

Nesting in the City: Birds, Children and a City Park as Teachers of Environmental Literacy

By

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A dissertation submitted in partial fulfillment of

the requirements for the degree of

Doctor of Philosophy

(Environment and Resources)

At the

UNIVERSITY OF WISCONSIN MADISON

2015

Date of Final Oral Examination: July 27, 2015

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This dissertation is dedicated to the birds who inspired me, to the children and UW-Madison students who taught me so much and gave me such joy, and to all of my neighbors who died during Hurricane Katrina in New Orleans.

Acknowledgements

This dissertation would not have been possible without my husband, Jim Carrier, who loved Warner Park and its wildlife, and who fought to protect it throughout this action-research project. I am also deeply grateful to all the members of Wild Warner who became a mighty flock of friends and colleagues, and everyone I interviewed for this dissertation. A very special thanks to all the neighbors, public officials (former and current), parks employees, local historians, planners, park users, birders, and Northside activists who spent their time and energy sharing their invaluable insights. I could not have produced this dissertation without the participation of 123 UW-Madison undergraduates who helped shape the Nature Explorers program, and the nearly 250 Sherman Middle School students who joined Nature Explorers. I also deeply grateful to Sherman Middle School Principal Mike Hernandez and school counselors Julie Wilke and Bert Zipperer, for their help, as well as Madison School and Community Recreation staff, and community volunteer and education dynamo, Paul Noeldner.

While analyzing the interviews and writing this dissertation, I spent many productive weeks at UW-Madison's world-class research facility, Kemp Station in Wisconsin's North Woods. Thank you to Kemp Station staff Tom Steele and Karla Ortman for providing the perfect researcher's refuge. And thank you to the many diligent and extremely helpful UW-Madison librarians who helped me access historical documents.

My advisor, Dr. Jack Kloppenburg, not only encouraged me to tackle this project, he participated in it. For four years he worked with middle school children every Wednesday in Warner Park as part of the undergraduate environmental studies course we created. This course began as a seed that Jack carefully nurtured. He not only helped me design the course and integrate it conceptually with my dissertation research, he helped me procure funding for it (many thanks to

the Gaylord Nelson Institute for Environmental Studies and the UW-Madison Morgridge Center for Public Service for that funding). During this course Jack brought Valentine chocolate birds for the children and cakes for parties. He directed games, led sledding parties down Warner Park's Sled Hill, and showed college and middle school students how to walk on ice. He carried a pocket knife that he used to dig up edible native ephemeral plants; then he taught students how to make a salad in Warner Park. Jack also urged me to organize to defend Warner Park and its animal residents; because of this there is a dynamic and feisty local environmental organization called Wild Warner. As an advisor, mentor, master teacher, and human being, Jack sets the bar very high for his graduate students. The only way I can thank him is by trying to pass on some of his teachings to my future students.

I am also deeply grateful to the rest of my PhD committee for their support and their scholarship which continues to serve as an inspiration. Dr. Bill Cronon planted the seed of this dissertation in my brain when he sent me into Warner Park eight years ago to write a place paper for his Environmental History course. Dr. Randy Stoecker has spent many hours with me, helping me understand the socioeconomic context of this project and grapple with theory. Randy also encouraged me to “tell stories” and regain my own voice. Dr. Cal DeWitt provided the organizing template for the Wild Warner Project through his own action-research in the town of Dunn, Wisconsin. And Dr. Anna Pidgeon not only greatly deepened my knowledge of ornithology, but she supervised the catbird geolocation monitoring project in Warner Park, spending dozens of hours in Warner’s thicket catching, banding and geolocating catbirds. Dr. Pidgeon also challenged me to confront my biases as an environmental activist.

My deepest gratitude is to my parents, who made sure that I received the education that they could only dream of.

Abstract

This dissertation is based on a six-year action-research project to promote nature education, and to protect an urban wetland and urban bird habitat in Madison, Wisconsin's second-largest urban park. Warner Park, the most heavily-used park in Madison, ranks 103rd nationally in terms of use. Today, over 80% of the US population lives in cities, making urban nature in places like Warner Park increasingly important to physical and mental health, according to literature in public health, environmental justice, urban ecology and environmental psychology. Three action-research interventions were employed in this project: citizen science ornithological research, environmental education, and community organizing. Data was drawn from interviews, archival research, and participant observation and ethnography during over 150 hours of public meetings, six years of community organizing, 230 hours of teaching, and approximately 600 hours of birding. This dissertation examines lessons learned from children, college students, avians, and environmental advocates. Findings show that children are often systematically excluded from parks planning processes, along with other park users including the wildlife itself, the elderly, the homeless, and practitioners of silent sports such as walking and birding. This action-research project attempted to address that exclusion and change parks planning and management practices in Madison, Wisconsin. The most important recommendations include organizing strategies for utilizing urban birds and wildlife to build human community, and a pedagogical template for expanding environmental education in urban parks through university-municipal parks systems partnerships.

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Chapter 1

Introduction

**“Scientists say we are made of atoms. A little bird told me we are made of stories.”
Eduardo Galeano**

This introductory chapter provides an overview of the research problem and process. It is divided into five sections. The first section of this chapter describes the purpose of the study. The second section addresses the research questions and their context. The third section traces the development of the research problem. The fourth section contains a definition of terms, the conceptual framework, and a discussion of research methods. The fifth and final section describes the political interventions and organizing methods used to address the action-research problem.

I. The Purpose of this Study

On October 11, 2009, I was sitting in the audience at the Wisconsin Book Festival in Madison when a student asked environmental philosopher and writer Wendell Berry this question: “How we are going to solve the world's environmental problems?” Berry answered: “Two generations of college-bred people have been indoctrinated to think that there are big solutions for big problems. I just don't believe it. It's going to take hundreds of solutions at the local level.”

I was one of those indoctrinated people. For most of my life, I'd been a peace activist trying to change US foreign policy. After spending 10 years living in Central America working as a researcher at an economics institute, then as an investigative human rights journalist, and finally as a human rights investigator for the United Nations, I returned to the US to work at a civil rights center in Montgomery, Alabama as a hate crimes researcher. How to stop war, how to end economic injustice, how to end racism and white supremacy—these global questions were

the focus of my work for 15 years. I had never paid attention to environmental issues or local issues. The concerns of foreign conservation biologists in Central America seemed frivolous compared to what was happening to humanity. That was my view of the environmental movement until my husband and I moved to New Orleans, 28 days before Hurricane Katrina hit. When our new home and neighborhood were destroyed, and 90 neighbors drowned, I realized that environmental issues could not be separated from socioeconomic issues. I started thinking about the importance of place and knowing the place and the water where we live, intimately. I began to think about how to defend that place.

That night as I listened to Berry's lecture I decided that this dissertation had to contribute to one of those hundreds of local solutions. This dissertation is the result of a six-year action-research and organizing project to protect a wetland and wildlife habitat in Madison's Warner Park. In 2007, my husband Jim Carrier and I bought a small home on this urban park's southern border; I have conducted this project as an embedded participant (Robbins, 2007), homeowner, and citizen. The analysis in the 10 chapters that follow is based on over 600 field hours in Warner Park studying birds and people in the park; attendance and participation in at least 150 hours of public meetings between 2009 and 2014; at least 35 formal interviews¹ and innumerable informal conversations and exchanges in person, by phone and via email; six years of community organizing from 2009 to 2015; and approximately 230 hours over a four and half-year period teaching an environmental education program called "Nature Explorers" in Warner Park.

First and foremost, this dissertation is a document written on the land and waters of Warner Park. As a result of this collective action-research project, a wetland is slowly being improved, and an unnamed and devalued creek bed has been partially restored and now has a

place-name, Castle Creek. One of the oldest and largest bur oaks in Dane County, Wisconsin—a bicentennial tree—is being protected. A shrub-thicket that was going to be cleared is still standing. An oak woods has been partially protected. Meadows that were being mowed to a nub are now filled with milkweed and monarch butterflies. A marsh shoreline has been partially restored creating wildlife habitat and helping to control Canada Geese, and a former fireworks launch pad in the wetland has been planted with prairie seeds. For the first time in decades, Eastern Bluebirds are raising families in the park. And every Wednesday afternoon a large troop of middle school and college students spend two hours together learning and playing in Warner Park, in the city's first park-based environmental education program.

I do not know how long these changes will last. After studying the history of this place and this park, I know that this land- and waterscape could change at any time. In the last 600 million years this place that became Warner Park has been a deep tropical sea, a shallow lagoon, a beach, a cradle for a 1600-foot high glacier called the Green Bay Lobe, a glacial lake created by that melting glacier, a marsh created by the remains of that giant glacial lake,² a camp- and worksite for indigenous people for approximately 10,000 years, farmland, and in the last 57 years, a city park. During these last 57 years, as a result of this study I believe that Warner's development has been driven by three major historical forces: 1) the use of municipal parks as a social fix (Cranz, 1989); 2) historic attitudes towards wetlands as wastelands (Vileisis, 1999); and 3) Madison's dual municipal park system that divides parks into the categories of either recreation or conservation parks (all of these forces are discussed at length in Chapter 2 on parks history). Because Warner Park has been used repeatedly as a social fix and because this park is classified as a recreation park--a new alder, a new mayor, a new parks superintendent, a new trend in management or ecological restoration, new forms of recreation, new sports, a new

development plan, a new master plan, or pressing socioeconomic needs in the neighborhoods surrounding the park—any of these could write a different chapter on the land and waters.

What is different from the past is that a new grassroots environmental organization called Wild Warner now advocates for the park's open green spaces, its wildlife, and wildlife habitat. There is a "we." This organization is one of the main results of this action-research dissertation.

II. The Research Questions

The overarching research question for this dissertation became: How can a place like Warner Park, a proxy for urban nature, teach us how to share this planet with other species?

In the United States, over 80% of the population now lives in cities. This makes city parks like Warner ideal spaces for learning how to share the planet. Beatley (2011) emphasizes the importance of strengthening "...connections with and care for nature" in urban areas through urban planning and design. To achieve this he advocates designing: "...a city that puts nature first in its design, planning, and management; it recognizes the essential need for daily human contact with nature as well as the many environmental and economic values provided by nature and natural systems."³ Urban planning that learns from nature and mimics natural systems can provide vital ecosystem services and public health benefits such as storm water retention, carbon sequestration, cooling, and air and noise pollution mitigation (Beatley, 2011).

Urban wetlands and woods, in particular, can provide those ecosystem services and public health benefits. Urban green spaces are also where most children, particularly lower-income children and children of color, will have their first encounter with wildlife. This encounter might be a toad hopping across a bike path, a painted turtle digging a nest and then

crawling back into an urban lagoon, a crow eating a breakfast pizza on an apartment rooftop, or a red-tailed hawk and its mate courting in a baseball stadium.

The main research question—how can places like Warner Park teach us to share the planet with other species--spawned these sub-questions:

- What are the forces driving the development of Warner Park and its wetland?
- Is the degradation of Warner's wetland and frequent pressures to build in its open green spaces a question of environmental injustice for neighbors living around the park, particularly lower-income neighbors without yards?
- How can a grassroots environmental group protect a place and make the invisible—urban wildlife--visible?

As I studied the birds of Warner Park during this six-year study and worked with children living around the park in the environmental education program, I repeatedly found that the theme of invisibility—invisible animals, an invisible wetland and public waters, invisible people, and invisible and subtle processes limiting access to the park—was the main thread connecting the research questions. The action-research and organizing process became a mission to make the invisible, visible.

III. The Research Problem: How to Make the Invisible, Visible

Warner Park is the second-largest municipal park in the city of Madison, Wisconsin. Easily the busiest city park in Madison and the state of Wisconsin, these 213.49-acres contain ballfields, parking, playgrounds, tennis courts, a 31,655-square foot community center, woods, a wetland, a white-sand beach, a boat landing, an off-leash dog park, and a 6,750-seat baseball

stadium. According to Madison's Parks Superintendent Eric Knepp more than 750,000 people visit or use Warner Park every year. The Trust for Public Lands ranks Warner Park nationally at 103rd among city parks in level of use.

The Madison parks department website describes Warner Park as follows:

Though distinctive for its natural beauty and expansive tracts of land, Warner Park is primarily defined by its links to the community. Occasionally, the park plays host to a variety of social happenings such as charity walk/run events and community festivals...Moreover, Warner is home to such summer favorites as Madison Mallards ballgames, and the Fourth of July musical and firework extravaganza, Rhythm and Booms. In essence the people who visit the park are as diverse as the interests that bring them there.

The human diversity that the parks department website refers to can be seen at annual events like Africa Fest, Mexican Independence Day, Blues Fest, and Kids' Fishing Day. Three to five nights a week, from May through August, 6,000 fans on average attend each Madison Mallard game, roaring when the home team scores and delighting in the fireworks that often cap home games. Ballfields and courts are filled on summer nights with people of all ages playing volleyball, softball, football, soccer, and ultimate Frisbee. Rhythm and Booms, the fireworks show the parks department's website refers to, was described for 21 years as "the largest firework show in the Midwest," drawing crowds of up to 300,000, organizers claimed. During the show, skydivers jumped out of airplanes, Blackhawk helicopters dropped cannons into the park, National Guard 155mm howitzer cannons fired into the air, and pyrotechnicians launched 10,000 to 16,000 shells into the park's wetland every year.⁴ Top-billed performers like "The Animals," "The Turtles," "Dr. John," and "Blood, Sweat and Tears," entertained crowds.

What the parks official website does not say is that Warner Park is also a place of startling biodiversity and the home or feeding grounds of at least 141 species of birds (O'Kane,

unpublished 2015). I discovered this when I enrolled in an ornithology course my first year at UW-Madison. I decided to do my birding homework in Warner Park since it was across the street from my home. I did not expect to find so many bird species there. Since it is an urban park, I assumed that there would not be much biodiversity. I soon discovered that urban wildlife and birds do not adhere to rigid anthropocentric categories of what is wild and natural. Although about half of the park's 213 acres have been built on, paved or are mowed, the wildlife uses the entire space and surrounding neighborhoods as part of their territories. The park's railroad border is an urban wildlife highway where a fox teaches four kits to hunt and killdeer lay their eggs in a rock scrape nest just inches from the rails. Snapping turtles measuring two feet in diameter climb out of Warner marsh and lumber up the railroad track banks to dig nests all along the tracks in the spring. At dusk, Warner's designated dog park, one of the most popular in Madison, becomes the hunting grounds of a Great Horned Owl perched high in a cottonwood, overlooking the marsh. The dog park is also one of the best places to find warblers, tiny birds that winter in Latin America, migrating through in the spring on their way to northern breeding grounds. Barn Swallow and Cliff Swallows build nests under the park's bridges and picnic shelters. Mink and beaver cruise Warner's storm water canals that feed into the dredged lagoon. Migrating ducks feed in the parking lot retention ponds. And the park's resident Sandhill Cranes often stand just outside the huge community center's glass walls, peering in as parks officials and local organizations conduct weekly and monthly meetings.⁵

This urban park is also home to several species of animals that are struggling in Wisconsin. It is a breeding grounds of the Brown Thrasher, a bird listed as of "Special Concern" by the Wisconsin Department of Natural Resources (WDNR) because its numbers are declining. Warner marsh is a nesting ground for at least four species of turtles, including Blanding's turtle,

also a species on the WDNR's "Special Concern" list. The park's warm and undisturbed waters in which motorboats are prohibited are home to the only native jellyfish in the entire Yahara River system, *Pectinatella magnifica*, known as the magnificent bryozoans, according to aquatic biologist Paul DuVair, who has been studying this water body for nearly 50 years. In May of 2013, the WDNR conducted a bat survey in Warner Park and found both little brown and big brown bats, two species now listed as "endangered" because of the spread of White Nose Syndrome.⁶

The park is also a fascinating geological, hydrological, and archeological site. Boulders called "glacial erratics" that are 2.8 billion-years-old, are scattered throughout the park. Gifts of the glaciers, they were pushed down into Warner Park approximately 25,000 years ago, probably from the east end of Lake Superior, according to David Mickelson, a glacial geologist who took me on a geology walk through Warner.⁷ There are also at least two freshwater springs in Warner's wetland (DuVair, 2007).

Indigenous peoples who lived in this area for thousands of years also left their mark. In 1939, the famed Wisconsin archeologist Charles E. Brown, director of the state historical museum and staunch defender of Madison's remaining Indian mounds, found two linear mounds and "a good bird effigy" in a woodland bordering the west side of the marsh that would eventually become Warner Park.⁸ Archeologists later found the skeleton of a nine-year-old child buried in the center of the bird mound.⁹

The Northside Neighborhood Plan

During that first surprising birding year, while I was documenting new avian species every day in Warner Park, I heard about a neighborhood development plan that could significantly alter the park's land and waterscape. The plan was 165 pages long and only

available online. It contained recommendations for another parking lot in a field where deer grazed in the morning, a pontoon boat concession in the shallow wetland where herons and egrets fished, ceremony sites for weddings on the swampy marsh island where Sandhill Cranes nested, the installation of lights all over the park, and the replacement of unpaved wooded trails with lighted and paved paths and sidewalks. The plan also recommended “clearing” a woods-thicket and turning the park’s only remaining meadows into mowed soccer fields or community gardens.

In affluent Madison, this neighborhood plan was part of a city-led effort to promote economic development in a struggling city region called the “Northside.” The plan stressed the need to beautify the Northside and give the area “a brand.”¹⁰ Warner Park is located on Madison’s Northside where the population is 75.8 percent White, 11.8 percent Black, and 5.6 percent Asian. The Latino population has increased by 132 percent in the past decade. Residents on this side of the city earn less on average than most Madisonians: 13% of children live in poverty compared to four percent citywide. In three of the four public elementary schools, at least 60% of the children are from low-income families.¹¹

Many of these schoolchildren live in apartment buildings on the park’s northeastern and eastern borders. In this area of Madison’s Northside, the minority population is 39 percent, the median income is \$28,542, and 10% of residents have a college degree.¹² The park is situated between these demographics and the affluent and largely Caucasian neighborhood of Maple Bluffs on the park’s southwestern border, just a five-minute bike ride across the park. Here the minority population is two percent, the median household income is \$151,875, and 82% of residents have a college degree. Warner Park is surrounded by stark inequality.

My husband Jim worked as a volunteer cook at our neighborhood food pantry for five years. He confronted this inequality every Friday night. The number of people coming for a free dinner and a bag of groceries doubled as the recession hit. He was stunned at the growing number of families with small children. Most of the pantry's "clients" had jobs. He was handing a plate to Madison's working poor, the people who lived outside the university Oz-like bubble that dominates the city center. Some of the "clients" were our neighbors. Their jobs as janitors, nurse's aides, grocery clerks, construction laborers, fast-food servers and cafeteria workers at the university simply did not pay enough for even two working parents to keep up with rising rents, monthly bills, and the cost of food.

The park was also surrounded by cultural richness. Our neighbors in the apartment buildings were African American, African immigrants, Iraqi refugees, Filipinos, Central American and Mexican immigrants, Hmong immigrants, Latinos, and whites of all backgrounds. Many families were a mix of ethnicities. Local schools resembled a mini-United Nations with over a dozen languages spoken in the hallways.

In the summer of 2009, when I found out about the neighborhood plan to develop Warner Park, I was concerned that the plan would destroy bird habitat. I now had several field books full of notes and species lists. By that summer I'd spent 130 hours birding in the park and found 86 species. At least 50% of these birds were long-distance migrators that wintered in the southeastern United States or Latin America. The park's Eastern Wood-Pewee could fly as far as Peru for the winter. According to the Smithsonian Migratory Bird Center, Warner's hummingbirds could potentially cross the Gulf of Mexico in one 18- to 20-hour flight.

Warner Park is an example of a global phenomenon as some large urban parks have become reservoirs of urban biodiversity, particularly for birds (Turner, Nakamura and Dinetti,

2004). One of the most well-known biodiversity reservoirs is New York's Central Park, a stopover point for migratory birds on the Atlantic Flyway, one of four major bird migration routes in the US. According to the National Audubon Society, Central Park has become one of the top ten birding destinations in the US, visited by birders from all over the world.

Many long-distance migrant birds face an increasingly dangerous journey because of lighted cell towers and glass skyscrapers, extreme weather, and predators (Stutchbury, 2007). Approximately half of all migrating birds do not survive long-distance migration (Gill, 2007). Their feeding and resting stations on the ground are also threatened by urbanizing and developing shorelines. As I discovered more migrating birds resting and feeding in Warner Park, I began to view the park as one of those feeding stations.

I also learned through my research that many of the birds that did survive the yearly long-distance migration probably returned to Warner Park. Loyal to their place--biologists call this "site fidelity"--every spring some Warner birds returned to their marsh, their cattail island, their meadow, their woods, and their thicket to raise families. As part of this action-research, I participated in a geolocation study in which avian ecologist Anna Pidgeon and I placed tiny light-weight geolocation monitors on the backs of 15 Warner Park catbirds. Geolocators are light sensors that record light levels. The data recorded can then be used to determine the bird's migratory route. One year later, we recaptured four of these same catbirds in Warner Park and removed the geolocators. Our preliminary data strongly suggests that they had spent the winter in either southern Mexico or northern Guatemala, and then they returned to their thicket in Warner Park.

None of these bird species in Warner Park are endangered. From an ecological standpoint, the city's development plans did not present a threat. But the plans would affect

individual birds nesting and feeding in the park, including some of those migrating catbirds. I was watching other individual birds every day, finding their territories and discovering their schedules and habits. The Great Blue Heron, for example, flew into the wetland from outside the park, nearly every morning around 7:00am. Then it spent the entire day in the wetland, fishing. A male Ruby-throated Hummingbird perched on a certain branch in a certain ash tree facing the sun nearly every morning from approximately 8:30am to 9:00am, before he zoomed off to visit his daily quota of between 1000 to 1500 flowers. An Eastern Phoebe was one of the first birds to return from Latin America. It announced its arrival from a certain bush beside the dog park bridge. I began watching and listening for this bird in late March. Every spring morning I stepped outside to hear yet another song of a new arrival from the South. Warner Park was a bird Bolero.

According to a growing body of public health literature, people with frequent access to green space heal faster and enjoy better health overall. Scientists have measured how trees, vegetation and natural green spaces calm nervous systems, boost immune systems and combat depression (Kuo, 2010). Living near green areas can increase longevity and lower rates of obesity and diabetes, according to large medical studies controlled for income (Kuo, 2010). Hospital researchers have found that patients with even just a window view of a tree heal faster, require less medication, and suffer fewer complications from surgery (Ulrich, 1984). The American Public Health Association (APHA) now views access to green space as a major public health concern and recommends "...the protection and restoration of nature in the environments where people live, work, and play..."¹³

I personally experienced these health benefits when I began birding daily in Warner Park. When I returned to the US after ten years working as a human rights investigator in Central

America, I was diagnosed with post-traumatic stress disorder. The condition worsened after Hurricane Katrina while I was teaching in New Orleans. But as I stepped into Warner Park and saw and heard these birds daily, the symptoms began to disappear. Richard Louv, author of “Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder,” writes that nature can become a child’s “Ritalin.” The park and its feathered residents became my Ritalin.

For children who experience the daily economic stresses of poverty, violence, war and natural disasters, urban green spaces like parks and gardens can also provide a vital refuge and psychological buffer (Chawla, 2014). In a review of studies of children living in rural Vermont and Bolivia, a slum in India, Latino neighborhoods in Denver, Nepalese refugees in Bhutan, a squatter camp in Johannesburg, and a dump in Guatemala City, Chawla found that this buffering effect is strongest for children who experience poverty and economic disaster, or other daily stressors such as prejudice, illness, disability, a family death, domestic violence, or bullying.

The Beginning of the Organizing Process: Knocking on Doors

I decided that I had to do something about the development plans. I began by knocking on neighbors’ doors to ask them what they thought about the plans. Over several weekends, I talked to maybe 30 people, some for a few minutes, some for half an hour. At the time, I was not planning to conduct research; I was trying to decide whether or not to oppose the plan. I did not know anything about local politics in Madison or urban planning processes. By the time I read the plan, it was just two months away from approval by a series of city commissions. Before I did anything at all, I wanted to know if neighbors supported it, especially my neighbors in the apartment buildings. The new parking lot was going to be built right in front of one of the area’s worst apartment blocks in terms of living conditions and crime, depriving residents of their front-yard green space. They did not know about it; several were upset when I told them.

During these conversations most apartment residents said that they valued the green space, especially since they did not have yards. In fact, some said that they moved to these apartments because of the park; they could not afford to live anywhere else in Madison so close to a large green area. Several neighbors loved seeing the deer grazing in the morning before they went to work. They were very opposed to the proposal. One African American family spent the whole winter watching the park's Great Horned Owls nest in the evergreen tree in front of their second story apartment. "It was like TV," the neighbor said. He was worried about how a new parking lot and lighting might affect the "hoot owls."¹⁴

Sandy R. was an apartment resident whom I spoke with for hours.¹⁵ She lived a few doors away from me. The building was very noisy, she said. People yelled at each other at all hours of the day and night. Somebody overdosed on heroin in the apartment just above her. This park was her refuge. She spent an average of four hours walking with her dog in the park, and sometimes as long as eight hours.¹⁶

Sandy had moved to Madison from Kansas after a series of devastating losses. First her marriage fell apart, then she contracted cancer in her jaw, then while in cancer treatment she lost her job and health insurance, then she had to file bankruptcy because of the hospital bills. Because of the bankruptcy she lost her home. In the midst of all this she'd had two serious surgeries. Afterwards she was mentally confused and could barely walk. Her son had moved to Madison and lived on my street. He persuaded her to come live with him. Sandy moved through the park at a snail's pace, every day, one leg still recovering from surgery. She carried a folding chair with her and sat for hours even in the winter, reading and watching animals. Some summer nights she lay down on a picnic table, her dog beside her, and stared at the stars or watched the bats eating insects.

“You have to get that healing juice from somewhere, or you don’t make it. I had two surgeries and was in very bad shape. The park revives you, in spirit as well as physically. I go sit in the park when I just can’t stand it anymore, when I’m upset about life in general, when I’m kind of needy. I like it best at night when it is so still with the snow. It’s very, very healing.”

When I told Sandy about the neighborhood plan and showed her the excerpts pertaining to the park, she was horrified. She was afraid the changes would hurt the animals. She told me about a mother owl and baby owl talking to each other one late morning, about a huge buck with antlers standing under a streetlight in the park at 2:00am when she was walking her dog at night, and about the weird “screamy” sounds that fox kits make when they’re talking to each other.

“I watch them [the animals]. They watch me. It makes me feel good. It’s a gift. They’re giving me a gift by showing themselves to me. I like the geese. I like even the fish in the spring when they are flopping around on the edge. I love to just see the redbird on a snowy day. There’s nothing better. I love the crows. I always talk to them.”

Sandy wasn’t “a meeting person,” and hated speaking publicly, but she was very upset about the neighborhood plan. I begged her to share her stories at public meetings. She gave me her phone number.

I had a few more deep conversations like this, with people who passionately loved the park. There was the fox watcher in a baseball cap who always updated me on the latest sightings—fox at 7:00am running along the meadow path towards the chicken people’s yard, fox napping on the tennis courts in the woods, fox sitting on sled hill barking at dogs below in the dog park. When he didn’t see the foxes for several days, he became worried. Maybe they tried to cross the main avenues around the park and got hit by a car? Maybe someone called animal control? There was a young black homeless woman who sat on a bench facing the meadow and

slept in a bush at Warner Beach. She loved to watch the animals, too. There was a young man with an anxiety disorder; he told me he was on disability and that he walked in the park every day to calm himself. He lived in an apartment nearby without a yard. He enjoyed watching the geese, particularly when they paraded their new families around. There was a dog park enthusiast who was grieving the recent death of his wife. A newspaper delivery man who worked very early in the mornings, he spent hours in the park during the day watching birds. He threw his arms out wide when he told me how much he loved the vultures: “They’re the coolest birds. I love watching them float on the currents.” In treatment for severe depression, he called the park “my sanctuary.” “I wouldn’t leave the house, otherwise,” he said.¹⁷ And there was the mysterious Golden Helmet Man, a tall, thin neighbor who sat at a picnic table all day long under an ash tree. He was always wearing a faded gold football helmet whether the temperature gauge hit 85 degrees Fahrenheit or 10 degrees. He, too, lived in the apartments. He told neighbors that he was a prince.

Jan Einfeldt was a 76-year-old retired feedmill worker who also lived in an apartment on the park's edge, a few blocks from me. Like Sandy, Jan spent every waking hour he could in the park watching animals. The park’s wilder corners remind him of the dairy farm he grew up on as a boy, particularly the park’s meadows and thickets. Jan crawled through the park very slowly every day; I usually heard Jan coming before I saw him. He dragged a large oxygen tank on rollers everywhere. If you didn’t hear the wheels first, then you heard his labored breathing through a clear tube feeding into a nostril. A heavy smoker with fifty years of feedmill dust in his lungs, Jan had Chronic Obstructive Pulmonary disease. His doctor ordered him to start walking daily in the park. Warner Park was Jan’s medicine.

“The one advantage of having a lung disease is that I don’t move fast. So I have more time to look at things. I have to stop and catch my breath and so I see more than you do if you’re walking,” he said.¹⁸

This is how Jan learned that the foxes love a certain kind of acorn from a certain oak in the park. He watched two young foxes come and clean up that acorn carpet in the fall. He called the concrete ditch running into the marsh “the hawk’s dinner table” because a Sharp-shinned Hawk perched in the bushes and then dove and caught small songbirds as they came to the water’s edge to drink. Then he discovered that the songbirds started going to drink deep in the thicket in a large puddle that formed in a depression dug into a gentle slope. The hawks could not fly into the thicket after the smaller birds. It was a safer place for them to drink.

He knew that the woodchuck family took the dirt path through the thicket to get to the marsh to drink water—he’d seen four of them trooping down in a line-- and that the crows like to eat the hamburgers and French fries thrown out during baseball games. Jan knew that the orb-weaving spiders in the meadow lived off the grasshoppers. He’d also noticed that some of the ash trees in Warner woods were dying, nearly two years before the city discovered Emerald Ash-borer in those same woods. After his hours in the park, Jan went home to research what he had seen in the park on the Internet and in field guides. A talented naturalist, Jan became one of my park teachers.¹⁹

As I met park-users like Jan and Sandy and talked to more neighbors, I began to wonder whether or not development proposals for the park—particularly the new parking lot facing the apartments—was a question of environmental justice and public health. While walking the park’s borders and studying aerial photos, maps of the park, and old master plans, I asked this research question: Who gets the park, and who gets the parking lot? The greenest and wildest

areas of the park, where there were no buildings, no parking lots, no traffic, no noise, no air pollution from the traffic, and no baseball games, faced individual middle-class homes. The park's developed side faced the blocks of low-income apartments, with the exception of the one block down the street from me that was still open green space (ball fields); that is where the new parking lot was going to be built.

Environmental justice theorists define the environment as “where we live, work and play,” not a distant pristine wilderness (Alston, 1991). They also emphasize the importance of human and public health, not just ecological health, when studying environmental issues. Urban parks like Warner Park fit within this theoretical framework because of their proximity to human populations and the public health benefits provided by urban green spaces. Environmental justice theorists now include access to urban green space as a matter of environmental justice for lower-income urban children (Hoff, 2014). Parks within half a mile of the user are most frequently used for exercise and thus the most beneficial to public health (Cohen 2007). Parks further away are often subject to what geographers and park theorists call “distance decay” because they are too far from most residents to be used daily (Wolch, 2010).

By the end of that first summer talking to people, I had discovered a small passionate corps of daily park-users who loved the place and the animals, and who needed that daily nature fix as much as I did. However, most of the neighbors I spoke with were not ardent park-lovers like Jan or Sandy.²⁰ They didn't say much of anything about the park. Some said: "It's fine the way it is." "Leave it alone." "It's nice." A few shrugged their shoulders and said the park was okay or that they didn't know. I really could not say what most of them, particularly neighbors of color, thought about Warner Park. However, there was one thing I knew with absolute certainty: not a single person I'd spoken with had ever heard of the 165-page neighborhood plan. Madison

had a reputation for grassroots citizen participation. I began to wonder if there was something wrong with Madison's planning processes.

In September of 2009, the neighborhood plan went before the Madison Board of Parks Commissioner for approval. Approximately two dozen neighbors showed up to protest the aspects of the plan that would develop the wild areas. Sandy showed up and other people I did not know who would soon become part of this action-research project. Commissioners voted to halt the plan for one month so we could suggest modifications. One month later they voted to eliminate the proposal for a new parking lot, the pontoon concession, and several other measures we objected to.

After this a small group of us began meeting regularly to discuss how to protect the park (see chapters 7 and 8 on Wild Warner). We also began speaking before various city commissions about the park's wildlife. I began a more serious survey of Warner's birds. I also started interviewing elderly neighbors to document species that had disappeared from the park since its development in the 1950s and 1960s.

At these neighborhood and commission meetings as I shared my findings, I learned that city planners, parks employees, some neighborhood activists, conservation biologists, and even local birders and environmentalists did not see Warner Park as a semi-wild place with wild residents. Some birders expressed surprise and disbelief at the number and diversity of bird species on the park's growing baseline list I was compiling. Warner Park was the "fireworks park," they said, "too disturbed" for wildlife, and full of "invasive species." These are some of their comments:

"Is this the best place for a red fox?"

Bike race organizer

“There is nothing natural about Warner Park.”

Member of Madison Audubon Society

“This is not habitat. It’s not an ecosystem.”

UW-Madison Environmental Studies student

“I saw your bird species list and 100 species or whatever you found in Warner Park, well, there are invasive plants, so there must be invasive birds. Aren’t some of those birds invasive?”

Northside community organizer

Somehow, the park’s animals had become invisible and the people who loved the animals had also become invisible: this became the major action-research problem. Neither the animals nor the people who loved them were counted or surveyed by the parks system; therefore, they were not valued by policymakers. I decided to turn my dissertation into a community project to research how and why this happened, and to try to change this situation of invisibility.

IV: Definition of Terms, Conceptual Framework, and Methods

Definition of Terms and Conceptual Framework

Open Space/Green space:

In a typology of parks in the US, Cranz (1989) defines four distinct periods in municipal parks history (see Chapter 2 for discussion of all of these periods). The Open Space period is the final period which began in the 1960s, according to Cranz. The city of Madison developed Warner Park during this period. Cranz (1989) emphasizes that city parks have functioned historically in the US as an urban safety valve. The period when the Open Space system first developed was characterized by riots in cities; parks were supposed to alleviate this social problem by providing psychic relief and opportunities to participate in the arts (Cranz, 1989).

Individual city parks were viewed as part of a network of open spaces. A wide variety of activities took place and continues to take place in these open spaces.

Jacobs (1961) criticized the value of more open space in cities. She was writing at a time of increased crime in parks and white flight to suburbs:

Walk with a planner through a dispirited neighborhood and though it be already scabby with deserted parks and tired landscaping festooned with old Kleenex, he will envision a future of More Open Space. More Open Space for what? For muggings? For bleak vacuums between buildings?...people do not use city open space just because it is there and because city planners or designers wish they would.²¹

According to Kenneth Clarke, Madison City Planning Director from 1959 to 1969, the definition of open space in the 1960s in Madison was very broad and meant “almost anything.” It generally meant non-urban, non-structural, meaning without buildings.²²

The term “green space” and “green space” is increasingly appearing in municipal parks literature. Cranz (2004) defines an emerging and new parks type, the “ecological” or “sustainable” park. The increasing use of the term green space could reflect this trend.

The US Environmental Protection Agency defines green space as “...land that is partly or completely covered with grass, trees, shrubs, or other vegetation. Green space includes parks, gardens, and cemeteries.” When using the term “green space” in this dissertation, I am using the EPA’s definition. I view concretization—increased paving with impervious surfaces—as a threat to urban green space and water quality.

Nature and Wild:

Throughout this dissertation I consciously avoid the use of the word “nature,” because it means nothing and everything. Instead, I use the word “wild” or “wildness” which admittedly, has some of the same problems as the word “nature.” Within cities, Beatley (2011) argues for

supporting “urban wildness” which is the opposite of pristine and “...defined by its resilience and persistence in the face of urban pressures.”²³ Beatley’s definition fits what I have observed in Warner Park.

Park: this term is defined in Chapter 2.

Action-Research:

Calhoun (2008) defines action-research or activist scholarship as “...part of the process of forming, testing, and improving knowledge.”²⁴ The emphasis is on solving practical problems in a particular place or context. Calhoun (2008) outlines five different functions that activist-researchers fulfill in their work with community groups or social movements: 1) learning from errors; 2) learning from the activists they are working with; 3) analyzing data in ways that uncover hidden patterns; 3) providing broader context for understanding the specific problem; 4) using this understanding of broader contexts and knowledge of other movements and struggles to help activists reflect on what they are doing; and 5) knowledge of other tactics that activists can use to address the problem at hand.

Greenwood (2008) posits that action research is “...neither a theory nor a particular set of methods.”²⁵ Action research addresses a particular problem or situation and this is why action-researchers utilize different theories and methods to fit the context. This project required mixed methods: field ornithology to study the birds, ethnography to study the humans, environmental education methods to work with children, and environmental and social history to understand the development of Warner Park.

This Wild Warner dissertation project fits within Calhoun's conceptualization of action-research. The project did not begin as an academic exercise but as an activist's attempt to stop the further concretization of Warner Park, and to protect its wilder, green spaces from the urbanization proposals outlined in the city's development plan. The research and theorization of what I observed over a six-year period, and of what I was actually doing--the activism--came later as I attempted to analyze and understand the forces driving the development of this space, and the attitudes towards this space and its non-human residents, including my own attitudes and biases.

In addition to Calhoun and Greenwood's definition, my understanding of action-research is based on 15 years of professional experience and practice as both an action-researcher and an investigative journalist in the muckraking tradition. I view serious investigative journalism as an organizing tool to correct social injustice. I practiced this form of journalism for ten years in Central America and five years in the Deep South of the United States. My action-research practices are largely due to the influences of Jesuit economist Xabier Gorostiaga.

Gorostiaga was a liberation theology theorist and practitioner who belonged to a group of Jesuits in Central America working as strategists for young revolutionary movements trying to overthrow US-backed military regimes.²⁶ Gorostiaga helped the Sandinista guerrilla movement prepare to overthrow the 43-year dictatorship of the Somoza family in Nicaragua (he was also an architect of the Panama Canal treaty returning that canal to Panama; that endeavor began as a dissertation he wrote for Cambridge University). The first minister of planning for the Sandinista government in 1979 and a pioneer in poverty research, Gorostiaga established a network of research institutes in Latin America in countries where statistics were scarce.

In 1988, Gorostiaga recruited me to work at his research institute based in Managua. In addition to conducting economic studies, this institute was a laboratory for applying some of the ideas of Brazilian education reformer and thinker Paulo Freire, author of “Pedagogy of the Oppressed” (1968), who championed education as a liberating and transformational force. At Gorostiaga’s institute, for four years I researched and wrote about the impact of neoliberal structural adjustment policies on workers, women and public health; policies imposed by the US-dominated World Bank and International Monetary Fund. Part of my job was to help the institute translate its economic studies into language that non-economists could understand. Our goal was to teach economic literacy so that people, particularly community organizers and union leaders, could understand how and why the global economic policies imposed by the international community were affecting their daily lives. During that period I also designed public education materials to help combat a cholera epidemic (health literacy), and I conducted grassroots journalism workshops for small farmers and former soldiers in rural areas. Later working for the United Nations mission in Guatemala, my job was to both investigate human rights violations and educate Mayan villagers in isolated war zones about their constitutional rights (human rights literacy). The Freirian promotion of literacy and contextual education, whether in the realm of economics, health, or human and civil rights, has been the template for much of my work.

Environmental and landscape literacy:

The Wild Warner project promotes environmental and landscape literacy. This dissertation is titled “Nesting in the City: Birds, Children and a City Park as Teachers of Environmental Literacy,” because I view the birds of Warner Park as partners in this literacy project. The ultimate green architects, birds build complex structures out of grasses, mud, twigs,

mosses, bones, spider silk, plastic, paper, wire, fishing line, old receipts and even my dog's fur.²⁷ These structures can survive blizzards and high winds. Birds are also vital indicators of the planet's overall ecological health. Masters of recycling and architectural ingenuity, they have much to teach our species about sustainability and how to nest in the city.

I understand environmental literacy within the Freirian context of "reading the world and reading the word" (Freire, 1987). This means understanding one's situation in life, how and why one is in that situation of poverty or oppression, and how to change that situation. I extend Freire's conceptualization of literacy to the environment and climate change. If more people on the Gulf Coast had had the opportunity to become environmentally literate, and if they had had access to transportation and the resources to evacuate, they would be still be alive; environmental literacy is essential to our species' survival.

Landscape architect and environmental planner Anne Spirn coined the term "landscape literacy" during 18 years of teaching, action research, and ecological restoration work in the predominantly African American urban watershed of Mill Creek in West Philadelphia. During that time, Spirn and her landscape architecture students taught neighborhood middle school students and elderly gardeners how to "read" their landscape. She writes that "To be [landscape] literate is to recognize both the problems in a place and its resources, to understand how they came about, by what means they are sustained, and how they are related."²⁸ She views landscape literacy as a tool that urban planners and community activists can use to correct environmental injustices, just as civil rights activists used verbal literacy during the Civil Rights movement:

Like verbal literacy, landscape literacy is a cultural practice that entails both understanding the world and transforming it. One difference between verbal literacy and landscape literacy, however, is that many professionals responsible for planning, designing and building the city are not landscape literate. After six week's investigation of the history of their neighborhood, the children were more literate than many professionals.²⁹

Repeatedly during this action-research project I found that Warner Park's neighbors and neighborhood children were often more landscape literate than city planners (see Chapters 7, 8 and 9). However, their voices were rarely heard in planning processes and their landscape literacy was not valued.

Case Study Research Methods

Yin (1984) defines a case study as "...an empirical inquiry that investigates a contemporary phenomenon within its real-life context when the boundaries between the phenomenon and the context are not clearly evident; and in which multiple sources of evidence are used."³⁰ Stoecker (1991) gives another reason for using the case study method: "...research of specific instances that actually show the historical causal process." For Stoecker, it is the cause-effect link that is important. I constructed timelines of the history of the development of Wild Warner and our actions as well as timelines of Warner Park's history and parks policy. These timelines permitted the analysis of causal links.

According to Yin's case-study typology, this action-research project is a single-case study with three embedded units of analysis that could also be called historical actors or agents. These units/agents are 1) the birds of Warner Park; 2) the children and college students in the Nature Explorers program; and 3) individual park-defenders and the environmental organization Wild Warner.

Yin (1984) gives three reasons for doing a single-case study: to test a theory, because the case is extreme or unique, or because the case is revelatory or there was no prior access to this group. I chose to do this as a single-case study because I believed it could be revelatory.

Yin warns that one pitfall of the single case study is that it can turn out to be something entirely different from expected. In Bent Flyvberg's study on local democracy in Aalborg,

Denmark, Flyvberg (1998) thought he had chosen a critical case to study how local democracy works well. Instead, halfway through his research, he found himself studying an “extreme case” where the business community had inordinate power compared to most Danish cities this size. Aalborg became a revelatory study in how power operates locally and undermines democracy in one of the world’s most democratic nations.

Scholz and Tietje (2002) also recommend embedded case studies when using both quantitative and qualitative methods, and for environmental sciences. I used qualitative methods for historical research by studying archives, newspapers, census data, city surveys, and other documents. I also used quantitative methods to gather data about animal species living in the park as well as qualitative methods such as interviews to determine which animal species had disappeared from the park.

Yin (2009) gives a road map for a systematic way to gather information, analyze it and then process it. I found these four Yin rules useful : 1) consider all the evidence; 2) address all major rival interpretations; 3) address the most significant aspect of the case study; and 4) use your own expert knowledge.

I also used the method of immersion since I have been living on the edge of Warner Park for eight years and involved in neighborhood politics. Stoecker (1994) used this method in Cedar-Riverside because it gives the researcher a window on the micro-workings of daily life which helps to see where conflicts can arise. Through immersion the researcher can also figure out what is the social glue in that community and what happens when that glue dries up as people become exhausted and relationships degrade. Stoecker attended neighborhood meetings for four years. In Cedar-Riverside he found that the glue was the food, the collective services, the beer boogies, the birthday cakes, the mischievous pranks. Evidence of social glue cannot be found in

documents. It is raised eyebrows exchanged between friends at public meetings. It is giggles. It is notes scrawled in the margins to each other. It is quiet conversations that are not taped while a researcher helps a neighbor weed a garden or paint a wall or chop onions at a community kitchen.

***A Methods Problem: From Human Rights- and Civil Rights
Activist to “Bird Lady”***

Immersion can also insure better access to qualitative interviews. As Stoecker describes in his book, many people are weary of being “studied” by university researchers. This is certainly true in my lower-income neighborhood of Brentwood which the city seems to study approximately every five years. Neighbors may trust a researcher who lives in their neighborhood instead of an outsider because the researcher has a stake in the neighborhood, and is more likely to give back rather than just conducting extractive research. Then, again, neighbors may not trust the researcher. Some conversations with black neighbors felt like the forced casual chats I tried to have with people in war zones in rural Guatemala, when they’d stare back at me with my tape recorder and notebook as if I were a dentist about to extract a large molar. In places where there had been terrible massacres, most people would not talk openly to a foreign journalist or to a stranger unless they knew exactly who you were working for and what your political position was.

It wasn’t a Central American war zone, but in my neighborhood, I watched some of my African American neighbors don those same impenetrable Guatemalan masks when I knocked on their doors or walked up to them casually in the parking lot. I do not believe that people were scared of me but because of systemic racism, particularly in Madison, why should they trust a white woman they did not know?

The work of sociologist William W. Ellis (1969) is useful to understand the difficulties of a white person or outsider doing research on African Americans in the United States.³¹ Ellis writes: “Social scientists and journalists in America generally operate under an ideology-laden code of professional conduct that requires objectivity. Only if you have no commitment to the people studied, it is argued, can you tell the truth about who they are and what they are doing. But this objectivity is in effect a commitment to the ruling class...”³²

Ellis believes that if there is a gap in social status between the researcher and subjects, the answers to the researcher’s questions will be distorted, especially when the researcher is white and the interviewee is black: “In no way can modern social science come to understand the American black man...from the posture of disengagement.”³³

I agree with Ellis and this is where I encountered a serious research problem during this project. When I worked as a human rights investigator for the United Nations in Guatemala interviewing massacre survivors, people knew that the UN was pressuring their government to stop torturing and killing people. My position as a researcher was clearly stated in the treaty allowing the UN to maintain a presence in that country. When I conducted hate crime research in the Deep South, I was a member of the Alabama NAACP. I was also deeply involved in prison reform work, an issue that affected mostly poor black people in Alabama. When I moved to Madison to get this degree, for the first time in my life, I chose to focus on environmental issues, a function of white privilege. I made this choice because after Hurricane Katrina, I suddenly viewed birds, frogs and the Earth itself, as part of the “underdog” community that I have always identified with and tried to show solidarity with through journalism and activism.

Human rights victims in Guatemala and hate crime victims in Alabama shared their stories with me because I was deeply involved in trying to change their situation; I was what

Ellis called a “partisan observer.”³⁴ I was in a very different position in my Madison neighborhood as “the Bird Lady.” As a Ph.D. candidate, I would not be viewed as someone on the side of the working class. Most people in my neighborhood had never had any contact with the university, even though it was just four and half miles away. Some community leaders of color on Madison’s Northside also had a very negative view of UW-Madison. They had only encountered the university when university researchers or faculty members needed the “community” for public relations purposes or to create opportunities for untrained UW-Madison undergraduate students—“disservice” learning programs.³⁵ Another research difficulty I encountered in Madison is that it seemed like a more socially segregated community than either of the southern cities I had lived in, Montgomery, Alabama and New Orleans. With a tiny black population, I found it much more difficult to make friends. In Montgomery I worked alongside black professionals every day. The last neighborhood I lived in was 98% African American. At my neighborhood association meetings in Montgomery, my husband and I were the only whites (and we were warmly welcomed). It was so easy to have a diverse group of friends and neighbors. In Madison it took a lot more time and effort; there was so much distrust to overcome. There were rarely ever any black people at the public meetings I attended, including my neighborhood association. Ironically, the racial dynamics in Madison seemed more tense and difficult than in the Deep South, to me at least. I began to wonder how racism in Madison affected the use of Warner Park and of the city’s park system in general (see Chapter 3).

Another Methods Problem: Bias

After describing methods for data collection and for building a chain of evidence, Yin warns against trying to use a case study to bolster preconceived ideas or advocate for particular issues (1984, 1993, 2004 and 2009). I chose to do my dissertation on Warner Park precisely

because I wanted to protect it from concretization and further development. In the view of some neighbors and community leaders (the alder), the city has been trying to improve and beautify the park. While I see cutting down trees and shrubs as eliminating wildlife habitat and taking away vital green space, others view it as cleaning up the neighborhood and helping people to feel safer in the park. Yin suggests several anti-bias mechanisms that I have used during this action-research: 1) a critical sounding board; 2) triangulation of data; and 3) exploring rival theories during research design.

The reading of literature on the history of national and municipal parks helped temper this bias as I began to understand that the term “park” has meant everything and nothing over the past 200 years. The reading of the literature on attitudes towards nature, what is wild, and urban wildlife also helped to temper this bias as I learned that urban animals have been viewed historically through the lens of “pest” (Sterba, 2013). Interviews with former parks planners on the development of the Madison parks system also helped deepen that understanding. Lengthy and loud debates with Wild Warner members who are passionate restorationists also forced me to confront my biases.

On the other hand, I believe that a deep personal and emotional attachment to this place and to the creatures that live there is the engine that powered this action-research project. In order to spend over 150 hours at public meetings, over 600 hours birding, and eat, sleep and breathe Warner Park for nearly six years, I had to love it, intensely. The project had to become personal. Ganz (2009) addresses the advantages and disadvantages of personal bias in his sociological study on activism in the California farm worker’s movement. For 16 years Ganz was deeply involved in this movement, working directly for labor leader César Chavez. In his study of this movement Ganz writes:

...my participation in this conflict could raise a problem of bias, due to my interest in controversial events and my personal relationships with participants on all sides. However, I believe that the benefits far outweigh the costs. My experience has equipped me with a deep understanding of the context in which events unfolded, direct information as to what took place, and access to important research resources. It has infused my work with a deep desire to understand not only what happened, but also why things happened as they did, and thus equip others to learn from this experience.³⁶

V. Political Interventions to Defend Warner Park: Writing, Teaching and Organizing

After my neighbors and I successfully pressured to modify the 2009 Northside Neighborhood Plan, we realized we needed a short- and long-term strategy to change attitudes towards the park and the city's management practices. Based on what I observed at the first public meetings of the Madison Board of Parks Commissioners, the Plan Commission and the City Council, discussions with neighbors who knew both the park and city politics well, discussions with the alder, and some initial archival research, I used Freire's situation analysis method to examine which actors had the most power in Madison to influence how Warner Park was viewed and managed. This analysis showed that UW-Madison was the most powerful actor in the city in terms of changing attitudes towards the park, and possibly protecting the green space in the long term.

As an intermediate and long-term strategy, I decided to involve the university in the park through this action-research dissertation project, and by bringing in students and professors from different departments to conduct research and use the park as a classroom. This is why I created a special service learning capstone course for the Gaylord Nelson Institute, Environmental Studies 600 "Birding to Change the World: How Kids and Birds Can Save the Planet." Nature Explorers, the children's environmental education program based in Warner Park, is the service learning component of this course. My ultimate goal for Nature Explorers was to empower

neighborhood children to become the future stewards of this green space. This education intervention is analyzed and discussed in chapters 3 through 7.

As an immediate protective strategy, I began two interventions: 1) I turned the avian baseline survey into a citizen science project involving schoolchildren, college students, and neighbors; and 2) I employed the power of the pen to protect Warner Park.

Journalism as a Political Intervention

There is one thing that I truly know and that I learned over and over again in Guatemala while investigating massacres in Mayan villages carried out by the US-trained Guatemalan military: when you write something down, it can have tremendous power. Freire (1970) writes: "...to speak a true word is to transform the world."³⁷

The very first op-ed piece I published in the Wisconsin State Journal detailing how the neighborhood development plan could hurt the park's birds had an immediate impact. Some parks commissioners told me that they had seen it that Sunday, just before the commission meeting. Then at a local businessman's breakfast, an attendee stood up and said he'd just read a story in the newspaper about the birds in Warner Park. It "haunted" him, he said, because it explained how plans to develop the park might destroy the birds' home. The alder was a guest speaker at the breakfast. He challenged the alder in front of the crowd: "Is it true that you're going to destroy Warner Park?"

The Northside of Madison had its own small quarterly newspaper called The Northside News. It was delivered for free to 10,000 doorsteps. I did not believe in writing for free. I had been paid to research, report and write my whole life. But I needed a local outlet to publish stories about the park. Since that little newspaper ended up on the kitchen table of thousands of people living all around the park, it had real power; it was the ideal venue for getting the voices

of the animals heard. I would not criticize local officials or say anything political at all. I'd just write stories about the feathered and furred residents of Warner Park; our invisible neighbors. I'd become the animals' public relations representative. For them, I'd work pro bono.

I sent the first 500-word column to the editor. The editor wanted a headshot of the columnist. I hated this idea. I studied journalism at a time when the story was about the story, not the storyteller. But she insisted so I sent in a photo. A month later I was riding my bike through the park and stopped to watch two soaring hawks. An older couple walking by said: "Are you the one who found 86 bird species in here?"³⁸ They read the Northside News, they told me. They loved "Wild Warner Park." They said that the name was a great "mantra." As we stared up at the hawks, a man nearby who was picking up trash walked over. He said "We need to keep more nature in here."

After this I sent regular stories to the paper and new people kept stopping me in the park. I was amazed. This had never happened in Guatemala and I wouldn't have wanted it to. Then one April night in 2010, a woman called me at home. A medicare nurse whose job was to visit and interview housebound elderly people on the Northside, she'd just read a story I'd published about silk moths in the park. She thanked me for writing about the animals. She wanted me to know that her patients loved the stories. They loved the park and its animals; they were glad someone was defending it. "People don't want more development. Just keep doing what you're doing," she said.³⁹

Four years later when I interviewed Wild Warner members for this dissertation research, many of them said they had first heard about the group or the wildlife in the park from the Northside News.

The nurse that called me that night taught me one of the most valuable lessons of my professional life. I realized for the first time in nearly two decades of writing for a living that the New York Times is not the most important media in the world. For someone trying to defend a place they love, right where they live, the local newspaper or neighborhood association newsletter is the most important media--that is if there is still a local media. This is where neighbors find the kind of detailed information about that place that they need to muster support to defend it. It is where activists see the names of other supporters in comment sections online or in letters to the editor (sections I combed for potential allies throughout the organizing phase of this project). It is where citizens learn about upcoming public meetings and city development plans. And it is where one can read columns by local politicians, study their positions and then develop a political strategy. Most local media is now online but I have witnessed the enduring power of print. An online story can disappear within hours and be missed by most readers. However, a story in a quarterly newspaper that sits on the coffee table for three months gets read, reread, and even shared with someone else.

I no longer write for the Northside News. I no longer have to. Every single issue has at least one if not two or three stories about nature in Warner Park and on the Northside, some of them written by other Wild Warner members, and some even written by UW-Madison students who have participated as student-mentors in the Nature Explorers program.

Wild Warner as a Political Intervention

The second long-term intervention was to organize Wild Warner, a political group to defend the park. This intervention is analyzed and discussed in chapters 8 and 9. I actually did not want to organize a group. I was really tired of organizing after working in Central America and Alabama. I also did not see how I could possibly complete a dissertation and teach while

organizing a community group. It was my advisor, Jack Kloppenburg who said repeatedly “You have to organize!” I blame chapters eight and nine, which cover the development of Wild Warner, entirely on him and on my husband, Jim Carrier, who volunteered to serve as the first chair of Wild Warner.

I stumbled on a template for organizing this group completely by accident. One day I found a document someone had forgotten in a university copy machine called “Community Mobilization: A Case Study of the Town of Dunn,” by Cal DeWitt, dated October, 1996. This nine-page document described how DeWitt and a group of neighbors organized in their town to stop growth that threatened their lands and waters. After throwing out the town board and putting into effect a two-year moratorium on all land division, DeWitt and “Citizens for Dunn” developed a land stewardship plan for Dunn. In January 1995, the town of Dunn won a national “Renew America” award for exemplary “growth management.” In this case study, DeWitt lays out a series of steps for developing a local land ethic:

...set about doing a detailed inventory of everything contained within our borders—natural and unnatural, wild and domestic. We recorded and made maps of bedrock geology, glacial geology, lakes, ponds, springs, streams, wetlands, soils, woodlands, prairies, archaeological sites, agriculture, historical sites, land ownership, sewer districts, and fire districts. We made lists of the creatures with which we shared the land... We discovered how our hydrologic cycle worked. We discovered the rich heritage of our natural history and social history. We came to know our place. We liked what we found. We also decided to care for it and keep it. We built a base for a land ethic by knowing where we were and what we held in trust.⁴⁰

Wild Warner is still in the inventory phase of DeWitt’s local land ethic-building strategy. We are just coming to know our place. But like the people of Dunn, we like what we’ve found and have decided to care for it and keep it.

Chapter 2: Parks History and Literature Review

As I began to develop the political interventions described in the last section of Chapter 1, I realized that in order to understand how the birds and wildlife of Warner Park became invisible, I first had to understand the history of municipal parks development and how the Madison Parks system, and Warner Park in particular, fit within that conceptual framework. After conducting archival research, interviews, and examining Warner Park's development within the historical context of municipal parks nationwide and national parks, I believe that Warner Park's development has been greatly influenced by three major historical phenomena: 1) historical attitudes towards wetlands and marshes as wasteland and trash dumps; 2) Madison's somewhat unique dual park system of recreation and conservation parks founded in the 1970s; and 3) the use of municipal parks to fix social problems dating back to the building of the nation's first major park, Central Park (Jacobs, 1961; Birge-Liberman, 2010; and Craz, 1982).

This chapter is divided into six sections covering these phenomena and tracing Warner Park's development. The first section describes the literature and sources used. The second section contains a discussion of municipal parks development in the US and the role of Central Park as a development template. The third section focuses on Madison's park system and how it was largely built on top of marshes. This section also traces how Warner Park evolved from an idea for a public beach during the Great Depression, to a plan for the city's largest recreation park by the 1950s. The fourth section is a historical examination of how nature became segregated in Madison into conservation parks, and how this division made Warner's wildlife invisible. The fifth section describes the influence of the national parks system on the development of Madison's dual conservation/recreation system and its specific and unintended

consequences for Warner Park. In the final section, the role of Warner Park as a social fix (Cranz, 1989) for problems in the surrounding neighborhoods is analyzed.

These are the **research questions**:

- What is a park?
- How did the development of Madison's dual park system of recreation and conservation parks influence Warner's future uses and the development of the landscape?
- How and why did Warner's wetland disappear from city maps and public consciousness even though it was legally protected in DNR and city documents?
- How have racism and poverty in Madison affected how Warner Park has developed?

I. Literature and Sources

For municipal parks history I relied heavily on Galen Cranz' (1989) theorization of parks in the US, Roy Rosenzweig and Elizabeth Blackmar's "The Park and the People: A History of Central Park" (1992), and the personal papers and letters of Frederick Law Olmsted, the founder of landscape architecture and creator of Central Park which provided the historical template for municipal parks nationwide (Volumes I and III). Jane Jacobs' "The Death and Life of Great American Cities" (1961) helped to understand the relationship of parks to neighborhoods. I also examined the history of the development of the national park system and how nature is treated within that system. There are numerous parallels between the development of the national park system and municipal system, and the national park system had a particularly strong influence on the development Madison's dual conservation/recreation park system. For a history of the national park system I utilized the works of Richard Sellar's (1997) "Preserving Nature in the National Parks: A History," Michael Lewis' (2007) "American Wilderness: A New History," and

Alfred Runte's "National Parks: The American Experience," (2010). Ann Vileisis' "Discovering the Unknown Landscape: A History of America's Wetlands" (1997), helped to contextualize the treatment of Warner's wetland within a national framework of wetland transformation. For the Warner Park section in this chapter I reviewed the annual reports of the Madison Parks and Pleasure Drive Association (MPPDA) from 1895 to 1928 (the MPPDA was the precursor to the present-day Madison Parks Division), and the minutes of the Madison Board of Parks Commissioners from 1932 to 1977 (as well as attending many meetings between 2009 and 2014), and the papers of Frederic E. Risser in the Wisconsin Historical Society. For Madison's municipal development and the role of parks within that development, I relied heavily on David Mollenhoff's exhaustive history of Madison and the city's progressive roots in "Madison: A History of the Formative Years" (2004). Newspaper archives, the Warner Park file of the Madison Parks Division, the Wisconsin DNR files on Warner Park and Castle Marsh, personal files and writings of local historians Ann Waidelich, Burr Angle and Dolores Kester, and Jack Bell of the Dane County Conservation League, as well as the files of the Brentwood Neighborhood Association, provided data for the construction of a timeline of Warner Park's development and its wetland.

II. Municipal Parks Development in the United States

Although the municipal park in the US is an institution associated with democracy, the melting pot, and the neutralization of class, its origins are profoundly anti-democratic. The word "parc" comes from the old English word for a hunting enclosure during the 16th century (Rosenzweig and Blackmar, 1992). English aristocrats created the first "parcs" by appropriating whole villages to use as hunting grounds.

When the first Europeans arrived to the New World they used “common” areas in village centers, clearings, to train militias, and hold meetings. These were also called village “greens.” Later, settlers began using cemeteries and riverbanks as spaces to picnic and recreate. The commons concept has resurfaced throughout the history of the US parks movement as workers in the late 1800s and anti-war protesters of the 1960s used Central Park’s meadows and greens for massive public meetings (Rosenzweig and Blackmar, 1992). Madison’s Rhythm and Booms in Warner Park could be another modern example of the commons concept.

Parks theorist Galen Cranz (1989) writes that park uses and meanings have varied greatly over the past 150 years; people have used the term “park” to describe almost any kind of property. Cranz could not identify a single common purpose for parks during her study which covers the history of the United States. In her typology of municipal parks, Cranz outlines four key phases: 1) 1850-1900, the “pleasure grounds” period of the nation’s first large parks; 2) 1900-1930, the “reform era” parks of playgrounds and organized activities to occupy increasing numbers of unemployed men and children (libraries, dance halls, casinos, swimming pools, ice rinks, etc.); 3) 1930-1965, the “recreation facility era” of buildings for sports; and 4) the current “Open Space” era which reflects the spirit of the 1960s and resulted in a closer relationship between park programming and popular culture. I will use Cranz’ typology as a framework to analyze the development of the Madison Parks system and Warner Park.

Central Park was the very first large landscaped public park that influenced parks history across the nation. This parks’ landscape was largely shaped by class interests; elites wanted a park to rival the parks of Paris and London. It was a tiny democratic step forward from the hunting enclosures of the British aristocracy.

The nation's "granddaddy" park engendered thousands of municipal parks as planners copied its organization and rules for use and design (Rosenzweig and Blackmar, 1992). Central Park also gave birth to the discipline of landscape architecture. This professional class continues to wield tremendous influence in the shape of parks everywhere.

A park of paradoxes, Central Park was built primarily for the rich with public funding, although today it serves millions of people of all classes, nationalities and ethnicities.⁴¹ Modeled on principles of British landscape gardening, it was built mainly by Irish refugees who had been driven from their own country by British colonialism (Marx and Engels, 1971). Its design emulated nature but nature at that location was erased to build it. The people living in that location were also erased, too, when their land was seized. Entire communities of mostly Irish immigrants and freed African slaves lived on the future park land. The Irish lived in an area called Pigtown. Blacks lived in Seneca Village which had several churches. One-fifth of the residents owned the land. Landowners were compensated while the poor were chased away.⁴²

To New York's political and financial elites who did not have to work the land, nature was a soothing rural retreat in the form of the weekend country estate, and an antidote to the unhealthy, chaotic and increasingly industrialized landscape of their city of coal-smoke fogs and epidemics. With the ascent of transcendentalism, writers like Emerson and Thoreau reinforced the elite's vision of nature as a nostalgic balm to the ills of urban life. Olmsted and others argued the park would civilize its users and provide social uplift.⁴³ Cranz (1989) calls Olmsted and other wealthy leaders pushing the park "moral entrepreneurs."

Labor leaders of the New York Industrial Congress had called for smaller parks all over the city instead of one big park or to increase the size of the Battery, a popular working class park (Rosenzweig and Blackmar, 1992). Many immigrants and ethnic groups preferred

commercial pleasure grounds with concessions and amusements. These demands were ignored as the city's elite pushed ahead for one large grand park to impress the world. By the end of the 19th century, the demands for smaller neighborhood parks and more active recreation areas for children were being echoed nationally by social reformers like Jane Addams in Chicago. Addams, who is considered the founder of the social work profession, and others were part of an urban reform movement to promote playgrounds and opportunities for strenuous physical activity as an antidote to unhealthy life in cities, particularly for children.

Frederick Law Olmsted's vision shaped our first park landscapes and histories; that vision still lingers in the curving, rolling landscapes of Madison's Warner Park. Olmsted, architect of the nation's signature park, was a "gentleman" farmer who had owned several farms where he had experimented with landscaping (Beveridge, McLaughlin, and Schuyler, 1981). He had also spent a lot of time studying parks and gardens in England. His view of nature was called "pastoral:" rolling, soothing green landscapes framed by groves of trees with a body of water to provide a mirror for the soul. It was not natural, but "naturalistic," an arranging of natural elements to guide and shape the vision of the viewer. He was not only "scaping" the land, Olmsted was shaping the way parkgoers viewed that public space and thus the way they behaved in it. Olmsted believed that public parks could be a "civilizing" force for the unassimilated foreign masses arriving to New York; this was park-as-Miss-Manners. For Olmsted personally, this pastoral vision was also a very important respite. Olmsted was a stressed-out workaholic who suffered from health problems his whole life. He found his childhood rural landscapes soothing and healing.⁴⁴

Olmsted was also a "moral entrepreneur" who viewed this park as a potentially "civilizing" influence on New York's exploding immigrant population (Rosenzweig and

Blackmar, 1992). Olmsted believed that green, calming spaces could change behavior. Later social reformers believed organized activities were the answer. In the early 1900s, when the reform era began, unemployment pushed more men and children into the streets. Parks provided spaces for organized social activities to depress crime rates. Social workers were the first professional parks employees and recreation was created as a subset of social work (Cranz, 1989). Olmsted's view of a large park as a tool for influencing human behavior has been a constant throughout US parks history, including in Warner Park (discussed in section VI).

III. Madison's Parks System: Pleasure Drives and the "Parks Men"

Madison's parks system developed in the 1890s, at the end of the pleasure grounds period, the first phase Cranz identifies. This is a description of the Warner Park area during that period:

Were I a poet I would take pleasure in expressing to you the emotion which arises within me when slowly meandering about the circuit at Maple Bluff and Governor's Island, and looping the loop at Farwell's point. What glorious vistas of water and woods are there revealed, and what kindly thoughts arise with us!

"There is a pleasure in the pathless woods,
There is a rapture on the lonely shore,
There is society, where none intrude
By the rolling lake, and music in its roar;
I love not man the less, but nature more."

Daniel K. Tenney, a self-described "nature worshipper" and a founder of the Madison Parks system read these lines at the tenth anniversary banquet of the MPPDA on April, 15, 1902.⁴⁵ Sumptuous affairs lasting for hours with as many as 200 guests, the MPPDA annual banquets attendees included the wealthiest and most powerful citizens in Madison. The architects of the Madison Parks system shared Olmsted's class background and his vision of nature in Central Park as a soothing and civilizing force.

Tenney was describing the area where Warner Park is located today. A century and a decade later, Tenney's 1902 glorious vistas are still there although a major road has replaced the poet's meandering circuit, a few scattered old trees clumped here and there are all that remain of his once pathless woods, and his lonely shore is the site of a small marina where I store a red kayak.

This group of men, the Madison Parks and Pleasure Drive Association or MPPDA, was the precursor to the Madison Board of Park Commissioners. Today several of Madison's most popular parks bear their names: Tenney Park, Brittingham Park, Olin Park, Vilas Park, Burrows Park, and Warner Park. The men of the MPPDA started their work in Madison by building several "pleasure drives." Farwell Drive, the loop that Tenney referred to above, ran between what is today Warner Beach and Warner Park; it was the third pleasure drive, built in 1899. At that time, there was no Warner Park and this area of the city was rural, studded with farms. Farwell Drive, and the area that became Warner Park, must have been very important to the MPPDA and greatly beloved by whoever compiled the first two decades of the MPPDA's annual reports. There are more photographs of this iconic drive in the yellowing and frayed pages of these leather-bound volumes than any of the other pleasure drives. If John Olin, the MPPDA's first president were alive today, I'd ask him why.

Olin was MPPDA president for its first 18 years and is the main architect of Madison's park system. The MPPDA annual reports are full of his long stirring speeches at banquets exhorting colleagues to contribute to the parks cause. A charismatic man of big ideas who pushed for the widening and deepening of rivers, the dredging and taming of marshes, and the purchase of thousands of acres of land for public use, he also paid attention to tiny details in parks like wildflowers and trees, advocating for white daisies, shooting stars and lady-slippers,

and begging MPPDA members to protect them by becoming "...a self-appointed policeman for the protection of the trees, shrubs and vines which, native or cultivated, grow along the drives and in the woods..."⁴⁶

His successor, J.C. Schubert, in a tribute to Olin, called him the "master spirit" of the Madison parks movement and described Olin's tasks:

Olin was responsible for the subscription list and solicited most of the funds, doing a great part of the solicitation himself. He looked after the details of the work, purchased supplies, made contracts for dredging, for right-of-ways, for the conveyance of lands. He staked out driveways, planned for planting, drew voluminous reports, prepared communications to the council, to the newspapers, to railway officials, trimmed trees, prepared monthly statements of payments, made elaborate financial estimates, interviewed aldermen, made trips to consult railway officials and in a hundred other ways gave unstintingly of this time and energy.⁴⁷

Within its first decade under Olin's leadership, the MPPDA's push to develop pleasure drives had broadened into a well-organized campaign to persuade the city to buy land to build parks for all Madisonians, and particularly as MPPDA president John Olin put it "the laboring classes." Under Olin's tenure between 1894 and 1909, Madison's park acreage increased from just three and half acres of park land in Orton Park to 269 acres of parks, three pleasure drives, and a parks commission.⁴⁸

Madison historian David Mollenhoff (2004) also credits Daniel K. Tenney with changing parks history. Tenney offered to buy the land that later became Tenney Park on the condition that the MPPDA develop more parks; Madison had only one park when Tenney made his offer, despite population growth. Mollenhoff writes: "Tenney Park changed history: "...beginning an extraordinary period of Madison open space development; it was the association's first in-city park and the first Madison park providing public lake access."

With Tenney's gift, the MPPDA moved from its traditional constituency of providing pleasure drives for wealthy carriage owners to providing parks for all, and particularly laborers on Madison's east side. Mollenhoff views Tenney's gift as the seed of today's park system.

At the MPPDA's 10th anniversary banquet on April 15, 1902, Olin told his colleagues: "The wealthy can make parks and play grounds for themselves. The laboring classes cannot. No child should go far to reach its play ground, and no city does it full duty to its children which provides only pavements for them to play on, and leaves them walls to look at."⁴⁹

At this same meeting Olin told the audience that Madison should have one acre of park per 200 residents. He was determined to make the city beautiful by preserving green spaces and planting more trees. Like Olmsted, Olin believed that beauty could change people. His vision and drive is the main reason Madison's park system became a national model for cities like Seattle, Denver, and Boston.⁵⁰

Olin did not accomplish his main goal of making the city of Madison assume full responsibility for financing and managing the parks system. But he convinced wealthy citizens that they needed to both donate land and also fund the purchase of land, immediately. The price of land would only rise, he argued, and the city needed to consider the needs of the population for the next 100 years. Olin also convinced the city to create taxes to fund parks and to hire its first park superintendent.

Perhaps Olin's most important legacy was not the thousands of trees and the hundreds of acres preserved for future generations, but that he changed how people viewed parks and their relationship to them. Mollenhoff (2004) writes that Olin fomented a "revolution in public thinking. People require contact with natural beauty in their neighborhoods. Cities are obligated to provide parks to its citizens. Great cities require great parks. That is Olin's park legacy."⁵¹

From Marshes to Parks in Madison

The first major city parks for all—Tenney, Vilas, and Brittingham—were carved out of and built upon filled-in marshes, a job that required several dredging machines to work for years, according to Mollenhoff. At that time, much of East Madison was covered by what Madisonians called the Great Central Marsh. This marsh covered 172 acres of the East Washington Avenue corridor, the city's main artery today. Marsh waters were two-feet deep.⁵² The ghost of that paved marsh returns with a vengeance during extreme summer rainfall in Madison.

At the end of the nineteenth century and beginning of the 20th century, nationally marshes were viewed as wastelands and dumping grounds. With epidemics killing thousands in New York and New Orleans, dirty water meant disease and death, and this vision of wetlands as a public health menace persisted until the 1950s. In May 1951, the Madison and Wisconsin Foundation (affiliated with the Wisconsin Chamber of Commerce), described the evolution of Madison's parks: "Beautiful Tenney Park...was an unsightly, odorous cattail marsh until good citizen Daniel K. Tenney transformed its 44 acres...Vilas Park...was largely a low-lying swamp...Brittingham Park...was a green scummed, malodorous, cattail marsh...Olbrich Park...was mostly a low-lying, unattractive bog..."⁵³

By 1905 the Tenney Park marsh had been filled in. By 1910, the Marquette-Yahara marsh had been filled and by 1920, most of the Great Central Marsh was gone. Mollenhoff writes: "Thus, after about twenty-five years of filling, Madison's Isthmus marshes were subdued and the lordly bullfrogs that had reigned so long in these boggy kingdoms were heard no more."⁵⁴

These efforts were minor compared to the nearly century-long push to fill in marsh and lakeland between 1836 and 1920. During that period, property owners filled in approximately 3,800 marsh acres and at least 200 acres of former lake, according to Mollenhoff. Mollenhoff credits four forces with driving this radical transformation of Madison's land and waterscape: 1) doctors who viewed marshes as a health hazard, 2) embarrassed city leaders and businessmen who did not want the smelly marshes and lakes to limit the city's growth, 3) developers seeking profit, and 4) parks activists like the MPPDA who wanted to convert the marshland into parks.⁵⁵

The Warner Story: A Tragedy Begets a Park

Warner Park has had an odd history of stalled development within the Madison Parks system. It is a story of fits and starts with nearly three decades passing between the park's inception and the moment when the city actually began building the park. According to the Madison Parks Division, the use of the Warner area by the public dates back to 1898, when the MPPDA built Farwell Pleasure Drive. This drive ran parallel to what is today Warner Beach and through one of three farms that later became Warner Park.

As one of Madison's oldest parks, Warner was conceived before the city's parks division was created. Warner was developed just at the dawn of the professionalization of planning in parks era in Madison (late 1950s-early 1960s), and the professionalization of the parks system, but it was a park without a detailed master plan according to city planners.⁵⁶ Its master plan is simply a map. This meant that the park was developed piecemeal, on an ad-hoc basis, and interest groups with the most power gained the most ownership and use of the landscape (baseball franchises, for example).

Ernest Noble Warner was a progressive Republican who was president of the MPPDA from 1912-1930. In 1929, he appointed a committee of the MPPDA to buy the popular white

sand beach for the public. That beach is called Warner Beach today. Perhaps his pledge to turn the area into a public beach was because Warner loved picnics and he and his entire family lived in tents on Lake Mendota Beach for two summers.⁵⁷ Just one year after he launched the beach initiative, Warner was returning from a bible conference in 1930 when his rear tire blew out just a few miles from Madison. His car flipped over several times. When the police arrived at the scene Warner was still alive. He lived just long enough to get to Wisconsin General Hospital.⁵⁸ Because of his public service to Wisconsin and his interest in this particular beach area, the MPPDA decided to name the beach and adjoining park after him.

Charles E. Buell, a prominent Madison attorney, compared Warner to John Olin during the eulogy he gave at Warner's service stating that other than Olin:

I know of no other Madison citizen, living or dead, who has done so much work of civic nature as did Mr. Warner...Mr. Warner has given unsparingly of his time and strength in his endeavor to increase the beauty of Madison and more than anyone in recent years contributed to carrying on the work which his illustrious predecessor inaugurated. Few know or appreciate the amount of time and energy he has given to public service.⁵⁹

Born and raised on a farm, Warner was from a proud family that traced its roots back nine generations to one Andrew Warner who left England and settled in Massachusetts in 1630. Their great-great grandparents had fought in the revolutionary war and their great grandfather had come to Wisconsin in 1852. Warner's father, Col. C. E. Warner, had returned from the Civil War battle of Deep Bottom, Virginia, with an empty sleeve after a bullet shattered his left arm. The colonel became a state assemblyman and senator.

Ernest Warner the son eventually followed his father's lead into politics. He studied classics and law at UW-Madison while teaching in a rural school. After graduation he became a lawyer and jumped into the progressive movement in Wisconsin. Warner was a close friend and follower of Robert M. LaFollette, the republican-turned-progressive leader who served as

Wisconsin's governor and became a national voice of opposition to corporations controlling government. In 1904, at the age of 36 Warner became a progressive candidate for the Assembly, representing the capitol city of Madison. As a floor leader for the LaFollette faction he wrote two major bills in Wisconsin: the primary election law and the Wisconsin Civil Service Act, one of the most comprehensive in the nation.⁶⁰ Warner described himself as "an unfaltering progressive" who endorsed women's suffrage and called for a "fairer division of wealth." An acerbic critic of "the great financial interests of the East," Warner declared himself as a candidate to represent "...the great common mass of men, the farmers, laboring men, the small business men, country bankers, co-operative associations, small packers..."⁶¹

A dairy farmer, lawyer, politician, investment banker, land developer, amateur genealogist, and public servant, Warner was also superintendent of his Sunday school, chairman of the board of the YWCA, and active in numerous civic and professional organizations. His sister wrote that he never missed a good public meeting.⁶² Warner also became the third president of the MPPDA, running the organization for 18 years and overseeing a vast expansion of Madison's park system in both land mass and public use.

In her tribute to him after his death, his sister Fanny Warner wrote that her brother "had a love for land, natural beauty, and the outdoors that is hard to describe."⁶³ The MPPDA gave Warner an opportunity to share this love of the outdoors with all Madisonians and future generations. His MPPDA tenure coincided with the national rise in demand for organized recreation. Cranz (1989) defines this as the second parks phase, the "reform era" from 1900-1930 of playgrounds and organized activities to occupy increasing numbers of unemployed men and children. Parks, including Central Park, began to fill with libraries, dance halls, casinos, swimming pools, and ice rinks. Playgrounds spread nationwide. In Warner's 1923 annual address

he noted: "The demand for playgrounds and athletic fields is increasing every year. The parks were not intended for athletic games, but the great pressure for opportunity for athletic exercise, and, in the absence of sufficient grounds, areas in the parks have been set aside for games as far as possibly consistent with the proper use of parks."⁶⁴

Many Madison playgrounds date back to Warner's era. Early in his presidency Warner noted the urgent need for more "shelter houses" in parks and more toilets. He also noticed the growing importance of smaller neighborhood parks. But his greatest legacy is that he continued Olin's push to persuade the city to administer the parks system. During his tenure, the law creating a Madison parks district and board of parks commissioners finally passed in 1915. Warner spent much of his energy laying the legislative and administrative foundation for the present parks division.

The Birth of Warner Park and the Disappearance of Castle Marsh

Warner accomplished a great deal during his tenure but the white sand beach he wanted to buy for the public remained just an idea in the committee he created in 1929. The Great Depression slowed down the MPPDA's fund-raising to buy this land. Although the MPPDA kept making payments to local farmers for the land, in 1937 it still owed the Woodward family \$10,700.⁶⁵ Ironically, what he could not achieve in life, Warner achieved with his sudden and tragic death. Two weeks after his car accident in 1930, the Ernest N. Warner Memorial Park Committee formed to raise \$20,000 to buy the beach as a memorial.⁶⁶ By 1939, the MPPDA was able to turn over the first seven acres of Warner Beach to the city of Madison, after the city finally assumed full responsibility for the park system and created what is today the city parks division.

The city was not the only party interested in the land in this area and its recreation potential. A group of passionate fishermen in the Dane County Conservation League had already been taking care of a corner of Warner's wetland known locally as "Castle Marsh...the last good spawning ground on Lake Mendota and the only natural rearing pond in the area" for northern pike, largemouth bass, carp and bullheads. This is according to a local history called "The Castle Marsh Story" compiled by Dane County Conservation League's Jack Bell.⁶⁷ The wetland was called Castle Marsh because it covered land owned by farmer James Castle and also by another farmer, Herman Weddig. Bell wrote that during a severe drought from 1933 to 1939, the fishermen were so concerned about the spawning grounds that they opened an outlet in July and August between the marsh and Lake Mendota to allow the small pike fry of four to five inches to swim into the lake.

In 1943, during the war, Ingvald Hovde, a Norwegian real estate developer known as "Inky" bought a portion of Castle Marsh, the northwestern edge of Warner's wetland, just a short walk from the new public beach and across the street from a new home he was building for his family. Corn prices were high at the time and so Hovde thought about draining the marsh and planting corn to sell. But Hovde later told the fishermen of the Dane County Conservation League that as he walked along his fences in the marsh, he noticed all the nesting birds and spawning fish. A passionate fisherman and hunter, he told Bell and the others that he was concerned about the future welfare of the animals. Then in the 1950's, the city purchased two farms north of the railroad tracks, adjacent to the beach, to finally develop Warner as a major recreation park to meet the needs of the growing population in the suburbs of northeast Madison: the Moore farm in 1953 and the Rieder farm in 1955. This was part of a national trend. With the post WWII building boom, housing developments began replacing farm land on Madison's north

side, as the township morphed from rural to urban. Nationally, between 1947 and 1957, developers built 11 million new homes in the suburbs.⁶⁸ Since the birth of the MPPDA in 1892, the population in Madison had grown from 13, 426 in 1890 to 96, 056 in 1950, and with it the need for more parks and recreation facilities.⁶⁹ The new Warner Park would meet the needs of this expanding population. An article in the Wisconsin State Journal published in the 1950s described the future park site as "a swamp area in the section recently annexed to the city from the town of Westport." In the same article Park Superintendent James Marshall mentioned "the low characteristics of the land" and said the city would dredge a lagoon there within five to ten years.⁷⁰

When the city began buying the farms to build the park, Harold Starkweather, a member of the Dane County Conservation League, contacted Ingvald Hovde because he too was very concerned about the future of Castle Marsh and the wildlife that lived in it. The DCCL held a meeting in 1953 to discuss how to save the marsh. At that meeting Hovde told the DCCL that "the best use of the land would be to preserve it for wildlife."⁷¹ Hovde and the Dane County Conservation League (DCCL) began planning how to protect the pike spawning ground. Hovde donated ten acres of his land to protect Castle Marsh. DCCL members decorated tin cans and went door-to-door to collect public donations throughout Madison so that they could help purchase additional acreage of the marsh. Together with Hovde, they donated 13 acres of Castle Marsh to the Wisconsin DNR, then known as the Wisconsin Conservation Department.⁷²

Documents in the DNR's "Castle Marsh" file show that the city and DNR agreed that the city could eventually create a lagoon in the marsh for recreational purposes while preserving enough of the wetland to support the pike spawning grounds. DNR officials at the time believed that this arrangement "...would be of mutual benefit from a resource multiple-use standpoint."⁷³

This agreement is why part of Warner Park, the former Castle Marsh area, is still owned by the DNR today.

In 1956, the US Fish and Wildlife Service published its first national wetland inventory called "Wetlands of the United States." The authors created a taxonomy of 20 wetlands types. The survey covered nearly 75 million acres and surveyors rated over 22 million of these acres as important to waterfowl.⁷⁴ The report signaled a major shift in national views of wetlands because it used science to give a value to these areas. This is the era when the word "wetland" began to be used. Environmental historian Ann Vileisis writes: "With a word, an inventory, a taxonomy, and legislation to prevent federal drainage assistance, wetlands had taken a big step toward becoming a valued part of our landscape."⁷⁵

But it was too late for Castle Marsh. New suburbs were being built in the area surrounding the marsh, greatly increasing stormwater runoff. Then two years after the landmark wetland survey was published, in 1958, the city dug the first drainage ditch in the new Warner Park. "One of Madison's finest parks is planned for the raw land enclosed within the dotted lines in the photo above..." reported The Wisconsin State Journal. The article ran with a photo of the "raw land" with the dotted line representing the new drainage ditch. A baseball diamond was installed and the city was preparing to seed the area with grass.⁷⁶ That same year, in 1958, Wisconsin Conservation Department officers put up 20 "Fish Refuge" signs for the first time in Castle Marsh between March 1 and June 30. The memo approving the placement of the signs stated that these signs would be erected every year.⁷⁷

By 1959, just six years after Hovde and the fishermen of the DCCL had donated 13 acres of Castle Marsh to the DNR, there was already evidence in the DNR file that the northern pike

were in trouble. Just one year after the baseball diamond was installed and the city started seeding the turf, Wisconsin Conservation Department official Ed Owen filed this report:

On the afternoon of Thursday, April 16, 1959, I personally observed the existing conditions at Castle Marsh in general and for the presence of northern pike specifically.... There is a very slight flow of water from the Marsh out to the lake in this outlet channel...There was no evidence of northern pike spawning. About 5 acres of the marsh area proper as well as the new ditch through the marsh area was open water...No fish or fish activity was observed in the marsh waters outside of the channel area. Mr. Al Koppenhaver advises that on a recent visit by himself to the Castle Marsh area he found the water extremely high on the lake side and water flowing from the lake into the marsh area. This undoubtedly adversely affected any northern pike spawning run which might have taken place by preventing the current from reaching the lake from the marsh. Mr. Koppenhaver did not observe any northern pike during his recent visit to the marsh area.⁷⁸

There was also a new water source that officials in both agencies could not contain and that was increasing in volume faster than they had planned for: storm runoff from all the new housing developments.⁷⁹ It was running straight into Lake Mendota and they decided to protect the lake by rerouting the runoff into Castle Marsh, lengthening the flow distance to the lake by 1,100 feet. On April 11, 1961, Conservation Department official Elmer F. Herman wrote: "... It is felt that the routing of this run-off drainage per the easement provisions rather than a more direct route will greatly reduce any future sediment damage to Lake Mendota proper. The City of Madison Parks Commission has fully cooperated with us to date on our tentative future plans for the retention and development of northern pike habitat in this entire marsh area..."

In 1961 the city and DNR agreed to "...eventually lagoon the entire marsh for public recreation." They proposed protecting the northern pike by sloping the lagoon edges and maintaining a certain channel depth. The city also agreed to install a settling basin where the stormwater entered the marsh and to dredge it out, periodically. According to DCCL member and fisherman Jack Hurst, the city did not keep these promises.⁸⁰

A 1962 Wisconsin State Journal article headlined “Plans for Warner Park: To be City’s Largest in 5-10 Years” laid out the park’s future as a major recreation park.⁸¹ The plans described how Warner Park fits in two of the parks phases identified by Cranz (1989): the third phase from 1930-1965 which Cranz calls the “recreation facility era” of buildings for sports; and the current fourth phase or “Open Space” era. The new park would contain an athletic area, a recreation area, two neighborhood playgrounds, a community park, and a wooded picnic area (this was supposed to go in Warner’s Big Woods),⁸² in addition to the already developed Warner Beach. The new park would also have an ice skating rink, a shelter house, and a toboggan run.

The new park was being developed to match “the explosive expansion of the city into this area...As the vacant lots disappear, youngsters have to get into park land,” said Parks Superintendent James Marshall in the same article.

Marshall described Warner at that time as “approximately half high land and half marsh,” and unsuitable for residential development because the land was too low. He also mentioned the Castle Marsh pike spawning ground and assured that “Anything done in the way of excavations or lagoons will be in accord with the principles of the commission [Wisconsin Conservation Department].”

Most of the planned facilities were eventually built. The article is printed alongside a map of the new park which shows Castle Marsh marked as a “Conservation Area.”

Nine years after the DNR had signed off on a plan to protect Castle Marsh and allow the city to develop a recreational lagoon, the DNR recognized that the plan to protect Castle Marsh was unworkable; by then the city had already dredged a 27-acre lagoon. The city’s emphasis on public recreation and “multiple-use” of the marsh ended up leaving out the fish. In a DNR memo dated September 23, 1970, John G. Brasch wrote: “Due to residential developments around the

perimeter of the entire marsh area...it became apparent that control of water levels over the entire marshland would be impractical..."

After studying the DNR file and after lengthy interviews with both Kurt Welke, DNR fisheries manager and Russ Hefty, the city parks conservation officer, I believe that everyone was responsible and no one was responsible in the DNR-City of Madison historical partnership to manage the marsh. Welke said: "The problem is that things slowly happen. The city had to get rid of water and we [DNR] let them."⁸³ Hefty said: "No controversy there. They've done nothing and we've done nothing. Now the fishermen are bugging them and our engineers."⁸⁴

Early maps in newspapers in the 1960s and documents in the city's Warner Park and the DNR's Warner files up until 1970 show the marsh acres that Ingvald Hovde and the Dane County Conservation League donated to the DNR marked as a "conservation area."⁸⁵ As these men died and the city continued to develop and urbanize Warner Park, the "conservation area" in Warner disappeared from maps and documents. A city parks map of Warner in 1993 shows the area marked simply as "marsh."

IV. The Conservation/Recreation Divide: One Master's Thesis and the Segregation of Nature in Madison's Parks System

As a result of this research I believe that one major reason Dane County's best northern pike spawning ground disappeared from city maps and public consciousness is because of Madison's dual recreation and conservation park system, which protects some marshes and not others. Today Madison's conservation parks provide 1600 acres of wildlife habitat to preserve "in its natural state" and for environmental education.⁸⁶ Madison's conservation parks are where dozens of volunteers practice Beatley's (2011) concepts of restoration and care. The conservation park system also constitutes a vital habitat buffer on the city's edges that may

provide wildlife corridors between the city and wilder areas that have not yet been urbanized. It also provides urban biodiversity reservoirs that may help recreation parks like Warner Park sustain a wildlife population according to Russ Hefty, the city parks conservation officer.

According to the Madison Parks Division website the conservation park management goal is to: "...to restore native plant and animal communities while providing education areas and opportunities for everyone...Conservation parkland is our past, present and future. We need to preserve this land, restore it to its original state now for future generations to have a window to our past."

There are few buildings and no sports facilities in Madison's conservation parks. These parks are managed very differently from recreation parks. All plants and animals are protected. There are much stricter rules governing public use to protect these "natural areas." The Madison Parks website lists these rules: no dogs, no picking of flowers, no vehicles, no bicycles, no off-trail use, and no fires, picnics or alcoholic beverages.

Urban parks researcher Paul Gobster (2007) calls these special rules and the designation of spaces like conservation parks "the museumification of nature." Conservation parks are fragments of Eden in Madison (Slater, 1995). Like living museum-cathedrals, users can walk through the parks but cannot touch the native plants. One parks commissioner commented at a Madison parks commission meeting in 2011: "I hold our conservation parks as sacred."

Madison's recreation parks like Warner, on the other hand, are for people to play organized sports in. They are the spaces where large public events are held. There are no restoration or specific preservation goals in these spaces.⁸⁷ This dual system, which is unusual in municipal park systems, began with a master's thesis.

In 1957, one year before the city of Madison began replacing the low marshy prairie in Warner Park with turfgrass, a master's student in Horticulture and Landscape Architecture at UW-Madison submitted a master's thesis titled: "The Expansion and Improvement of the City of Madison Park System." The introduction of Art Johnson's thesis explains that the document recommends solutions "to some of the main problems confronting the city of Madison Park Department today." Johnson was a planner in the parks department while studying for this master's degree. A landscape architect who worked with Frank Lloyd Wright early in his career, he was responding to the baby boom in Madison. Johnson was thinking ahead to meet future recreation needs. Between 1950 and 1970, the population of Madison grew from 96,056 to 173,258, partly because of annexation.⁸⁸

Johnson eventually became the head of Park Planning for the Madison's Park Division working for 38 years "preserving, planning and constructing parkland for the Madison Parks system that is in place today."⁸⁹ He believed everyone should be able to live close to a park and as new neighborhoods were built, he fought for new parkland to be appointed. As part of his job he would examine a piece of land and decide what type of recreational features it should have: nature trails, picnic shelters, ball fields, etc.⁹⁰ He directed a major expansion of Madison's parks and recreation facilities, especially sports fields and conservation parks.

"If you look at Madison parks, you're looking at Art Johnson in many, many ways," said Tom Benson, a golf pro who worked with Johnson. Johnson also designed 11% of all golf courses in the state.⁹¹

Johnson's thesis addressed a serious public policy gap at that time. In the 1950s there was no detailed land-use plan or plans for park expansion. The city had other priorities. Johnson wanted his thesis to jumpstart that conversation. Johnson had also been greatly influenced by

President Eisenhower's Youth Fitness Conference in 1956 and the Weber report of 1953, a study documenting the "physical deficiencies" of American children. Citing public health studies, Johnson was greatly concerned with the lack of camping opportunities and "outdoor living," swimming, and particularly the lack of play areas on school ground.⁹² He wrote:

Madison is not exempt from this problem of a population boom which quickly outgrew recreational facilities as originally planned by the city's leaders. The years following World War II left a twofold result on our park planning: 1) present facilities are inadequate to meet our needs and 2) the expense of other city improvements (i.e. schools, streets, etc.) have depleted resource funds to such an extent that there is little surplus to maintain the original recreational areas, not to mention the purchase of the necessary additional lands to meet increased demands... A healthy community calls for adequate and varied recreational facilities for groups of all ages.⁹³

Johnson proposed to address this problem by expanding existing facilities to serve greater numbers in a wider variety of ways, and by purchasing "lower-cost" land for parks in future suburbs. The exploding demand for recreation spaces for all kinds of activities that Johnson envisioned is evident in the minutes of the Madison Board of Parks Commissioners throughout the 1960s and 1970s. Representatives of sports teams, gospel associations and swim instructors lobbied at parks commission meetings to use park spaces. Neighbors from different neighborhoods, including new neighborhoods on Warner Park's border, asked for more basketball courts, playground equipment, bathhouses, tennis courts, water bubblers, hockey rinks, permission to fly model airplanes, sites for teenage dances, pet exercise areas and sailing and canoeing facilities, among other requests.

As the city's "largest" new park with several different types of areas for recreating, Warner Park was the ideal space to help meet some of these needs. In May of 1960, the Parks Commission approved plans for developing a baseball diamond, football field and "related recreation features" in Warner Park near the intersection of Northport and Sherman avenues. The new facilities were to be used in coordination with the Madison school system "...for physical

education and interscholastic purposes.”⁹⁴ At the parks commission meeting on April 7, 1965, commissioners voted six to one approving the Madison Mustangs Football team’s game schedule for Warner Park. They also approved financing the installation of 2500 bleachers. By 1970, Warner Park had become the go-to site for most major sports tournaments as well as the city’s largest fireworks show (see Chapter 9). I could not find any mention of Castle Marsh and the potential impact of this development in the minutes of the Board of Parks Commissioners, with the exception of reference to the need for the 1970 easement agreement to allow the city to dredge the lagoon.⁹⁵

Cherokee Marsh and Conservation Parks

While Warner was being developed for organized sports and public events, planners and parks commissioners were engaged in a negotiating process to purchase lands to set up a parallel system of conservation parks where marshes and areas viewed as “natural” would be protected and preserved. Although the city did not institutionalize the conservation park system until 1971, this process really began when Johnson toured all of the western National Parks as part of his master’s research in the 1950s.⁹⁶ This tour had a huge influence on Johnson’s ideas for municipal parks. Johnson’s thesis recommended creating “preserves” around the city to protect the future water supply to the lakes. In this sense Johnson was a visionary because he was thinking holistically about how to protect the entire watershed instead of just individual water bodies. He was also thinking of how to protect wildlife in a municipal parks system, a concern which was virtually unprecedented: “A conservation park should be planned so that wild life may continue to use this land as a reserve area. Waterfowl use the marshy haven as a resting spot during their long migration. Fish of all types spawn in the early spring in the warm shallows...The protection of these areas will guarantee Madison sportsmen plentiful game in the future.”

Johnson recommended buying large tracts of land ranging in size from 100 to 1,000 acres to create a feeling of “open country. “...exceptional natural beauty should primarily be sought.”⁹⁷ He noted that marshland in new parks should be left “undisturbed” because this was one of the only places where yellow-headed blackbirds can be found.⁹⁸

Johnson’s thesis proposed ringing the city with conservation parks and locating “recreation-type” parks near the city for circuses, fairs, displays, sport centers.⁹⁹ By the time the conservation category was created in 1971, Johnson and others had already spent over a decade pushing the city to buy hundreds of acres of land. According to Kenneth Clarke, Madison City Planning Director from 1959 to 1969, and who worked with Johnson, the city picked conservation park sites by asking what land was worth preserving. Size not necessarily a consideration: “The idea was to preserve the feature desirable to preserve.”¹⁰⁰

Johnson’s thesis contains an audacious and contradictory vision for the park system that reflected the views of that time period towards marshes and wetlands. He recommended preserving Cherokee Marsh on the city’s outskirts--a 2000-acre marsh that is the crown jewel of the Madison Conservation park system today—while continuing to fill in the city’s more central marshes with garbage (Cherokee Marsh is just 2.8 miles from Castle Marsh in Warner’s wetland). Environmental and wetland historian Ann Vileisis (1997) calls this a “destruction-appreciation” dualism governing attitudes towards wetlands that is still operating today. Vileisis believes the drive to destroy wetlands has historically been fueled by a cultural disdain for swamps that dates back to the Puritans. Europeans were unfamiliar with swamps and marshes because England had already destroyed some of its own. She also attributes our society’s schizophrenic views towards wetlands to the deeply rooted idea of wetlands as properties with finite boundaries, just like dry land. She writes that we do not understand their liquid nature and

interconnectedness. Vileisis calls wetlands today “the most controversial landscape in America.”¹⁰¹

Si Widstrand was the Conservation Supervisor from 1975 to 1991, and succeeded Johnson as Parks Planning and Development Manager from 1991 to 2008. Widstrand said that Johnson’s development mantra was “Save the best. Doze the rest.” Widstrand said that parks planners simply did not have much ecological knowledge then, and “were strongly committed to developing recreation facilities.” Widstrand said that he and Johnson “...sometimes disagreed internally, but became allies and preserved many natural features in the growing park system throughout their careers.”¹⁰²

Because of Johnson’s thesis and other conservation enthusiasts who continued his work, particularly certain parks commission members, Madison developed the conservation park system and institutionalized it during the 1970s. Widstrand pointed out that the Madison Parks Division is the only city agency that has had professional conservation staff continuously since 1975; such an early emphasis on conservation in municipal parks was also very unusual, nationally.

During that same time period, Warner Park, the largest recreation park, became the go-to site not just for organized sports but other activities such as huge rock concerts, motorcycle rallies and city festivals. This happened despite the occasional opposition of the alder representing the Warner Park area.¹⁰³

Unintended Consequences: Warner’s Wildlife Disappears

As the conservation category became more institutionalized, natural areas expanded in the city and were protected for future generations. Yet this expansion created a contradiction: nature also became more segregated in the Madison park system. Castle Marsh and its animal

residents became even more invisible, except to daily park-users and neighbors (see chapters 8 and 9). I believe Madison's dual-park classification system changes the way people view places like Warner Park; the conservation category became an ideological filter that prevented them from seeing the animals that actually lived there. I have observed this during over 600 hours of field research conducting a baseline survey of Warner Park's birds; environmentalists, ornithologists and birders have continually expressed surprise at the park's biodiversity. The first time I shared Warner's bird species count at a city council meeting in November of 2009, councilman Michael Schumacher asked: "These birds in Warner Park—can't they just go to Cherokee Marsh? That's a conservation park."¹⁰⁴

Environmental organizations do not view urban parks or their wild residents as "nature" because of this ideological filter and because of the recreation park designation; therefore, these organizations do not advocate for urban wildlife. The problem that I see is not with the conservation/recreation system itself, but with what Cronon (1995) calls "...the specific habits of thinking that flow from this complex cultural construction called wilderness."¹⁰⁵ Cronon writes of an "ideology of wilderness" which separates humans from nature: "The place where we are is the place where nature is not."¹⁰⁶

According to Cronon's theorization of the ideology of wilderness, Warner Park, with more than 750,000 visitors annually and ranked 103rd in the nation in terms of use, has become a place where nature is not and cannot be. The wilderness filter privileges large, open "sublime" spaces at the expense of the Warner Parks of the world which become: "...too small, too plain, or too crowded to be *authentically* wild." Warner's recreation designation erased its state-designated wetland, woods, meadow, and wildlife. If Madison's recreation parks are not real nature then the animals in them are not natural.

Since Warner Park is not a conservation park, its wildlife is not surveyed or monitored. Parks division conservation officer Russ Hefty said “It’s not a conservation park. There’s no management of wildlife there” (this was in 2008, before he began managing the Canada Geese in Warner Park in response to complaints about their numbers).¹⁰⁷ Wildlife habitat needs are not considered during urban planning processes or for management purposes. For planners, this means that the park’s land and waters are a blank slate. In 2012, for example, the district’s alder decided that the park needed a new master plan because of conflicts over uses. The city’s public bid for the master plan was 44 pages long and contained over 20,525 words. It instructed consultants to conduct an ecological inventory of all vegetation. The word “wildlife” did not appear. The word “fauna” appeared once. There was not one fox, one bird, or one fish in this document.

This is not just an issue in Warner Park and the Madison parks system. Although municipal park uses have changed considerably over the past 150 years, one management tenet has remained constant: animals in municipal parks have never mattered. From an institutional standpoint, they do not exist. Nature in a city park is irrelevant. Trees and plants are replaceable and expendable (Cranz, 1989). They are not part of an ecosystem. Urban ecology has never been the basis for park planning. Urban animals are mostly invisible except when they are viewed as “pests.” This is what I discovered during a review of parks literature. I did not find a single urban parks study that focused on the environmental history of the land, water, *and* the animals that live in that place. Urban parks studies focus solely on human history. Animals are mentioned very rarely and abstractly as “wildlife” or “wildlife habitat.” For example, in a 40-year review of Madison Parks Commission archives, I found animals mentioned only in the following contexts: 1) parks employees illegally raising chickens on park properties; 2) rules involving domestic

dogs; 3) zoo animals; and 4) a few references to preserving species in decline like meadowlarks and bluebirds. The meaning of the animals to park users and the impact on mental health is not considered in parks and leisure science literature, although public health researchers and environmental psychologists are considering the importance of animals to human health.

The exception is in the public literature, for example in books such as Marie Winn's 1998 "Red-tails in Love: A Wildlife Drama in Central Park," and Winn's 2008 "Central Park in the Dark: More Mysteries of Urban Wildlife." Winn chronicles how the wildlife of Central Park, particularly birds, created a diverse and dedicated human community of birders.

The recreation/conservation designation also affects how human park users are viewed and counted, or not viewed and counted. Like the animals in recreation parks, the humans who watch the animals and enjoy them have also become invisible. Human "users" of recreation parks are equated with consumers because they either pay for services or reserve space or facilities. I observed how this happened in 2011, while participating in public meetings and surveys during the Madison park system's planning process for a new five-year Park and Open Space Plan. At two public meetings (January 25, 2011, and February 3, 2011), Kay Rutledge, Assistant Parks Superintendent of Planning, Development and Finance, explained that while the public could participate in planning through three "input" meetings and an online survey, only "stakeholders" would be interviewed by the parks department. When questioned by several members of the audience about the system's definition of a "stakeholder," Rutledge defined it as a user who either rents or reserves a facility such as a building or a court. Parks employees explained that they planned to interview approximately "30 recreation groups," by choosing the groups that made the greatest number of reservations. Some members of the audience criticized this definition as narrow with a "bias" towards organized sports and groups that can afford to pay

for facilities.¹⁰⁸ They demanded that the parks system expand this definition to include parks’ “friends” groups (volunteer organizations that care for their local park), the schools closest to each park, local community centers and other park users. While participating in the planning process for that five-year plan I observed that Madison’s park system only formally recognizes organized groups and does not count as “stakeholders” people who use recreation parks for walking, jogging, picnicking, fishing, nature study, geo-caching, musing, sun-bathing, mental health (the views, fresh air), and other silent or unorganized sports.¹⁰⁹ Park users like my neighbors in the apartments--Sandy R., Jan Einfeldt, Golden Helmet-man, and others I saw every day in the park for years—were not counted or heard in public planning processes. Most of the park users I interviewed did not want to testify publicly. Park users with serious mental and physical health problems and elderly users rarely attended public meetings at night. According to the Madison Parks Division, only 29 people participated in the three public meetings for the new Open Space plan.

V. The Influence of National Parks on Madison’s Dual Park System

The conservation/recreation dichotomy is not the only way in which the national park system has influenced the development of Madison’s park system. In Sellars (1997) history of the development of the national park system and the role of nature in that system, I found the following parallels with the development of Madison’s municipal park system and the management of Warner Park:

1. Scenery is emphasized over science and ecology. This is evident in how the best northern pike spawning ground in Dane County, Warner’s Castle Marsh, was not protected despite signed agreements to do so. A recreational lagoon was more important. There have been

seven different studies of different aspects of this wetland between 1989 and 2014 done by a local aquatic biologist, the DNR and the Public Health Department. Study findings on this wetland's value and biodiversity have not mattered. The city has continued to increase paved surface in Warner Park and treat the park piecemeal, instead of considering the health of the wetland which is still a vital filter for protecting Lake Mendota from stormwater runoff;

2. There is a general indifference to environmental laws (see chapter 9 on the Rhythm and Booms case study);
3. Park administrators generally do not want public involvement. Public involvement means more time, energy and administrative headaches;¹¹⁰
4. There is a general reluctance to inventory wildlife;
5. There is a mythology of a commitment to protect natural resources;
6. The engine of the national park system is tourism. In the municipal park system, the engine is public use and use is only counted when it involves renting or reserving facilities;
7. There is an emphasis on building structures in parks, whether national or municipal;
8. The buildings and concessions in parks determine the culture of the parks system and also who works for that system. Warner Parks Community Recreation Center is an example of this phenomenon as discussed in later chapters. The annual fireworks show "Rhythm and Booms," and the baseball stadium are also examples. As in the national parks system, the buildings and facilities continually redefine the meaning of the word "park";
9. The leaders of the systems are driven by development, as in building, while rank-and-file workers tend to be more environmentally conscious. I observed this repeatedly in Warner

Park over the past six years with mowers and maintenance workers who love the park's animals and are concerned about the animals' welfare;

10. Sellars writes that the management of the national park system is divided between two drivers: enjoyment (public use) and ecosystem management. This division is evident in Madison's park system in the recreation/conservation park dichotomy;
11. A business model that only measures success in terms of growth, of "more" and "new": new buildings, roads (in the case of national parks), paved paths, more visitors, more programs. Sellars writes that in the case of national parks, leave-it-alone preservationist management is not a growth policy. The same is true in municipal parks. "Leave-it-alone" is viewed as backwards and also does not fit the park-as-social-fix paradigm;
12. The history of national parks as a democratic concept, as spaces open to everyone is similar to the municipal parks idea. John Olin's philosophy shifted Madison Parks from pleasure drives for the carriage owners to parks for all.

VI. Warner Park as Social Fix

Repeatedly throughout US history, political and community leaders have effectively used municipal parks to fix social problems in surrounding neighborhoods (Birge-Liberman, 2010, and Cranz, 1989). Public park as urban safety valve worked during the Great Depression when thousands were put to work (Cranz, 1989). Parks have been and continue to be viewed as solutions to unemployment, youth crime, public health concerns, overcoming racism and building community. They are also one of the few spaces left where different types of people can mix face-to-face, instead of Facebook-to-Facebook, and essential to a multicultural democracy (Low, Taplin and Scheld, 2005).

As described in Chapter 1, Warner Park is situated in the middle of some of the starkest inequality in Madison, with severe and enduring pockets of poverty in some apartment buildings on the park's borders. In the 1990s, community activists worked for years to build a beautiful, multi-use, 31,655-square foot community center in Warner Park in 1999. Several apartment complexes near the park also have their own smaller centers with computer labs, after-school and scholarship programs.

Crime levels have decreased dramatically in the area since the 1990s, according to police reports. Without the Warner Park Community Recreation Center and the vital services it provides this area could have become unlivable. But the same problems of poverty, drugs, guns, domestic violence, unemployment, gangs and despair, persist in neighborhood pockets, including in apartment buildings just a block from my house where sometimes as many as 10 police cars are parked. The first murder in Madison of 2015 occurred on that block, just around the corner. Park-as-fix cannot solve all the problems in the neighborhoods surrounding Warner Park.

The idea that Warner Park is a social fix may also obscure deeper problems in the neighborhoods and city at large—it can become park-as-panacea. For example, during the neighborhood community meetings I have attended in the past five years, the main issue that apartment residents continually raise is problems with landlords and security, and a lack of strong laws to protect tenants. They insist that the problems are in the buildings, themselves, not the park (see Chapter 3 for discussion of crime in Warner Park and surrounding areas). Another facility in the park is not going to resolve the issue of weak tenancy laws that allow slumlords to operate with impunity in Madison.¹¹¹

And yet, I have watched Crazz' theme of park-as-social-fix continually resurface during over 150 hours of public meetings. Every time there is a shooting or an increase in crime,

someone proposes building something new in the park. In just the eight years I have lived on the park's edge, policymakers have proposed building a second community center in Warner Park, a library, and most recently, a splash pad. At a public meeting on June 11, 2014, when questioned why Warner Park needed a splash pad since it already has a lakefront beach for swimming, Northside Planning Council Executive Director Karen Bassler explained that there was a need to create more public places where children of different ethnicities could mix and play in this part of Madison.¹¹²

To their credit, city and community leaders continue to try and resolve seemingly intractable problems in the area. They are attempting to use Warner Park as a fix for racial segregation, poverty, gang activity, the academic achievement gap between white and black children in Madison (particularly black boys), the need for summer teen employment, and the phenomenon of latchkey kids in my neighborhood (parents working long hours or two jobs and unavailable to afford childcare). In Warner Park the “park-as-fix” solution has resulted in more paving, lighting, programming, and building. At the same time, the city has implemented other solutions in the area such as community policing, working with schools, and bringing in public health nurses to study neighborhoods and organize neighbors in resource teams.

Policymakers and elected officials in Madison also share the perception that Warner Park is underused by people of color, and underused in general. They are trying to address racism and social exclusion. They assume the park is underused by people of color for the same reasons given in parks and leisure research literature on how and why different ethnicities recreate differently. Based on these assumptions, policymakers address the problem of low parks use by people of color with at least two main policy tools: the building of more and different types of

recreation facilities to attract more diverse park users, and the cutting and clearing of trees and vegetation understories to reduce the public's fear of crime.

One problem I have observed is that policymakers may be basing their decisions on incomplete information. They do not have reliable data on all the different ways park users use Warner Park because of flawed survey methods (see Chapter 10: Conclusions and Recommendations). Jacobs (1961) argued that a parks' use will be determined by its environs and resident's work schedules. In her seminal study of four Philadelphia parks adjoining each other that had the exact same design. Jacobs found that park use was determined by what surrounded them: the types of businesses, layout of the land, and particularly the working schedules of the people who lived around the park. A park downtown in an office corridor was used primarily during the day, particularly at lunchtime. Later in the evening, that park would empty whereas a park in a residential area where people work during the day would be empty during the day and used either in the early mornings and early evenings and weekends.

Warner Park is surrounded by residents with very different work schedules and lifestyles. The park use reflects this; it is not used much during the weekday except by the retired, unemployed, disabled and homeless, as well as schoolchildren enrolled in various programs or brought over by science teachers to do experiments in the wetland. Most people jogging or walking use the park early in the morning or after work. The influence of work schedules can also be seen in the park's heavily-used dog park where peak use hours are in the early morning and evening.

Current park development policies may also be based on simplistic assumptions about how and why people of all colors use or do not use urban parks. The reasons some people do not use Warner Park and other urban green spaces like it are much more complex. There are multiple

factors involved, and some of these factors may have nothing to do with the park, itself, its facilities, or surrounding areas. The use or non-use of parks by people of color may reflect historic patterns of segregation in public spaces in the US.

Race and Racism as a Historic Barrier to Parks Use Nationally

Leisure research on the role of race and parks' use began in the decade following the Civil Rights Movement, when all aspects of public life were desegregated by law. Leisure researchers focused on white vs. black participation in parks and leisure because this was the concern during that time period as the nation desegregated schools, libraries, pools, beaches and parks.

In 1978, just a decade after the Civil Rights movement ended, Washburne published an article on "black under-participation" in "wildland recreation." Washburne's article became the conceptual template for researchers for the next two decades and it continues to influence parks planning and management. Washburne cited two factors causing black under-participation in outdoor recreation: 1) marginality: class differences between blacks and whites due to historic discrimination; and 2) ethnicity: values, norms, and socialization independent of class (Floyd, 1999).

As leisure researchers conducted more studies on this subject, and as the demographics in the United States and in outdoor recreation became much more complex, with an influx of Latin American and Asian immigrants, researchers began debating the usefulness of broad categories like class and ethnicity or race to measure parks' use. Floyd (1998) criticized the marginality-ethnicity framework as too simplistic and faulty. The major problem with this framework for Floyd, especially the ethnicity hypothesis, is that it was based on and perpetuated what he called a static and monolithic view of minorities.

In a 2002 study of the use of Chicago's Lincoln Park, the city's oldest and most heavily-used park, parks researcher Paul Gobster also found that the monolithic category of "black" was not very useful. Blacks with northern roots and blacks with southern roots had significantly different recreation preferences and different patterns of parks use. In answer to an open-ended question about their ethnicity, all participants in Gobster's study identified themselves as belonging to 25 different cultural identities instead of the broad categories of "white," "black," "Asian," etc. This study also found that the group with the highest preference for "natural" settings was not whites, as is usually the case in US park surveys, but Asians.

Low, Taplin and Scheld (2005) in their study of four New York parks also found that monolithic survey categories were not useful. For example, white park users in New York had strong ethnic identities and defined themselves as belonging to several immigrant groups. Recently-arrived Russian immigrants used New York parks very differently from long-time Brooklyn residents (Low, Taplin and Scheld, 2005). The researchers found the same for the categories "black" and "Hispanic."

Researchers now recommend that park surveys study ethnic subgroups (Floyd, 1998) and that surveyors ask parks users to identify themselves (Low, Taplin and Scheld, 2005).

Fear of Racial Hostility as a Barrier

I knew from conducting ethnography in the Guatemalan highlands and from researching hate crimes in Alabama that fear can deeply influence how people move through a landscape. African American biologist Drew Lanham from Clemson University lectures about how older blacks in the South view trees: through the historical lens of lynching.¹¹³ Many lynchings and murders in the South (and north) occurred in rural settings. Racial terrorism in the South is what

forced six million blacks to flee during the Great Migration between 1915 and 1970 (Wilkerson, 2010).

In a 1989 study on blacks' use of parks in Detroit, West proposed a different hypothesis to explain lower black participation in outdoor recreation: the fear of racial hostility from whites. West documented a lower number of blacks using parks because of their perception of a potentially hostile environment. Phillip (1994) and Floyd (1998) emphasized the need to look at how this hostility or discrimination influences how African Americans move through outdoor spaces.

Researchers using qualitative ethnographic methods, not just quantitative surveys, began hearing stories that supported West's racial hostility hypothesis. This is an excerpt from a commentary by an interviewer in New York's Prospect Park on a conversation with a black man sitting on a bench on the west side, the side used more by whites, followed by the black man's own comments: "He said he doesn't go into the woods because someone would probably see him and scream: 'It's the way things are around here. And people are afraid if you are skating alone or biking alone. The only time I feel somewhat comfortable is if I bring my nieces and nephews—at least people see you with children and relax a bit.'"

This same fieldworker also interviewed a group of teenage black boys: To the question "What do you like least about the park?" one answered: "White people run away! We don't run; we're not scared of them—why they scared of us? They be like, 'Uh-oh, there come some black guys.'"¹¹⁴

When I read this study on Prospect Park, I began to think about the number of conversations I had had with African Americans in Warner Park—not many. There are people of different ethnicities walking in the park at all times of the day on the main paths, but it is striking

that in over 600 fieldhours in Warner Park, mostly in the morning but also walking the dog at different times of the day, over the past eight years I have never seen a black man walking in Warner Woods. Once I saw a black man riding a bicycle through the woods.

I began to think about West's racial hostility hypothesis after conducting a two-hour interview with an African American man in Warner Park. During that interview I witnessed how this racial hostility can play out in seemingly subtle ways (subtle to an oblivious white interviewer like me).

Mr. J. has been walking in Warner Park for nearly 30 years. An over six-foot tall, heavily-built 71-year-old, Mr. J. walks slowly because of severe arthritis and sciatica. A craftsman for most of his life working with his hands, he had to leave school at the age of 12 to work. He told he loves the park so much that he wants his ashes scattered there (this is one of the reasons he did not want his name printed).

We went on his usual route around the entire park's entire perimeter. A bird and fox enthusiast who particularly enjoys the park's meadows, during our two-hour walk we stopped several times to listen to song sparrows singing (he loves their song), and to admire the monarch butterflies:

There's something about this park that it gives me, I can't even put it into words. This park gives me a feeling of security. With all this surrounding here (gestures to the meadow and woods), I feel like I'm protected from what's out there on the street: violence, drugs, alcohol...I like to fish. I came to the shelter over here, my wife and I, she liked to fish, too. So we used to come to the park to fish, and the more I came to the park, the more I started to enjoy it. And I enjoyed it so much that it didn't matter whether I was going fishing or not. I still came to the park...Anyways, all those times I spent in Warner Park, the more time I spent in the park, the more I loved it. And no matter where I go, Warner Park is always in my mind. It's like, I'm sure you've heard this before--Home is where the heart is? No matter where I go, this is in my heart...When you leave the ball stadium and get away from the noise, then I start to enjoy it. When I walk through this park, I'm never bored. Whatever's on my mind, I can find a peace of mind when I get to the park.¹¹⁵

Since Mr. J. loved the park so much and had been walking it for three decades, I assumed it must be a safe space for him where he does not experience racial hostility. During our walk Mr. J. talked a lot about the racism he has experienced in Madison over a forty-year period. I thought that Warner Park might be a refuge for him from that racism. But when I asked him if he'd ever experienced racism in the park, he laughed: "Didn't you see those two young white men who just walked by us, how they turned and looked at me?" he said. "Didn't you see how they tensed up? They weren't happy seeing a black man walking and talking with a white woman."

I was startled. I'd seen the two young white men walk by us. Actually, I realized that they had skirted the sidewalk to circle around us and avoid us, but I hadn't thought about that until Mr. J. brought it up. I just nodded to the two young men while I held up the tape recorder and kept asking Mr. J. questions. I was so focused on Mr. J. that I did not notice the body language or facial expressions of the two young white men. And maybe as a white person who has not experienced racism I wouldn't have noticed, anyway, because I do not know the cues.¹¹⁶

***Social Exclusion: Neighborhood Associations and the Warner Park
Community Recreation Center***

In their study of four New York parks, Low, Taplin and Scheld (2005) examine how certain ethnicities and immigrant groups are systematically excluded from parks use by restrictive management, rules and financial barriers. Blacks living around Warner Park have been historically excluded from two important local powers: the Brentwood Neighborhood Association (BNA) and the Warner Park Community and Recreation Center (WPCRC).

Neighborhood associations are quite powerful in Madison. The alders consult the associations and try to get their support for policies and proposals. Neighborhood associations also can have an impact on parks development and management. The Brentwood Neighborhood

Association is one of six associations bordering Warner Park. This association began as a social club before the apartment buildings were built. Homeowners held dinner parties in private homes. As the association grew and institutionalized, it remained solely a homeowner association. Apartment residents could not become members until 2000.

African Americans began moving into the area in the 1990s. The majority of African Americans moved into apartment buildings which meant that the neighborhood association became a de facto white association (it is still very rare to see a person of color at a neighborhood meeting). Association leadership is still trying to change this. One community activist who has been involved with the association for years insisted that the prior restriction of membership to homeowners had nothing to do with race; the association formed and its bylaws were written before African Americans moved into Brentwood.

According to Dane County Board Supervisor Paul Rusk, the Warner Park Community Recreation Center was built in 1999 in response to the murder of a community activist and local crime buster in 1992. Rusk worked for years along with others to raise funds to build the community center.¹¹⁷ The community raised \$809,000 to build the center and the city contributed the remainder.

Organizers considered building sites bordering Warner Park for the center but this land was private. Rusk explained that the city would have had to purchase the land; the expense would have delayed the community center's construction. The fastest way to build the center was to use public land in Warner Park. Rusk said that there was very little public opposition to building a major community center in the park both because of the severity of crime problems, and the urgent need for social services and a major recreation facility in the area.

“In defense of the city, we were able to overcome opposition to the use of the green space for the greater common good,” Rusk said.

Parks planner Si Widstrand and the head of Parks Planning, Art Johnson, both opposed the proposal to build in the park at that time because they wanted to protect the park’s open space. They did not oppose the center itself; they thought it should have been built in one of the shopping centers on the park’s edge.¹¹⁸

When the facility opened in 1999, the fighting over rules governing uses of the center began almost immediately, according to Rusk. The WPCRC’s first advisory board did not want community groups to use the center’s kitchen (this policy was finally revoked just a few years ago after an alder intervened). There was also a fight over providing inexpensive childcare. Then the board enforced a “no hat” rule to discourage gang members from entering the WPCRC.

Brian Benford, an alder at that time and African American, became a member of the WPCRC’s advisory board. He described his first attempt to attend a meeting at the center:¹¹⁹

I’ll never forget the first time I walked into the Warner Park Community Recreation Center. I was wearing a baseball hat. I’d just been elected. Someone approached me and here I’m in my forties and she said ‘You have to take that hat off.’ I’m like ‘I’m not taking off my hat.’ And she’s like ‘Well, then I can’t let you in here.’ And I’m like ‘You’re going to let me in here. I’m not taking off my hat.’ You know I didn’t want to play a power trip but I said ‘You know, I’m the alder of the district and if I want to wear a baseball hat—I’m not in a gang.’ And then the person was like “Oops, my bad. We didn’t know who you were.’ So then it hit me that there was this strange dichotomy. Here’s this beautiful building—and I love senior adults—but I was seeing how it was being developed and used. Everything had to be immaculate. The building wasn’t inclusive. Kids couldn’t get loud in the hallways and run around. It was like going to Grandma’s house.

The no-hat rule is still listed on the wall just inside the WPCRC. I have defied it myself, every time I enter the center because I am always wearing a baseball cap in the park. In eight years, no one has ever told me to take it off.

Benford was concerned that the kids living in surrounding neighborhoods, particularly children of color were not using the center. Other alders have shared that concern. Rusk said the center had been a “phenomenal success” for seniors and adults using the gym and taking art classes, but that the center had failed in its mission to bring together people from all socioeconomic backgrounds.¹²⁰

The WPCRC became a showpiece for the parks department. The WPCRC’s rules for use and its fee structure became a form of social and exclusion and barriers to use, the same barriers documented by Low, Taplin and Scheld (2005) in their study of four New York City parks:

...racist ideology and practices underlie the cultural processes and forms of exclusion we describe in urban parks and beaches...Restrictive management of large parks has created an increasingly inhospitable environment for immigrants, local ethnic groups, and culturally diverse behaviors. If this trend continues, it will eradicate the last remaining spaces for democratic practices, places where a wide variety of people of different gender, class, culture, nationality, and ethnicity intermingle peacefully.¹²¹

This history of social exclusion in the WPCRC is long and messy. Some of the community activists who worked for years to raise the money to build the center feel that the parks bureaucracy took over the building and that it does not belong to the community anymore. The first building manager the parks department hired did not have any connection to the surrounding neighborhoods or the park, itself. He told me that he had “never” walked in “those woods,” because he was afraid of “that neighborhood,” meaning my neighborhood of Brentwood which faces the parks’ woods.

In 2013, the parks department hired a new building manager with some experience working with communities of color.¹²² He began walking through the park daily; he did not share the former administrator’s fears of the park or neighbors. In the past two years he has tried to increase access to the community center, particularly for neighborhood teenagers and children. He gave Wild Warner permission to set up the first “Nature Center” in the WPCRC. It remains to

be seen whether he can change the culture of this facility and municipal parks bureaucracy to better meet the needs of a culturally diverse community.

The failure of the WPCRC to provide services to children of color in the surrounding area has led to pressure to build a second community center in Warner Park to serve my neighborhood of Brentwood. These pressures to build additional facilities will continue as long as the facility is viewed as only serving white and elderly residents.

Chapter 3 Birding to Change the World: A Critical Pedagogy of Joy

I. Introduction

This chapter and the following four chapters cover the main political intervention I employed during this action-research project: the Nature Explorers experiential-learning program based in Warner Park. In these chapters I describe and analyze how I tried to meet several community needs. I also analyze what I learned from the children in the Nature Explorers program, and the undergraduate environmental studies students who participated as mentors in this program.

This chapter (chapter 3) is divided into five sections. The first section focuses on the community needs that led to the creation of this environmental education program. The second section describes the research methods used to analyze this particular intervention. The third section outlines the conceptual framework which is the criminalization of natural play (Louv, 2005). The fourth section explains how this service learning program developed to meet the particular needs of Sherman Middle School, and how I designed this environmental education program as a tool to promote natural play in Warner Park. And the fifth and final section explains what this program means to my lower-income neighborhood.

I. Community Needs

I set up this experiential education program to meet three different community needs:

- 1) a need expressed by community leaders and a school principal calling for education programs for children in my neighborhood on the north side of Madison, particularly for children of color;
- 2) the needs of Warner Park's wild residents to be seen and valued, and for their habitat to be protected. This need was expressed repeatedly in interviews and public meetings by neighbors and park users who valued seeing these animals and whose voices had been ignored by city

planners and parks staff (the history of this exclusion is outlined in Chapter 7 on Wild Warner); and 3) the needs of UW-Madison environmental studies undergraduates to get outside and connect to the natural world, learn about their immediate natural environment, and also learn about their own economic, social and racial privilege by working in a neighborhood with serious pockets of poverty.

The last need—of undergraduates to directly connect to the natural world—surprised me at first. In five years of teaching environmental studies I have discovered that most of my undergraduate students have spent the bulk of their environmental education inside heated or air-conditioned classrooms. They experience nature through Powerpoint. They can cite the causes of global warming but they cannot recognize the goldfinch in the bush outside the classroom window or even the robins grazing on campus lawns. Here are three student comments from three different semesters:

Over these last few years, I have felt that something in my life has been missing, and finally in deciding upon going into education and environmental studies, I think I have found what was missing: nature. As a little girl I was outside always, running through the woods in our backyard and playing by the lake and stream that went through our neighborhood. As I grew up, time outside vanished and I always felt like something was missing, but I have rediscovered it in this class...I have fallen for the birds. We have only gone birding twice in the class and already I find myself carrying my binoculars everywhere around campus, with my head to the sky, looking for signs of movement, or the hint of wings. (9/21/11)

This week I was sick and unable to go to Sherman [middle school] with the class... Well, after not being able to join everybody this week I've realized that this time outside has been having just as much of an effect on me! As a college student I think I spend close to 95% of my time inside, whether it's in class, at my apartment, or at a library cramming for exams. This past week I had two midterms, and that on top of being sick meant I was inside almost all week, and the only time I experienced 'nature' was on my walk to and from class. I think that this class has been crucial for me this past semester, and made me realize just how much I miss being outside during the school year. (10/12/12)

Another thing that I loved about this course was the way it forced me to be outside. Sometimes I felt like I was benefiting from birding club more than the middle school students! On campus I always have a million and one reasons why I need to be inside

studying or on the computer instead of going outside and birding which I would most definitely rather be doing! Some days the thought of committing three hours to hanging outside with a middle school student was daunting. How was I going to study for my exams or write my papers...And yet, there was never a cab ride home where I regretted having gone to birding club...I also loved being with people of different socioeconomic classes and beliefs, because even if those people were only twelve, they were able to give me more perspectives to take into account when I make decisions in life. I was able to grow emotionally and socially. (12/15/10)

There are two other community needs that I was unaware of when I first began this action-research: the need for the voices of the young and very young to be heard by policymakers and planners, and the need for kids to spend time outside in unstructured play. As an investigative journalist and professional storyteller I have always chosen to focus on the stories of people often ignored in Latin America and the Deep South. While conducting this action-research, I have been continually struck by the absence of young people's voices—children and college students--in public meetings and planning processes. According to Louise Chawla, an international expert and scholar on the children and the environment, this is because: “The planning process is not designed to accommodate young people's voices.”¹²³

I was also struck by the sheer number of hours that children spend inside today. Schools have cut recess and lunchtimes because of budget cuts and an emphasis on testing, according to the Robert Wood's Foundation. Recess has disappeared completely to create time for more academics in 30% of all kindergarten classrooms because of the No child Left Behind law.¹²⁴ This lack of physical activity greatly impacts children's health according to the Center for Disease Control. And the lack of opportunity to experience the nature on their doorstep robs children of new experiences and new dreams. How can a child imagine that she could become an ornithologist or wildlife biologist or limnologist if she does not even know such professions exist?

Significant Life Experience researchers (SLE) survey environmentally-conscious citizens to determine what engenders environmental sensitivity, and what motivates people to act on that sensitivity and actually change their behavior and/or engage in activism. Tanner (1998) describes the pattern he first perceived among conservationists, before he began his formal study:

Asked about the influences which led to their passion to protect the environment, they uniformly reported many hours of childhood and youth spent alone or with a few friends in a relatively pristine area, accessible on a more or less daily basis. When they were children this might have been an undeveloped neighborhood spot where forts and hideouts could be fashioned in thickets; as adolescents they expanded their territories, often by appropriating nearby farms as their own hunting grounds and fishing holes.¹²⁵

In a review of seven studies done between 1980 and 1998 which surveyed 446 people, Chawla (1998) found the same in every study: that the number one factor contributing to a person's environmental sensitivity was time spent outdoors during childhood, often with family and frequent access (not one-off camping trips or nature camps). Some of the studies reviewed by Chawla surveyed ethnic minorities in the US and citizens of other countries. The results were the same for the most important factor—time spent outdoors during childhood--although secondary factors differed. Chawla (1998) found that children's contact with "natural" areas was one of the most important factors in all seven studies reviewed even as the opportunities for these experiences are diminishing worldwide due to urbanization.

Through this project, with the support of many people and particularly UW-Madison, I was able to meet my community's need for successful environmental education programming in Warner Park.¹²⁶ The program began with six children in September of 2010. In August of 2014, a record 101 children signed up for this program; the majority children of color. Several of the new sixth-graders who registered that August were led to our table by proud eighth-grade

brothers or sisters who had been in our program for two years and were entering their third year. For some of our children, “Nature Club” had become a family tradition.

Our main community partner, Sherman Middle School Principal Mike Hernandez, attributes the program’s fast growth to our flexibility and ability to grow with his children: “...you adapted to the students’ needs. If you take this and transplant it to a different area in the city or in the country, my advice would be to maintain that flexibility of adapting it to the students’ needs because I think that success of this program is that it is not a canned program. You’re not trying to make the children fit into this program... That’s what I loved about it.”¹²⁷

Hernandez also attributed the program’s success to the emphasis on personal relationships between the children and their college mentors, and to the fact that our program offered a “personalized pathway” to education for many of his children.

The program today does not resemble my original vision. When I first began, I envisioned a one-on-one mentoring club--one college student paired with one middle schooler. My students and I would teach the children how to have a relationship with Warner Park and its non-human residents. We would help them fall in love with the park and want to protect it. These children would eventually become the future guardians and stewards of the park, the animals and the planet.

Instead, the children taught us all, that before we could teach them to relate to the park and its animals, we had to relate to *them*. As the principal and school staff stated in assessment interviews and conversations over a four-year period, the human relationships came first. One college student mentor observed at the end of the semester:

My [middle school] students taught me about a kind of reckless abandon that, I think, has partially helped me take a more objective approach to my life and academics... What really matters when things get hairy in life aren't the grades you got or the classes you failed or the nights you spent cramming last minute for those exams. People are what

matter in life--the relationships you have with others and yourself...I think this program gives the students the most meaningful thing in life--an opportunity to share remarkable moments with people who mean something to them...You can't quantify the value of a relationship with somebody. My [middle school] students taught me to live more freely...I think this was a unique feature of my [middle school] co-explorers; they weren't all interested in learning, but more living. Towards the end, Zach [sixth-grader] gave us real [science] questions he said he would read the answers to that night. Donovan and Carlos [both sixth-graders] actually used my binoculars to look at birds. Essentially, I think we rubbed off on each other: they became more interested in what was in the park and I became more interested in the people. (5/14/13).

II. Methods

The analysis of the program and the narratives that I constructed from this analysis are based on an ethnographic reading of eight sets of documents; my own participation in the program; interviews with former student participants, Sherman Middle School staff, and a community volunteer; and lunchtime conversations with Sherman Middle School students over a four-year period. These are the eight sets of documents 1) my weekly teaching journal which also contained notes from conversations with the children during school lunches and Sherman staff; 2) teaching memos to myself analyzing problems as they arose; 3) email correspondence between myself, my students and the co-instructor; 4) four years of undergraduate weekly reflection journals; 5) undergraduates' weekly birding journals, 6) transcripts of public presentations given by the middle school children and UW-Madison student-mentors as well as testimonies before city commissions; 7) visual imagery from the program such as photographs and the children's artwork; and 8) class worksheets, homework and lesson plans. My teaching journal, post-graduation interviews with former college student mentors, the lunchtime conversations with individual children, interviews with school staff, college students' weekly reflections and birding journals, and the weekly experience of walking, playing and learning with the entire group were the richest sources of information.

I analyzed this data by using grounded theory methods (Charmaz, 2006). First, I analyzed the documents for recurring themes; I did not have a pre-existing list of themes. Weekly student reflection papers provided the most themes and material, becoming a foundation for the stories (constructed narratives) in subsequent chapters. This is because the student mentors were the ones actually working one-on-one with the children. During our weekly time in Warner Park, I walked around and observed the teams working together, from a distance. I was busy just trying to make sure that no one fell in the lagoon or got lost. So I often missed the deep conversations and heartfelt exchanges—the real learning--that occurred between college students and the children while they were high up in a tree or creeping along the marsh's edge imitating the stalk-walk of a great blue heron. This is why the college students' comments during class discussions and office hours were so valuable, in addition to their weekly reflections. My students did the real teaching.

Over the course of four years, a total of 123 student mentors wrote approximately 1476 reflection papers (12 per semester), which I analyzed; this dissertation contains direct quotes from 60 of the 123 mentors (either from post-graduation interviews or their papers), which is a total of 49% of the students who participated in this program. Then I conducted follow-up interviews with some of the student mentors to ask deeper questions about the themes that emerged during all eight semesters.

Since students wrote their weekly reflection papers for a grade, there was always the possibility of bias towards emphasizing only the positive aspects of the program. However, during the very first semester, the course's structure was very different from subsequent semesters. It was just a one-unit course. Students earned 85% of their grade just for mentoring the middle school student. Students knew that if they just showed up every week, they were

guaranteed an “A.” I told them this on the first day of class. The first semester was entirely experimental. I told these first students that we were designing a community project together. Their honest feedback would be critical to insuring the program’s future. Most of the main themes in these chapters came from student critiques during that very first semester of the least grade coercion. As I read through my teaching journal and student journals from later semesters, the same themes were repeated; there were very few new themes. New themes did emerge when students of color joined the class as mentors; most student-mentors were Caucasian. These themes are analyzed and discussed in Chapter 6.

I used the method of triangulation (Yin, 1984) to counter-check my analyses of my teaching journal, my own memos, student interviews and reflections. During the spring semester of 2013, a student in my course, May Erouart, asked permission to interview Sherman school staff for a paper in a global public health course; she wanted to study our program as an example of environmental education. She was particularly interested in the potential health benefits of getting children outside. When this student conducted her interviews with Sherman staff members, I had not yet done any in-depth assessment interviews (although I was continually checking-in with partners and assessing the program on a weekly basis). Sherman counselors and the principal did not know May at all whereas they knew me very well. Since they did not know this student, I believe they were more likely to criticize the program or to be more frank with her than they might have been with me, particularly since I represented the university. May shared her paper and interview transcripts with me after she had finished my course and already received a grade; she wanted to help me improve the program. When I studied these documents I found that the main themes that had surfaced during May’s interviews were the same themes that

surfaced in student reflection papers, and in my later assessment interviews with school staff and community leaders. There were no contradictory themes.

One new theme did surface in an interview that May conducted with Brentwood neighborhood leader Dave Meyer (Meyer was one of the community leaders I consulted for advice before I started the program who had emphasized the need for children's programs). Meyer often accompanied the children and college students to Warner Park on Wednesday afternoons. He was one of the program's most enthusiastic supporters. However, while Meyer was very positive about the program and its impact for the neighborhood and Warner Park, he expressed frustration that our program was not more structured. He was very concerned about the number of children in Brentwood who were falling behind in school and who need more help. Meyer explained that he wanted the children conducting more formal research projects. He wanted them to acquire skills to help them perform better in school:

I guess I'm just looking for more. It's like getting them in the park and getting them to see things is cool, but if the ultimate goal is to get them to do better in school, and to pique their curiosity and their creativity and their love of science, then I need people of your age—students, grad students, professors—that also have an education background. Because we can march children through the woods and point out certain things to them, but unless people are trained in education the children probably won't get as much out of it as they could. So I guess I want to ramp up the quality of what the children are doing by having more people with an education background involved.¹²⁸

III. Conceptual Framework: The Criminalization of Unstructured Outdoor Play in Warner Park

In order to meet my community's expressed need for environmental education programs for local children, I needed to first understand children's historical patterns of use of Warner Park, particularly any barriers to use. For national and historical context on municipal park use nationwide and possible barriers, I first examined leisure science literature and the literature on

municipal parks history. Media reports on the history of crime in Warner Park and interviews with local police helped to understand the particularities of Warner Park's history and public perceptions of the park. I also attended neighborhood association and other public meetings over a five-year period, and conducted in-depth interviews with long-time neighbors and community activists to document Warner Park's history (see chapters 8 and 9).

History of Crime as Barrier to Municipal Park Use

The public's fear of crime and perceptions of crime is a major barrier to parks use that dates back to the 1960s and 1970s, when municipal parks budgets were cut nationwide (Cranz, 1989). By the 1970s and 1980s, many major municipal parks, particularly Central Park, became known for crime (Cranz, 1989).

Central Park was the very first large landscaped public park that influenced parks history across the nation. The history of crime in Central Park and how the public reacted to that crime shows how race and racism continue to affect parks' use. In their seminal history of Central Park, Rosenzweig and Blackmar (1992) write that crime increased when use increased between the 1940s and 1980s. At that same time, particularly in the 1960s, New York City suffered serious economic decline. The city's population also changed as large numbers of black southerners and Puerto Ricans moved north into the city. The city's black population more than tripled between 1940 and 1970 (Rosenzweig and Blackmar, 1992).

Crime has gone up and down in Central Park over the past several decades but Rosenzweig and Blackmar (1992) point out that the numbers do not really matter. When police reports have shown that there is less crime in Central Park than in the city, in general, and that in fact, the park is one of the "safest" precincts, some people still do not believe it: "...the story of crime in the park of the past half century is as much the story of perceptions as of realities, of

fears as much as criminal acts...many city dwellers tend to view any unfamiliar urban terrain—spaces fill with people different from themselves or outside their own neighborhoods and workplaces—as threatening.”¹²⁹

In other words, racism and fear of the “other” have shaped public perceptions of Central Park more than actual crime statistics and perhaps more than changes to the park landscape, itself.

Historically and at the present time, fear of crime can also be a barrier to park use by all ethnicities, not just people of color. Brownlow (2006) found that fear of crime is particularly a barrier for African American women and children in Philadelphia’s park system. Philadelphia’s Fairmount Park System is one of the largest municipal park systems in the world, covering 10% of the city’s land. Brownlow traces an increase in crime in Philadelphia’s parks to the early 1970s, when Philadelphia’s mayor cut the parks budget and eliminated a large park police-ranger program. Parks users interviewed by Brownlow told him that the rangers’ visible physical presence parks users was reassuring; they felt safer when the rangers were around. The elimination of the ranger program contributed to a serious increase in crime, including a wave of gruesome rapes and murders in parks formerly loved and well-used by African Americans. People of color living right beside these parks became alienated from them (Brownlow, 2006). Brownlow calls these parks “landscapes of power and exclusion.”

In Richard Louv's 2005 book, *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder*, the main thesis is that this generation’s children are spending less time outside than any prior generation. The Kaiser Family Foundation (2010) found that children aged 8 to 18 spend less time today outside in “unstructured” play, and more time inside on electronic media (an average of seven and a half hours a day) than at any other time in history.

Louv attributes the decrease in outdoor play to a number of factors, particularly parents' fear of strangers or "stranger danger," and the same fear of crime documented by Brownlow (and other geographers. Louv takes the hypothesis a step further and examines the consequences of that fear of crime which he calls "the criminalization of natural play."

Louv (2005) distinguishes natural play from organized sports and playing in playgrounds. He defines natural play as unstructured and outside in areas that are not designated as playgrounds. The criminalization of play is driven not just by stranger danger but also the threat of lawsuits (children falling out of trees or other injuries) and what Louv calls "a growing obsession with order."¹³⁰ Both private and public entities--condominium associations, housing associations, parks departments and school districts-- are imposing rules that either directly or indirectly regulate unstructured outdoor activities such as prohibiting the building of treehouses or even climbing trees (Louv, 2005). Conservation organizations trying to protect fragile ecosystems from human disturbance are also imposing "do-not-touch" rules that inhibit natural play (Louv, 2005).

Fear of Crime as a Barrier to Use of Warner Park

Based on qualitative interviews on the history of Warner Park and adjoining areas, as well as archival research and five years of participant-observation at public meetings as a homeowner and activist, and in the park as a field researcher and birder, I believe that the following factors have influenced how Warner Park is used: the fear of crime which could really be white neighbors' fear of "different" and newer black residents and park users—the same historical pattern documented in Central Park by Rosenzweig and Blackmar (1992), problems in the parks environs and people's work schedules (Jacobs, 1961), habits and preferences of different sub-ethnic groups (Gobster, 2002), gender differences (Henderson, 2013), and

discrimination and social exclusion (Low, Taplin and Scheld, 2005). I strongly suspect that marginality (Washburne, 1978) could play a major role as well given the poverty in some of the neighborhoods surrounding Warner Park. Data from the 2010 census displays some of the starkest inequality in Madison in the neighborhoods adjoining Warner Park.

During this action-research project I chose to target the first factor affecting children's use of Warner Park: the fear of crime. I believed that this was an issue that perhaps I and my neighbors could actually change through the intervention of environmental education. By flooding the park and neighborhood every week with a large group of binocular-wielding college students and children, we hoped to change the way our neighborhood and Warner Park was perceived. My goal was to increase the positive uses of the park by proving that it was safe for children. In four years of leading a large group of children into the park every week, we have not had a single serious incident involving criminal behavior. Whenever I share this information with community leaders and policymakers, they are very surprised.

However, according to the statistics, it should not be surprising at all. Warner Park is one of the safest parks in Madison today according to the Madison police and the Madison Parks Department. Crime in the surrounding neighborhoods dropped by 31% between 2010 and 2014, according to an analysis of police incident reports.¹³¹ However, crime has been an important barrier to park use. I have found in interviews that a history of crime in the areas surrounding the park and the park itself still colors the perceptions of Madisonians in general regarding Warner Park. The socioeconomic context of the greater area known as Madison's "Northside" also affects how Warner Park is viewed.

In the 1980s, as in many US cities, crime increased in Madison significantly. The north side of Madison where Warner Park is located made local headlines for murders, stabbings,

shootings and robberies. Some of the crimes took place in the neighborhoods bordering Warner Park. This crime wave coincided with the area's urbanization. Pockets of poverty began growing with rising violent crime and drug use. There were few local businesses. Residents had very few local organizations.¹³²

By the early 1990s, the park's largest wooden picnic shelter became a well-known meeting place for drug dealers according to neighbors. In 1992, the shelter burned down in a fire.¹³³ Neighbors believe that drug dealers set the fire—that is the story that I heard, repeatedly. The Wisconsin State Journal reported that the shelter was destroyed “by arson.”¹³⁴ After this, neighbors organized and insisted that the replacement shelter be built out of metal so it could not be burned down. Neighbors also organized in teams to comb the park and push out homeless people and others doing drugs and drinking in the park.¹³⁵

The local clean-out-the-park effort was part of a major push to halt the crime wave. By 1991, a group of neighbors was working hard with city officials to create a first neighborhood plan. In 1993, this group set up the Northside Planning Council, a grassroots coalition of community groups that was the first of its kind in Madison. The Northside Planning Council helped organize local neighborhood associations and revitalize moribund neighborhood groups. The organization started with 13 neighborhood associations as members. By 2006, there were 26 associations in this coalition--the highest concentration of neighborhood groups in the city of Madison.¹³⁶ By the mid-1990s, the crime rate began to drop. The Housing Ministries of the American Baptists in Wisconsin also targeted some of the area's most problematic apartment complexes, setting up community centers and providing services and after-school programming for children, as well as college scholarship programs. In 1995, the NPC set up an area newspaper, the Northside News, the paper that published my nature columns.

At the same time, the Northside Planning Council led the effort to build a major community center in Warner Park to provide social services to young and old, and to provide a gathering place for northsiders to build community. In three years of knocking on doors of corporate sponsors and business leaders, and pounding the pavement, organizers raised \$810,000.¹³⁷ The city of Madison supported the building and in 1999, organizers opened the Warner Park Community and Recreation Center, a 31,655-square foot facility that serves thousands of people annually.¹³⁸

Local activists spent thousands of hours at meetings. In just ten years, dozens of people working together very, very hard, turned around a major region of Madison, revitalized several neighborhoods, created a regional identity, and set up community services and programs some of which are national models today. In 1999, Neighborhoods USA named Madison's Northside the "National Neighborhood of the Year." In the years that followed, Northside activists set up Troy Gardens, Madison's first urban farm with community gardens and mixed-income housing on the same property, started neighborhood-based Study Circles on Race, created a local parents and teachers organization, and set up a local grassroots leadership college. They also expanded the local library which is a much-beloved refuge for book-lovers and community organizers, a place where a child without air-conditioning or Internet at home can hang out in the summertime, and where a graduate student can use one of the special meeting rooms to work on her dissertation or community organizers can strategize.

A few years later in 2003, the Wisconsin State Journal editorialized that Northsiders had managed to "turn a blighted group of neighborhoods into one of Madison's most pleasant communities."¹³⁹ Four years later, I moved into one of those pleasant communities, across the street from Warner Park. Then I discovered the Northside Neighborhood Plan of 2009 to develop

parts of the park (see Chapter 1). The plan's language and proposals to clear shrub areas and cut trees in the woods expressed some of the same fears of "weedy ecologies" that Brownlow (2006) observed in Philadelphia's parks.

In the past seven years I've clocked over 600 ornithology field hours in the park, often at dawn, and almost always alone. I've found Gray Catbirds and Brown Thrashers lurking in the shrubs, but no drug dealers or pedophiles. For years, two other female neighbors have been walking in the park in the middle of the night, alone. They have never had any problems, either.¹⁴⁰

The perception that the park is dangerous persists and continues to drive some of the mow-and-clear management policies. Crimes still occur, although much more infrequently than in the past, perpetuating these perceptions of the park as dangerous.¹⁴¹ Discussions of crime and how to prepare for it and defend against it filled the agenda of nearly every neighborhood meeting I attended. Police gave long and elaborate PowerPoints on how to crime-proof your home and how to walk aggressively to discourage potential attackers. The story I kept hearing from some neighbors, from some community leaders, from people in other parts of Madison, and in the media was that my neighborhood of Brentwood, and that my street in particular, Monterey Drive, was dangerous:

"You live on *Monterey Drive*? I wouldn't let my wife walk down that street in the daylight," one man said when I told him where I lived.

"You walk *alone* in *those* woods?" asked a female birder who lives in another part of Madison.

I encountered the same attitudes from Madisonian friends who lived in other neighborhoods when I explained that I went Christmas caroling in my neighborhood and invited

them to join me. I also encountered this attitude when I participated in a voter registration drive in my neighborhood during the 2008 presidential campaign.

The director of the Warner Park Community Recreation Center, for example, was astonished when I told him one spring that Warner Park had a beautiful ephemeral understory of native plants such as Jack-in-the-Pulpit, Bloodroot, and Rue Anemone. A native plant enthusiast from Michigan who had grown up walking in woods, he told me that he did not know about the understory because he “never” walked in the park woods (it is a two-minute walk from his office). He said he was afraid of “*that* neighborhood,” meaning my neighborhood of Brentwood which borders the woods.¹⁴²

All the attitudes described above fit within Rosenzweig and Blackmar’s (1992) description of how fear of different ethnic groups has shaped how white New Yorkers have perceived Central Park. The current disjuncture between public perception and reality in Warner Park was also predicted by urban planning critic Jane Jacobs in 1961 in *The Death and Life of Great American Cities*. Jacobs wrote that what happens in neighborhoods bordering city parks will affect these parks and how they are used: “Too much is expected of city parks. Far from transforming any essential quality in their surroundings, far from automatically uplifting their neighborhoods, neighborhood parks themselves are directly and drastically affected by the way the neighborhood acts upon them.”¹⁴³

Jacobs posited that how bordering neighborhoods affect parks, particularly the working schedules of residents, determines to a large degree what will happen in that park. Jacobs’ emphasis on work schedules is a useful framework for understanding the use of Warner Park. She based this analysis of the uses and roles of urban parks on a study of Philadelphia’s Penn’s four square parks. When William Penn laid out the city and created the central square (now City

Hall), he also mapped out four identical residential squares, each the same distance from the central square. According to Jacobs these four parks were all the same size and built at the same time. And yet, Jacobs wrote: “Their fates are wildly different...the varying fates of these squares—especially the three that remain squares—illustrate the volatile behavior that is characteristic of city parks.” One became a highly-used successful park in the center of a wealthier neighborhood. Another became known as a “skid row” park. Another remained empty much of the time because it was surrounded by offices. The fourth became a traffic island. The human activity in each of these parks’ environs, not the parks themselves, determined future use of the parks and how they were perceived.

The 57 apartment buildings on the edge of Warner Park, just a block from my home are owned by at least 30 different landlords making it very difficult for the neighborhood association to even contact them all.¹⁴⁴ According to interviews with apartment residents, their main problems are not in Warner Park, but in the buildings where they live. Some landlords do not maintain these buildings and do not screen tenants so families raising children sometimes end up living next to drug dealers and people with weapons. Three tenants from different buildings that I spoke with on numerous occasions (one later became an important member of Wild Warner) referred to their landlords as “slumlords.”

The physical and economic insecurity of tenants leads to a high turnover of apartment residents, making it difficult to implement community programs. This transience has been identified as a major problem by university extension researchers who studied my neighborhood in 2013 and 2014. Young families are not going to stay in these buildings very long if they are not safe. I witnessed this problem personally in May of 2012 when one of the most talented children in the environmental education program that I started, a 12-year-old African American

boy born to be a biologist, who called himself “Turtle Man,” had to go into a witness protection program with his family and move away because of a shooting on his doorstep.¹⁴⁵

Because of all these problems and occasional crimes, the city of Madison had identified Brentwood as a problem that needed to be solved. I believe that since my neighborhood and other neighborhoods surrounding the park were believed to be dangerous, this also shaped public perceptions of Warner Park.

IV. How Birding Can Change the World: Decriminalizing Natural Play In Warner Park through Environmental Education and Telling a New Story

In the past seven years I have seen Louv’s criminalization of play hypothesis play out at public meetings, in meetings with Madison parks officials, in meetings with Madison school district employees, and in conversations with neighbors and parents. Over and over again I have heard wild children (“troubled youth,” “gang activity”), wild spaces in Warner Park (“pedophiles hiding in the bushes”) and wild urban animals (“Is this the best place for a red fox?”) framed as “problems.” I decided to design a program that would put all of these “problems” together in a solution to meet community needs.

As of 2013, there were at least 200 children in Brentwood, living on the edge of this 213-acre park.¹⁴⁶ However, I did not see many of these children exploring or playing in the meadows and woods while I was surveying birds, although the tiny playground near my home was heavily used in the summertime. Parents told their children to stay in that playground and avoid the woody thicket on the playground’s edge because of “pedophiles.”¹⁴⁷ At community meetings, two mothers expressed fear of the trees; they believed that attackers could be hiding behind them. During this same time period, neighborhood leaders were concerned with growing gang

activity in the area; park employees occasionally found graffiti painted on larger park trees. There were no public education programs or park rangers to counter these fears.

Most of the people I observed walking in Warner Park in the early mornings and early evenings were white. At numerous community meetings and in private conversations, then-alder Satya Rhodes-Conway stated that the park was not used enough, particularly by people of color living in the apartment blocks surrounding the park.¹⁴⁸ The alder stressed a need for environmental education programs.

Fear of crime in parks depends not just on environmental cues like Brownlow's "weedy ecologies" of "social disorder" but also on social cues such as the presence of other park users who are doing activities perceived as positive and non-threatening (Jorgensen, Ellis and Ruddell, 2012). Their study in three community parks in Salt Lake City, Utah found that levels of fear of crime were lowest where other people were recreating, regardless of whether the landscape had vegetation such as shrubs and thickets that could conceal a potential attacker or not. In addition to landscape changes, Jorgensen, Ellis and Ruddell (2012) suggest other strategies such as placing signage along trailheads and paths, targeting information to groups that are more fearful of crime such as women, and by setting up programs for partner or group walks.

Jacob's (1961) first proposed the idea of "eyes on the street," that the more people in a given area, the less crime there would be. I wondered--what if the people recreating were using binoculars? Would this magnify the "eyes on the street" effect? I wondered that if I created a program flooding the park with children looking at birds, could these new social cues change the way the park was perceived and increase its use by other people of color? In other words, could birding really change the world? Could it at least change how Warner Park was viewed? Could birding reduce neighbors' fear levels so that they might use the park more frequently?

Criminology researchers have focused mainly on negative cues that provoke fear but more research is needed on positive cues that create feelings of safety among potential users.

The opportunity to explore these questions and to meet community needs came in October of 2009, when the new principal of Sherman Middle School, a school just one mile from Warner Park, attended my neighborhood association meeting. Principal Mike Hernandez wanted help recruiting tutors and mentors for his students. I knew from neighbors that the school had a reputation for low test scores, frequent police visits and wild children. Many of the children in my neighborhood attend this school which is one of the most ethnically diverse in Madison: 27% of students are black or African, 29% are Latino, 10% are multiracial, 25% are white and 9% are Asian according to the Madison Metropolitan School District. Two-thirds of Sherman middle school students are from lower-income families.¹⁴⁹ It is also ethnically and culturally rich: over a dozen languages are spoken by students, many of whom are immigrants or the children of immigrants.

Energetic, positive and passionate, the new principal, Mike Hernandez was determined to bring up tests scores and change the school's reputation. Many of his students were latchkey children with parents working long hours.¹⁵⁰ He wanted to keep them in school longer so that they would be doing something positive; he planned to set up a series of after-school clubs to achieve this.

Hernandez started his teaching career as a 22-year-old special education teacher in Los Angeles. During his first seven years teaching at lower-income schools he observed a "learned helplessness" among his students and their families. He sees the culture of learned helplessness as a serious problem in lower-income urban schools: "...educators know that children are struggling so instead of making them struggle, we're just going to help them answer this

question, even give them the answer so that they're not sitting there struggling. It's the old 'pobrecito' approach of--'My poor baby—let me just do this for you.'”

Because of learned helplessness, Hernandez began to see that special education classes in Los Angeles were a pipeline straight to the jails and juvenile detention centers.¹⁵¹ So while teaching, he began volunteering in the jails working with teenagers who were on his case load. Through this volunteer work, he eventually connected local universities to the schools, getting college students to mentor and tutor. He believes very strongly in the power of positive mentoring: “My thought process on this has always been—I will never make a connection with every single kid but if I can get other people involved then somewhere along the line there's going to be a connection with one of the children—that connected feeling of a positive role model is there.”

Hernandez was promoted to principal and went on to change the culture in other “rough schools” by connecting the schools to their communities and bringing in mentors of all kinds, not just college students. In Chicago, he opened up a “very rough” school with serious gang problems to community organizations and probation officers, giving them office space on campus so they would have immediate access to students.

I was looking at other people to come in and volunteer and be those role models to show that you don't *have* to be a teacher, you don't *have* to be a social worker—you can be anyone [to be a mentor]. I had a relationship with one of the autoshops...and the owner...would send a couple of his guys, paid, and they would just come and hang out in the school. They would work in the lunchroom. They would go out and shoot baskets and play dodgeball and such, but they would talk to children...And they were able to make some connections with children.

When Hernandez first arrived at Sherman Middle School seven years ago he found a culture of learned helplessness similar to what he had seen in Chicago and Los Angeles:

I know that part of it is that it's a poor low-income school and ...[was] a dangerous school and just toss candy at them and let them watch movies so they're not going to break anything and no one is going to fight. And so you just continue doing that and then where's the academics? And then you try to introduce academics and there's a mini-uprising on your hands because—they're [the students are] like—What? You're expecting me to do...Just give me that treat. The Pavlov's dog thing. We see that [and say to the student]...No. In order to close that gap, in order to insure that you're [the student] on equal playing fields when you graduate, you need to have these skills and we're going to try to teach you those skills.

Hernandez wanted his students to value academic achievement. This is why he was particularly interested in having college students as mentors for his students; academics would seem “cool” since college students were viewed as “cool.” In four years of working in a middle school I've learned that the culture of cool is all-powerful. Schools had no extra money for busses for field trips so he was also interested in the idea of using Warner Park as an outdoor classroom because the children could walk there; it was just one mile and back. His children needed more exercise. A program in Warner Park would be a free weekly walking field trip, with an hour and a half there to learn.

This principal had also noticed that despite the fact that his school was just four miles away from the University of Wisconsin-Madison, many of his children had never been on our campus: "You guys have an outstanding university right down the street. These children don't realize that it's right in their backyard," he said.

So in 2009, with Hernandez' support, I created an undergraduate environmental studies course at UW-Madison with an experiential learning component, to try to meet the needs of the middle school, our undergraduates, my neighborhood and the park's wildlife. The course was originally called “Birding to Change the World.” Today it is called "Last Child in the Park: How Children & Birds Can Save the Planet." Every Wednesday morning I taught our undergraduate students bird identification and other naturalist skills. And then every Wednesday afternoon, our

class went to Sherman Middle School for the course's service learning component: the Nature Explorer's after-school club. At Sherman Middle School, we paired our students as environmental mentors with children in "Nature Explorers." Then we all walked a mile through the neighborhood to the park together. In the park we spent 90 minutes playing and learning together by exploring the woods, marsh and meadows, and utilizing Anna Botsford Comstock's "Nature Study" pedagogy.

In five years the program has matched more than 250 middle school students with 123 college mentors. By 2014, the majority of the children in the program were Latino. According to Madison district staff, Nature Explorers became one of the largest and most successful special interest clubs in the district, based on attendance records and diversity of student participants.¹⁵² Sherman's afterschool coordinator in 2009, Betsy Peterson, who was an invaluable help in setting up this program, said that the club had the most diverse membership in the school across the board spanning different ethnicities, interests, personalities, grades levels, and performance on standardized tests. She told me that we had some of the school's top students in the club along with children who were perpetually truant.

We don't have any other clubs that touch on what you're doing. There are children in there that I wouldn't guess in a million years that they'd continue coming back to a club like this. They'll complain sometimes about going outside for recess but then they'll continually come back to this club when it's 20 degrees outside and love to walk to Warner Park. The consistency is amazing. I look at the attendance and most children go every single time. That's definitely not common.¹⁵³

In an interview Principal Mike Hernandez said that Betsy Peterson spent much more time at his school than her contract required. She not only ran the after-school program, according to Hernandez she "...pops into classes, she walks around the lunches, she talks to the children, she goes to grade-level meetings, talks to staff..." I've found that this is a constant theme. In order to

build the relationships needed to make these programs work, staff must put in extra time and energy. Betsy Peterson helped lay the foundation for this program. She was a critical partner.

V. A New Story for Warner Park and Sherman Middle School

Stories can frame us, trap us, liberate us. They can be threads that bind or walls that separate. There are stories that others tell about us--that we belong to a certain group, that we are victims or victors--and stories we tell about ourselves. This last category has enormous power. Harvard sociologist Marshall Ganz (2007) wrote "Because stories allow us to express our values not as abstract principles, but as lived experience, they have the power to move others."¹⁵⁴

That Warner Park was a crime-ridden, scary place was a story that some of my neighbors had been working to change for years. The Nature Explorers program is just the latest in a series of attempts to change that perception. The sight of a large group of binocular-wielding young people, college students and middleschoolers, crossing a main thoroughfare and then walking one mile together through my neighborhood to the park and back to the school, every Wednesday for five years is changing how some people see Warner Park and the neighborhood. According to Principal Hernandez:

On the whole, I think [the club] it's given back some ownership. Brentwood has changed demographically and financially over the last several years. The thing I've noticed in Madison is that people take great pride in their neighborhoods. Brentwood has kind of lost its purpose and this is one of the ways that it will be able to help restore that pride... Walking from here to there [from Sherman Middle School to Warner Park through the Brentwood neighborhood] our neighbors see and then *they* call here: 'Why are there a group of middle school children walking to Warner Park?'... Once I've explained why I've recruited several parents and retirees who all of a sudden come in and volunteer and read with children in the library. It's been pretty neat."

Together as community partners, the university and college students, Sherman Middle School and the nature explorers club, neighbors in Wild Warner and the Brentwood

Neighborhood Association, and the birds and animals, we are writing a new story (Ganz, 1991). This is that new story: We live in a wild and magical place where a new bird species rarely seen in the city-- a Pileated Woodpecker--is excavating huge holes. Where woodcocks migrating north stop in our meadow to conduct their whistling-wing sky dance that naturalist Aldo Leopold wrote about, late in March when the snow begins to melt. Where park lovers see the red foxes nearly every day as the fox pair cross marsh and meadow, hunting to feed their new kits. Where a bald eagle occasionally stops to fish and bathe when the ice melts in the marsh. Where children find 71 bird nests in 1.5 hours during a scavenger hunt. And where on Valentine's Day, 30 astonished middle-schoolers and college students watch the resident red-tailed hawk pair mate for four seconds on top of the baseball stadium.

Chapter 4: The Capstone Course and Community-Based Program

The heart of the UW-Madison course I created, “Birding to Change the World, is learning by doing (Dewey, 1916), and then reflecting on that doing. Here is how UW-Madison student-mentors described it:

I can't think of any other course that offers us as much time outside in nature, a chance to give back to the community, and practical learning...As a senior with a zoology major, I have taken a lot of classes that emphasize learning through reading, learning through doing multiple problem sets, and learning through lecture. Sometimes it's boring. I think I've only had 2-3 classes besides this one that emphasize learning through *doing*, and those are the ones that have mandatory labs associated with them...This is why I care so much about this course. I want to teach people how cool going outside can be...Maybe when they're older these children will look back on their middle school days and say 'Hey, a long time ago I used to go bird watching. It's a beautiful day out, so maybe I'll spend the afternoon outside walking in the park. Maybe I'll teach my children how cool birds are one day, just like my mentors did.' (2/21/10) (Jackie Edmunds, who became an advanced wildlife rehabilitator and coordinator for Dane County Humane Society's Four Lakes Wildlife Center, one of the largest wildlife rehab centers in the nation.)

I took it [the class] because it was a way for me to actually be doing something...in the environment...and would be a way for me to get outside. I was learning from many different angles in this course--from the readings, the birding sessions, my peers, the children, the instructors--and learning about myself through all of these interactions. A lot of times we think of ourselves as being outside the environment or being separate from it somehow, but connecting with these birds...has really changed the way I see that especially living in a city. (12/19/12)

I have found hands-on approaches to learning the most effective....Engaging your senses engages your brain and thus development as a student. I saw this at Warner Park in the Sherman students as well as within myself. I learned a large amount of more specific textbook knowledge through my hands-on experiences in this course. I can now identify over 50 species of birds, what oak galls are and have touched them. Yellow jackets nest underground, are attached to shades of red, and are very aggressive when they feel threatened--all discovered firsthand. The wealth of random knowledge I acquired about mushrooms, trees, foxes, and other residents of Warner Park is quite amazing. Unlike the information I am typically tested on through multiple-choice exams, this new information will be retained. I will remember it because I experienced it. (12/19/12)

This chapter contains a description of the environmental education program's structure and an analysis of how this program represents community-based teaching. In this chapter I also

evaluate the Nature Study pedagogy employed (Botsford Comstock 1911), my teaching philosophy of “co-exploring,” and assessment mechanisms. The chapter is divided into six sections. The first section covers pedagogy. The second section discusses course learning goals. The third section examines principles of community-based learning. The fourth section describes personnel needs. The fifth section elaborates on course design and structure. And the sixth final section covers assessment mechanisms employed.

I. Pedagogy: The Nature-Study Method

“The child should first see the thing.” (Liberty H. Bailey, 1903)

Nature study is the main teaching method and philosophy that we used to work with the middle school children every week in Warner Park. This pedagogy comes from a book published 93 years before Richard Louv published *Last Child in the Woods*. Cornell professor Anna Botsford Comstock published *The Handbook of Nature Study* in 1912; we use it as a course text. Comstock wrote this book at a time similar to the present in terms of socioeconomic context. Like the passing of the millennium, the turn of the 20th century was a time of rapid social, technological, economic and environmental change. The US population was shifting from rural to urban. Millions of immigrants were changing the country’s demographic composition. A century ago, Comstock, Bailey, Wilbur S. Jackman and other Nature-Study leaders feared that children would grow up without intimate contact with the natural world because they were not growing up on farms. Today, Louv and leaders of the get-children-outside movement fear that children are also losing intimacy with nature for different reasons.

The Nature-Study movement was more than a movement or a curriculum: it was a teaching method to see and experience the world directly. Just like the movement’s name, nature came first and the study, afterwards. It was not natural history or biology or science. Students did

not study about the thing—they studied the thing itself (Bailey, 1903). Comstock (1912) defined it as:

...the work begins with any plant or creature which chances to interest the pupil. It begins with the robin when it comes back to us in March...because the child sees it and is interested in it, and notes the things about the habits and appearance...In fact, he discovers for himself all that the most advanced book of ornithology would give concerning the ordinary habits of this one bird.¹⁵⁵

Although the Nature-Study movement eventually spread nationwide, the method was locally-based and teacher-controlled (Bailey, 1903). The teacher, usually a woman, used whatever was outside the classroom (Comstock, 2009). Lesson plans had to be flexible and seasonal. She had to think and teach on her feet, not out of a textbook or from lesson plans. For many teachers who were not naturalists, this required constant learning (Comstock, 2009). This method was harder in many ways than conventional teaching but proponents were convinced that it suited children's stages of psychological development better than the rote learning that had characterized education up until the Nature Study movement started (Kohlstedt, 2005).

This method became established as a movement from 1890 to the 1930s. Universities in Chicago and Cornell became major organizing centers for the movement; Chicago had a more urban focus and Cornell, more rural. Two of the movement's most important figures, Bailey and Comstock, taught at Cornell. Their work influenced the president of Stanford University and helped spread the movement to California (Kohlstedt, 2005).

By the 1930s, nature-study had been abandoned as "sentimental" and "unscientific" (Kohlstedt, 2005). But historian Sally Kohlstedt argues that it lived on through 4-H clubs, scout programs, natural history museums, zoos, and the odd terrarium or aquarium still languishing in a few classrooms. The ideals of nature-study also permeated the writings of Aldo Leopold, Rachel Carson and others (Kohlstedt, 2010).

II. Course Learning Goals

My main goal was to replicate for my students in some small way the experiences I had working for ten years as a human rights journalist in Central America, and later for four years as a civil rights and hate crimes investigative journalist in Alabama. As a young white, naïve foreigner landing in Managua in 1988, determined to “help” the Sandinista revolution, I learned immediately that despite two degrees and coursework in Latin American history, US foreign policy, and international relations theory, I knew nothing about the real world and how it worked. Before I could become useful to the human and civil rights movements in Nicaragua and Guatemala, I needed to sit and listen to people’s stories.

I experienced this same disconcerting and humbling process, again, when I moved to Alabama to work for the Southern Poverty Law Center investigating white supremacist groups. In both Central America and the deep South, the everyday people who had changed their places and situations became my teachers. This challenged the personal paradigm of white-person-as-savior (Cole, 2012) inculcated in me from childhood since I was raised in a Catholic household where you were supposed to “help the poor.” I realized that the so-called poor were rich in ways that I could not even comprehend. They were the ones helping me.

III. Community-Based Learning: Accountability and Reciprocity

Critics of service learning programs point out that student volunteer internship structures too often do not serve the community and place a burden on already struggling organizations and under-funded non-profits (Stoecker and Tryon, 2009). Most student interns lack essential communication skills and need to be trained and supervised. This model of volunteer community

work shifts the burden of teaching and supervising from the public university to small private entities (Stoecker and Tryon, 2009). It could be called Disservice Learning.

Unfortunately, my own community's experience with student volunteers fits this critique. A community leader in my neighborhood who contacted UW-Madison's student volunteer program to request student volunteers later described the service as "free babysitting" and a "waste of time and energy" for organizations that have to supervise and teach the college students.¹⁵⁶ Another African American community leader was surprised when I told her that my students had to earn a grade and that they were enrolled in an actual course, not just in a volunteer service learning program: "You mean you're not just sending those white children out to help the poor black children with no preparation? You actually *train* them?"

Environmental justice theorist Laura Pulido posits that activist-scholars must practice accountability and reciprocity when conducting community-based work (Pulido, 2008). To meet the standard of accountability, this program had to be a credited and graded regular course, not a volunteer internship program. I promised Sherman Middle School Principal Mike Hernandez that I would select and train responsible student mentors. He emphasized the importance of this requirement in an assessment interview:

I am extremely sensitive and particular of who interacts with my children... You as their supervisor, I know that you vet [your students]... I don't want some knucklehead coming in and working with my children... What I'm most concerned about is that children are able to identify some adults who care or who have an interest in them because unfortunately not all our children have that at home... All programs, whether it's sports or hip-hop break dancing club or the rock-climbing club, all those children build a relationship with the adult and that person becomes their most immediate mentor. For some children that's right next to or in place of their parents. And that's something important too that we have to be sensitive about.¹⁵⁷

Instead of an open enrollment process where any student could apply, I created an application for the course with a lengthy questionnaire. After I emailed interested students this

questionnaire, inevitably I never heard from some of them, again. This was one method to ensure that students would take the time commitment, seriously. I believe this mechanism worked because overall the course has attracted excellent students and mentors. Many have prior experience tutoring children or working in summer camps.

The college capstone course to prepare the student-mentors took place for two hours on Wednesday mornings. Then several hours later, every Wednesday afternoon, we met as a class at Sherman Middle School and walked one mile with the children to Warner Park. This was a regular three-credit environmental studies capstone course. The capstone's goal was to give them a "real-world" experience where they could apply what they had learned in environmental studies or other majors. The course was also designed to prepare them for possible future careers in environmental education, environmental advocacy, teaching, and community work.

During these morning sessions I taught my students basic birding and naturalist skills that they could later teach to the children. Half of these morning sessions were held outside either in the campus' lakeshore preserve area or at different birding hotspots in Madison. The rest of the sessions were held inside to discuss course readings, plan the afternoon sessions in Warner Park, and discuss how to handle behavioral issues that arose with the children. Thirty-five percent of the course grade depended on mentoring the Sherman middle school students. On the first day of the course's orientation and training, I explained to new undergraduate mentors that if they missed even one afternoon session at Sherman, their grade could drop, immediately. This was more than a course—I told them—it was a commitment to a child and to a community.

In many courses where professors assign students to do service learning, students are required to log a certain number of hours on their own. They set up their own schedules, travel to the site individually, and build their own relationships. In our course, I was doing the "service"

with our students. We travelled to Warner Park as a class and I accompanied them at all times to supervise and help them process the experience later. This meant that when something happened in Warner Park with the children--a teachable moment--I witnessed it and could later relate it to course readings and concepts. Ideally, the student-mentors connected these mental dots by themselves and related these learning moments to course readings. Later, together, we integrated these teachable moments into class discussions. The richest discussions on race and privilege came from these moments that we experienced together in Warner Park.

This teaching method requires a flexible and open syllabus. Sometimes I built special course assignments around issues as they arose. For example, during one particularly severe Wisconsin winter (2014) on a day in my teaching journal titled "Winter Hell Day," some undergraduate mentors were upset that the middle school children did not come dressed in proper winter clothing. With a foot of snow on the ground, and more in the park, there were children wearing tennis shoes and cotton socks with the temperature hovering around 20 degrees. College students were angry and wanted to know how the children's parents could be so irresponsible. This was the perfect opportunity to teach about privilege. I went home and made an itemized list of all the clothing I was wearing: the total cost was over \$600 (just my Smartwool long underwear shirt had cost \$100). I then emailed my personal list to the class and asked each student mentor to create their own lists; then to think about that list and journal about it. One student wrote:

To start off, I just wanted to talk about the exercise Trish emailed to us, about her 'clothing privilege list.' I was enjoying a nice cup of coffee at Redamte on Tuesday afternoon when suddenly the Wi-Fi stopped working. All of my work required use of the Internet, but I remembered that Trish wanted us to make a list of some sorts, so I pulled out my phone to find [her] email. At first I was shocked at the number at the bottom of Trish's list, but then I remembered exactly how much I was wearing last Wednesday. My list totaled out to be \$717! The bulk of that was from my winter boots and parka, which means I wear about \$450 worth of clothing on a daily basis during the winter.

Completely astounded by my list, I stared at it for a while and eventually ended up calling my friend, an education major, to share and discuss. I have always been aware of the clothing privilege that is required to be “outdoorsy,” and my parents have always purchased whatever I needed. But actually writing everything down made me feel bad about my lifestyle. I know this was not the purpose of the exercise, to make us feel bad, but I could not help feeling a bit guilty. The only thing on my list that I purchased with my own money was the scarf I was wearing, which was probably \$15 or \$20. \$717 is what people spend on rent and food. It is three weeks worth of minimum-wage pay, which is not a lot in the grand scheme of things if you are single and have no one else to support. But for a family, what does \$717 mean for a struggling family with two or three or four kids? I can go out and be active during the winter because I have that \$717 to spare, or at least my parents do, but the kids at Sherman most likely cannot. I am sure that some would like, but most days they are probably stuck inside because their parents simply cannot afford to clothe them. And with this incredibly cold winter we have had, I cannot imagine being cooped up all day at school and then all night at home because I could actually get frostbite if I played outside without the proper clothing.... I still watched all the kids on the sledding hill, some in just t-shirts or sweatshirts, the ripped jeans, and the sure-to-be cold and soaked sneakers, and wondered who could afford the proper winter attire. (2/20/14)

IV. Personnel

I was the principal instructor and architect of this course. However, I was heavily influenced by the teaching methods and ideas of my co-instructor and PhD advisor, Jack Kloppenburg, who has 30 years of teaching experience. Kloppenburg’s specialty is using Dewey’s methods. Even in huge lecture courses of 250 students he emphasizes learning-by-doing and assigns students action-exercises. Through his assignments students have learned to plant gardens, work on organic farms, cook, and share their food culture. One of the most important lessons I learned from this team teaching experience is that I have to be continually watchful, both in myself and in my students, for what Kloppenburg calls the “Peace Corps syndrome.” By the sixth or seventh week of this course, every semester he inevitably had to give our class a mini-lecture on this topic because some student-mentors began to get discouraged that the middle school children were not turning into budding ornithologists. Every semester he insisted that we just let the middle school students *be*, and drop our expectations that we were

going to teach them environmental science. I believe this approach is one of the main reasons that this after-school program has attracted and retained so many children, particularly children of color. After a long heavily structured school day this club gave these children one of their only, and maybe their only outlet for unstructured play outside. They came because they *needed* this club.

The Madison School District requires that a school staff member accompany any off-campus trips. For the first three years, the school's social worker, Julie Wilke, accompanied us to the park. Julie had three decades of outdoor experience and also experience running church camps for hundreds of children and teens. She was extremely helpful in helping us follow school rules and meet staff and parents' security needs. She also suggested ideas for activities that helped the children learn to cooperate instead of competing. Our relationship was not easy and not without Louvian tension because inevitably children fall from trees and hit their heads or break their wrists rolling down hills or re-fracture a foot while walking on a bumpy path or fall through thin ice at the lagoon's edge and get their pant legs wet or get stung several times by angry hornets after an unwitting youngster steps on a ground nest. All of these things and more happened. The school staff member had to answer to the principal and sometimes field calls from angry parents. Her job was not easy. Her authoritative presence, deep dedication to the children, and quick-thinking helped build the foundation for the program.

After the first three years, school staff changed nearly every semester. Most after-school clubs are set up and run by teachers. According to Sherman Principal Mike Hernandez, this is the most serious barrier to implementing programs like ours in schools—getting staff “buy-in.”¹⁵⁸ But in a school district suffering budget and personnel cuts, many teachers do not have the time or energy to do anything extra. Our club is an extra. We had to work with whoever was

available. Fortunately, all school staff have been wonderful. But the continual turnover means that we have to build a new relationship with each new person and teach him or her how the program works.

During the program's fourth year, a community volunteer and retiree began joining us every week. Paul Noeldner, education chair of Wild Warner and public educator for Audubon's chapter in Madison, is an extremely talented and dynamic teacher. Every week he brings kites, prairie seeds, stuffed birds, candy, binoculars, scopes, and other tools and games to complement our activities. Since school staff change nearly every semester, Paul's weekly presence as a community volunteer will help maintain continuity. He is another teacher and mentor for both the college students and the middle school children. He helps link our college students to the greater Madison community by providing them with volunteer opportunities that can help build their resumes and characters.

V. Course Design and Structure: co-architecture

UW-Madison student mentors have been the co-architects of this course. Nearly every semester I have changed or added something—an assignment, a component, a method for dealing with the children—because college student mentors suggested it. The very first semester laid the groundwork for working with the children. The first college mentors taught me that they needed a lot more preparation, structure and bird knowledge to be better mentors. This is why the course evolved from a one-unit mentoring seminar the first semester to a three-credit capstone course by the second semester.

Course structure is based on three types of learning: learning through daily and weekly practices; learning through relationships; and learning through course readings and discussion.

Learning through practices: Students engaged weekly in four different practices: birding, nature-study with the children, public research and reflective writing.

- **The practice of birding:** Birds become their portal for learning how to observe, how to listen, and how to connect to place in this course. Avians are just one portal. This type of course could be based on any other urban animal, on plants or on local watersheds. But birds are one of the most visible and accessible forms of wildlife (Comstock, 2009). They grace our dull city hedges with flashes of color and bursts of song. For urban children and college students nationwide, birds are the nature they see and hear every day without having to be driven to a zoo or "wilderness." Neotropical migrant birds, many of which nest in Wisconsin, winter in Latin America and in the southeastern United States, showing students the connections between ecosystems.

As part of the course, students were required to practice birding for one hour a week, either alone or with another classmate. During their weekly birding homework students had to observe, listen, and write down what they see and hear in a waterproof fieldbook, honing their note-taking skills.

The practice of birding provides a useful lens for examining economic and skin privilege. Birding takes time and money. Like any outdoor activity, birding is based on the assumption that the birder has access to safe places outdoors, and that that person does not expect to encounter racial hostility. Drew Lanham, one of the nation's few black ornithologists has written about the dangers of "birding while black." While teaching birding I try to help my students walk in others' shoes.

We conduct many of our weekly two-hour bird identification labs right on campus. Soon

UW-Madison students are noticing the red-tailed hawks' nest on top of the biology library that they had passed dozens of times before and never noticed, and the crows digging in the dorm trash bins, dragging out the remains of Thursday night's pizza party.

In this course the birds are also teachers. They teach our students what I learned in post-Katrina New Orleans: to see beauty every day and take comfort in it, to notice and draw connections, and how to be resilient. The birds teach all this quietly, gracefully, with no contracts or schedules, no meetings, no lesson plans. Just a woodpecker going about its daily business inspecting the tree bark for insects or an eagle soaring by the college library, or a family of three Sandhill Cranes landing in front of our afternoon club in Warner Park, or two migrating American White Pelicans perched on a log in Warner Marsh, one shielding the other with its wing while an eighth-grader named Laura videoed the scene on her Smartphone.

College students who had never noticed birds before described how the practice of birding changed their daily lives:

I did not have a great fondness for the outdoors...This class has changed me most by making me more aware and more appreciative of the outdoors. Three years ago I probably would have said 'ew' if a bird was sitting on my porch, yet now I find myself trying to identify the bird and running for my bird book to check if I am correct...Essentially being 'forced' to walk to and from Warner Park and to spend an extended period of time outdoors really made me see nature in a different light. While I never expected to enjoy being outside, this class helped me see beauty where I never knew it existed...This class has truly made me think and made me reassess the way I look at life. For example, as stupid as it sounds, I never thought about how many birds live in trees, hide in trees, eat in trees, nest in trees and how life is even created in trees. Thus, one of the things I found most surprising about what I learned this semester was my ability to go from seeing things on the macro-level to now seeing things on a micro-level. This class has enabled me to see the little things, the interconnectedness of these things and just how important all of this is. (12/15/10)

I had always seen birds, flitting about, but had never really paid much attention to them. Just being in the bird-watching club made me start noticing the huge amounts of birds we see in our everyday lives. Walking past a bush in library mall I would see the team of house finches loafing about not five feet away from me. Walking through the woods on my round-about way home from math class I would take notice of the several downy

woodpeckers and sparrows and robins and cardinals all swooping about the woods. If I had not been put in the go-and-see nature mindset by the bird-watching club, I might not have ever decided to take that roundabout path home from class. (12/15/10)

You have helped me...reconnect to nature, a connection I know will spread to many more people, like a ripple in a pond from a pebble that creates a giant wave. This past break [over Thanksgiving], I took my family out birding. At first they were very skeptical. My Dad's first reaction when I told him what I wanted to do, was, "Bird? But there are no birds around this time of year!" But he was wrong. We saw many black-capped chickadees, blue jays, downy woodpeckers, red-bellied woodpeckers, a white-breasted nuthatch, cardinals, a red-tailed hawk, and *three* bald eagles! Quite the bird count if you ask me! At the end of the break, my Dad had started pointing out all sorts of birds to me asking me what it was and information on it. It was great to share the birds with my family. It brought us to a new park in my city I had never been to, and it brought us closer together as a family. (11/29/11)

I signed up for this class because I needed a capstone and this was the only one that had anything to do with animals. When I signed up, I didn't even like birds that much, honestly I thought they were a little boring, and the people that sat silently for hours waiting to see one were a little off their rocker. The number one thing I have learned from this course is a deep appreciation for birds. It was astounding to me the sheer volume of birds...that exist around me in my daily life. This class is singlehandedly responsible for me almost getting hit by a car as I darted across the street chasing my first cooper's hawk I'd ever seen downtown, or blocking a sidewalk of traffic as I stopped, staring in awe at a downy woodpecker hopping around a tree at eye level ten feet from me. (12/5/12)

Every time I walk outside in the morning, the first thing I notice is the chatter and the singing amongst the birds. Prior to taking this class, however, I never paid much mind to this noise in the midst of my daily environment. Everywhere I go now, I am entrenched in the soundscapes of my own environment, more specifically the bird chorus and song. After realizing that our soundscapes generally reflect more human activity these days than animal activity, it really got me thinking about the continuous development of land that has taken place over my years growing up here in Madison, WI. (11/9/12)

- **The practice of Nature Study**

Every week, college students used nature-study methods to work with the Sherman children. I gave two or three suggested activities for the week based on Comstock, then mentors asked the children which activities they wanted to do on that afternoon. As a class assignment, student-mentors also developed a series of place-based "mini-lessons" that they could use at any time in Warner Park. These lessons had to be flexible and require very few materials. Student-mentors

had to learn as much about the park's flora and fauna as possible to design these flexible lesson plans, based on the Comstockian principle of using the immediate environment as the context for learning. One student, an art major, researched the park's trees and designed a "Black Walnut Ink" activity, with children using the black walnuts in the park to draw with. Semester after semester students used their creativity, new knowledge and growing naturalist skills to design lessons specific to Warner Park. These activities are discussed in Chapter 6.

- **Public Research: The Practice of Asking and Answering Questions**

In "Handbook of Nature-Study," Comstock writes:

In nature-study any teacher can with honor say, 'I do not know'; for perhaps the question asked is as yet unanswered by the great scientists. But she should not let lack of knowledge be a wet blanket thrown over her pupils' interest. She should say frankly, 'I do not know; let us see if we cannot together find out this mysterious thing...she makes her pupils feel the thrill and zest of investigation.'¹⁵⁹

Comstock's advice to simply answer "I do not know," was a relief to student mentors immersed in an academic culture where they assumed that they had to act like an expert around the children:

I think the biggest thing I learned on this first day was that it was okay to say I didn't know. Until I had done the readings these last couple of weeks specifically *The Handbook of Nature-Study* by Comstock I do not think I would have been comfortable saying the words, 'I do not know' to one of my co-explorers. In this situation I consider myself the mentor and generally in this position I feel I should know all the answers. After reading from Comstock I knew being honest and admitting I really did not know was the best thing to do. I even found it helpful to not know all the answers so my co-explorers and I could discover together. (9/21/12)

I wanted to find a way to get the middle school children more interested in scientific research while avoiding the pitfalls of advising our student mentors to try and "teach" them science. As an ethnographer, I'd observed how much the children liked taking charge in the after-school club. For most K-12 students, their experience is that an authority assigns them a

homework assignment as a class. Assignments are rarely individualized. Public school teachers simply do not have the time or energy to individualize homework. What if we reversed the roles and the children could become the authorities and assign “homework” to their college mentors?

Based on Comstock (2009) I created a “homework” assignment. Every week in the park the children could ask their college mentors any environmentally-related question that they wanted. The UW student mentors then had to research the answers to these questions, using credible science websites. The mentors had to write the answers and turn in a paper copy to their children the following week.

Some of our students did not want to give a paper copy to the children. They preferred a web-based assignment and offered to create a website and post the questions and answers on it, weekly. I already knew that school district rules made it extremely difficult to set up a public website that the children would easily have access to. Someone would have to police it. It would mean more work for a teacher or after-school staff member, and possibly future headaches for the school’s principal if something untoward were posted. I had serious doubts it would work and I did not have the time to police the website. But this was an opportunity to teach my students about meeting the community partner’s need, *first*. So I gave the most ardent student-mentor, who insisted on a web-based assignment, the task of researching district rules and state laws. He quickly discovered that it would be legally complicated to communicate with public school children through a website. Then I asked the teacher who was accompanying us weekly for his opinion. He insisted that Sherman Middle School needed help getting the children to read words on paper, not just on screen. In standardized tests, teachers were having trouble getting the children to read whole chunks of text. The teacher asked us to keep giving paper copies to the middle-schoolers every week.

College mentors describe their middle school students' reaction to this assignment:

As soon as Trish mentioned that the nature club [children] were going to be the ones assigning our homework, a big smile crept across her [Caziah, a Sherman Middle School student] face and she put me to work. Asking questions like: 'What is grass made of? How do plants die? What happens when you mix dirt and fur and water?' These are some of the more amusing and scientific questions she asked. She clearly has a keen eye for the way things work and the science behind it. (9/28/12)

A college student mentor writing about her assignment to answer the question: "What makes a Mexican jumping bean jump?" "Donovan [the middle school student] had had a Mexican jumping bean the week before, but none of us knew how it worked. I researched what caused the bean to jump over the weekend, and I was reporting back at the beginning of Nature Club today, and Donovan told me that he already knew and that he had tricked me! Luckily, I found the same information that he had known, so at least we could double-check that it was right. (10/11/12).

Eventually we had to leave to make it to story time, but as we were crossing the river I heard the familiar pounding of a woodpecker. I told Levi to stop and help me find it. After I spotted it, I was trying to explain to him where in the tree it was when another one started pounding a little further down. A third Downy woodpecker soon flew in and joined them until it sounded like a percussive trio performing. Levi watched transfixed before turning to me and asking why they pounded their heads on the tree like that? I was happy to have him finally ask me a question that wasn't about electronics! (11/14/12)

Some of the children did not ask questions or pay attention to the answers. Others loved giving "homework" and having power over their college mentors, so much so that one group of children gave their mentor a weekly grade. That group enjoyed giving their college student mentor tougher and tougher questions. One of the most memorable was: "How many kinds of cheese are there in the world?" The UW-Madison mentor dutifully produced a chart showing the over 500 types of cheeses with a list of all their names.

I do not know the impact of this exercise on the middle school children. My goal was to at least get some of the middle school children thinking scientifically. Another major goal was to teach our college students the practice of cultivating daily curiosity about the world and give them the skills to become lifelong learners. If my college students walked outside and saw a tree

or flower they did not know, I wanted them to develop the practice of going home and researching that tree in a field guide or on a website, instead of just wondering about it for a minute and then forgetting about it. Former student-mentor Jared Ellenson said that now when he sees a plant or bird he does not know, he feels compelled to go home and research it, immediately, even though he graduated. He said he developed this habit while participating in this homework assignment.

- **The practice of reflecting through writing**

Students' reflected on their weekly experiences through frequent writing exercises. Students had to turn in a two-page single-spaced weekly reflection paper; one page on their experience with the children and one page answering the directed-reading questions. The reflection paper was a personal journal written like a diary. This reflection journal was extremely important not only for students to process their weekly experiences with the children and to answer reading questions, but also to monitor the mentoring relationships between my students and the children; it was a form of assessment and legal insurance. Since we were working with minors, we needed to avoid any relationships that could be viewed as "inappropriate." I could also occasionally troubleshoot for Sherman Middle School counselors. The children often told their college mentors about personal problems that school teachers and administrators sometimes did not hear about in the course of a busy scheduled school day: bullying, cutting, depression, suicidal thoughts, serious illness in the family, divorcing parents, parents in prison, and homelessness.

We met with the children on Wednesdays and by Friday at noon—in less than 48 hours-- every college student mentor had to email me their reflection journal for that week. If there was a serious problem of any kind, this deadline allowed me to contact Sherman school staff Friday

afternoon. I could also contact the individual student mentor who reported the problem and ask to meet with them. By privately sharing more information about my neighborhood or that particular child, I could help my student mentors better understand the context for the situation and strategize with them on how to deal with it the following week. Occasionally, there were heartbreaking situations that taught our college student mentors visceral lessons about racism and economic injustice even in a “rich” college town like Madison. Course readings reinforced these life lessons. It was important to have a time and space to discuss these situations with our individual college mentors, immediately, often outside of class, in order to protect the childrens’ privacy. I was asking my students to be responsible mentors; this meant that I had to mentor them, individually, when they needed it. This community-based teaching is energy- and time-intensive. But in addition to giving students another way to learn and retain information—by experiencing it-- it can provide students with invaluable life lessons on how to function in the real world and how to become a better human being (Pulido, 2008).

- **Learning through relationships: The philosophy and practice of co-exploring**

Our college students learn through five sets of relationships: with the middle school children, with Warner Park the place and its non-human residents, with a neighborhood outside the university bubble (Brentwood), with each other, and with their instructors and community volunteers. I call this relationship-based teaching “co-exploring.” It means that we are not teachers, mentors and students: we are all co-explorers. Co-exploring is a series of reciprocal relationships: the instructors teach our UW students who teach the middle school children. Our UW students teach the instructors what we are doing wrong or right and they teach us what they are learning from the children. The children teach our students about Warner Park and its animals because many of the children know the park better than we do since they live in the area.

The children also teach our students about their lives, about poverty, about the public school system, about how much they love the park and its animal residents. The animals and park teach all of us about wildlife in the city, and challenge our assumptions and ideas of nature. Our college students teach the children that someone cares about them and will listen to them, unconditionally every week. They also teach the children that college is not a shining Oz, miles away. It is just a 20-minute bus ride away, it is fun and interesting, and it is something these children can aspire to.

Principal Mike Hernandez said that because of the mentoring relationships, some of his students are starting to think about college differently. For the first time some of them are thinking: "Maybe I can do this."

Co-exploring works by breaking down academic hierarchies and allowing for a deeper, richer kind of sensory learning that students remember. We explore an outdoor place together; that place and its non-human residents become our teachers. This place and its non-human residents teach us all how to connect to the nature on our doorstep, how to truly see and hear. The co-exploring relationship with a middle school student provides our college students with a real-world opportunity to acquire essential job skills. They learn how to communicate with someone totally different and with different interests (their middle school co-explorers), how to solve problems, how to work in a team, how to have patience even when you do not see immediate results; how to learn from anyone, anything, and any situation; how to relinquish control and embrace uncertainty; and how to feel uncomfortable and examine, reflect upon and learn from those feelings.

- **Teaching through flock-building**

While teaching, at first unconsciously and now consciously, I tried to build a flock between our college students. We did this through outdoor birding sessions, homework, and reading discussions. For the birding sessions we took our students on frequent field trips to Madison's birding hot spots. At the retention ponds of the Nine Springs Sewage Treatment Plant we bonded while standing in 20-degree weather, munching on fresh-glazed donuts that Jack always brought for our outings (fresh donuts are a marvelous teaching tool). We looked through a scope at ducks and waterfowl and shared tips on identifying characteristics like the shape of their beaks, crescent markings on faces, and sloped foreheads versus rounded foreheads. We created weekly adventures together, pushing our college mentors to try new things like walking on the iced-over lake together in a January fog or nibbling on edible plants in Warner Park. We learned to trust each other during those morning college sessions and this helped us to work together with the middle school children during the afternoon sessions.

Storytelling is essential to learning through relationships. It is a mechanism we used every week with our college students during morning class discussions and then later with the children in Warner Park. We started every morning session going around the class circle and asking each college student to share a "bird story." Later in Warner Park, we had a "sharing circle" with the children around the largest and oldest oak tree. Even total novices can share a story about the house sparrows they saw hiding in the hedges on campus or the red-tailed hawk catching a squirrel right in front of astonished students walking to class. Sharing bird stories is an easy and non-threatening way for students who know nothing about birds to participate; they don't have to be experts. During the very first semester of the course and program, student-mentor Christa Seidl observed:

We could use a language of birds to cross social, educational and racial boundaries. Middle school is a testing time for pre-teenagers, whose identities and bodies are ever changing. College is a stressful time for young adults; their decisions and world-views are constantly being challenged. Bird club time, however, was a few hours every day where we could all escape the definitions of our other lives and speak on simple human levels. The ability to see and appreciate a bird in Warner Park was not contingent on being a certain race, age or class. Even though many of us had seen a Black-capped Chickadee a hundred times, that didn't make us any better or more entitled than those who had seen it only once. (12/15/10)

The weekly birding homework provided another teaching mechanism for flock-building.

At the beginning of the course I asked the experienced birders and former ornithology students to pair up with the new college birders and accompany them during their weekly birding homework. Essentially, I wanted them to become “bird buddies.” This worked:

Personally, I never thought I would fall into the game of birdwatching. I used to think that realm was reserved for grey-haired ladies and men with fanny packs and tall socks... It was not until this class that I learned the power of birds... Even with snow on the ground, they are still out there providing songs and dashes of color in the woods... To fulfill our weekly birding assignments, I have gone birding with many college co-explorers in this past semester sometimes even two times per week. What I discovered was that birdwatching was just an excuse to get outside in nature and bond with my classmates... Additionally, birds make an excellent key species to chart human activity. We have learned that they are responsive to changes like tall structures, noise, urban sprawl, and wetland destruction. (5/13/13).

- **Other flock-building mechanisms: grading system, carpooling, office hours and use of email**

We used a conventional grading system but encouraged our students to help each other instead of competing. We did not grade on a curve and made it clear that it was possible for every student to earn an “A” in the class if they worked hard. During the course, students had to pass three bird identification exams. I also designed weekly assignments to help them develop new skills: the birding practice, the reflecting and writing practice, and the weekly research they had to do for their middle school co-explorers.

After four years teaching this outdoor course, I believe that the ecological concept of fragmented habitat—of a landscape carved into too many small pieces to allow certain species of animals to thrive and roam—can be applied to young minds. If college students are continually cramming information into their brains to pass tests, their thinking becomes too fragmented to draw connections between concepts they have learned in different courses. In this course I wanted to create a space for a different kind of learning, a 213-acre Warner-Park-in-the-mind intellectual space with meadows to run through and hills to slide and roll and run down.

In this capstone class I have learned more than I have in any one class before. It is a different type of learning that I have gotten the most out of. I have not had to memorize facts, read long-winded textbooks, or stay up late in a caffeine-induced state of alertness. I have learned through doing. I have been confronted with many obstacles in this course that I had to take head-on, there was no other choice. (12/17/12)

Most of what I took from this class and learned... is not about facts and information, but more about discovery, realization and reflection. It is not about identifying the grackle by its hinge-like call, but about how I related to the grackle in the grand scheme of things, how my life patterns and its life patterns co-exist, how I relate with the grackle and how my co-explorer relates to the grackle, and how we relate to each other. (5/17/13)

The transport time from campus to Sherman Middle School also provided an opportunity for sharing, reflecting and flock-building that I did not anticipate. Students travelled together in free university-provided taxis or in car pools to Sherman on Wednesday afternoons. Those 30 minutes roundtrip in a car sharing stories about their children helped our student-mentors bond and reinforced peer-mentoring. According to former mentor Mike Lu: “I am also really going to miss the car rides to and from Nature Club. Our carpool definitely hit it off great. We laugh all the way there and all the way back, without any awkward silences...I am already really critical of myself when I make a mistake and I need friends that can make me loosen up and give me some perspective.” (12/5/12)

Office hours and individualized emails to students were two other mechanisms to build the class flock. I held office hours in a university coffee shop and insisted that students come to have a coffee with me. I pestered them by email if they did not come. These individual sessions helped me to get to know my student mentors very quickly. I learned a lot about them, their needs and their dreams during that hour. I realized that if I wanted them to be a good mentor for a middle school student in my neighborhood, I had to be a better mentor to them. Over the years I've also had several students who want to become published writers. They knew I was a journalist. During these office hours I've been able to help several of them realize their dream by helping them publish columns and stories about their experiences working with the children. I also used email extensively, sending individual students suggestions for books to read to help in their other classes or future careers. When there was a difficult incident with a middle school kid, I sent emails to the class providing more socioeconomic context or sharing stories about how former college mentors had dealt with these situations.

These flock-building techniques worked. In their reflection journals and final papers, several students who had participated earlier in study abroad programs in Europe and Ecuador reported that our capstone course provided them with a similar experience of community. Some of our classes set up their own Facebook pages to arrange birding trips together and share class news. At the end of each semester, almost every class wanted to organize a dinner party or some kind of celebration. One or two former student mentors from prior semesters always showed up to join bird walks or to visit the children in Warner Park. In their final reflection papers, environmental studies students reported that this is one of the few college classes in which they made deep friendships and connections to the community beyond the campus bubble:

I think that the relationship we built with our fellow classmates was golden. I had that same feeling after coming back from Ecuador [semester abroad program] and spending 6 months with a small group of peers and am so happy I found it again!...I hope that in the future I can continue to create and assist those making such environments of love and learning. Birdwatching turned out to be an excellent way to create a community of people passionate about the natural world and each other. (Christa Seidl, 5/4/11)

On the last day I was surprised at how sad I felt. When I got home I felt sort of depressed that our class and Nature Club was over and there would be no more morning bird walks...I guess it meant that I was actually going to miss the class, Nature Club, and the children. I have never had a class like this before because usually I'm just glad when they are finally over. This environmental studies capstone was more of an experience rather than a class and that allowed me to learn more about myself, my classmates, and of course, our-co-explorers. (5/17/13)

One fear that I had if I were to study abroad was if I'd be thrown into a situation I had no idea how to handle. That directly applies to this class. I had no idea what I was doing from the get-go...but that is the thrill of doing something unfamiliar and outside of your norm. I think that is why I was able to grow so much during this class. When you are in situations that are brand new you have to adjust and survive...I think turning the unfamiliar and uncomfortable into a learning experience is just another one of the great benefits of this class. (5/14/13).

- **Learning through course readings**

Warner Park provided a weekly learning laboratory to test ideas and concepts that students learned in course readings or in other courses. Louv's book was the main course text along with Comstock and several chapters from John Robinson's *Birding for Everyone: Encouraging People of Color to Become Birdwatchers*. Shorter readings and articles also covered basic ornithology; the history of Warner Park; urban wildlife; media stories and reports on my neighborhood, the city and its social context; racism and environmental issues; planning processes and environmental justice.

One of the very few African American UW-Madison students in our class suggested one of the most important changes in course structure. She thought race and environmental justice were going to be central themes in the class. She was frustrated with anemic class discussions

that danced around race and class. She could feel that the white students were not comfortable:

It is also impossible to understand the social justice aspect of birding without first exploring privilege and the reasons why people of color don't have access to these opportunities. In the future I would like to see the course taught with a class or two dealing with identity, race, and understanding privilege. When you choose to ignore issues of race, it becomes impossible to understand the implications they have within these communities and schools with regard to power and access. (3/21/11)

Because of her input I designed a new assignment on systemic racism and decided to devote two of the 14-weeks to readings and class discussions on race and privilege. These new readings focused exclusively on racism against African Americans. We also brought two black ornithologists to Madison to work with our class and children.

The reading discussions deepened after this. Some classes moved beyond the-what-are-we-doing and how-are-we-doing-it discussions, to asking why we even need this kind of program. Because of the suggestions of the student above, we began discussing what is going on in this school and neighborhood, the geography of racism, why environmental studies and science is white, and why our university seems so disconnected from the children we are working with.

I am not exactly sure why the discussions were deeper and richer some semesters. I suspect it was because of the reading and writing assignments we added on race and social justice, and also because during those particular semesters we had white students who had already taken courses dealing with race and privilege. They were more comfortable talking about these subjects and this helped the other white students. As African American social critic Leonard Pitts Jr. advises: "Before a 'conversation,' we need education on race." Some of our students of color also shared in class stories of racism they experienced in Madison—these personal stories were pivotal. When students shared their painful stories, they taught their

classmates more than they could learn from reading a text. Students could not distance themselves from or dismiss these experiences as easily as an abstract account they had read in an assigned article or text.

VI. Assessment mechanisms: The L-U-N-C-H Model

Sherman Middle School: Low Impact Assessment

When working with overtaxed community partners, particularly in the public school system today, assessment mechanisms should meet their needs, first. It should not be a burden, another form a harried teacher or principal has to fill out. If school staff had wanted the children to be tested, I would have done whatever they asked or required. They did not ask for formal assessment mechanisms. The school principal's goal was to get as many of his children as possible participating in positive after-school activities. We met that goal. We also helped the school attract more community volunteers to tutor children in reading and other subjects; this was an unexpected benefit of our program.

I did conduct a few assessment interviews after the first, second year, and fourth year. Some of our college students also wanted to interview Sherman staff for other class projects. I discouraged this because the staff did not have time to talk to our students at length, or to answer their calls or emails.¹⁶⁰ While visiting the school weekly over a four-year period it became very obvious that staff barely had time to do their jobs, much less help college students with assignments. During this same period, the school district was subject to continual budget cuts and I watched the staff's workloads increase, particularly the school counselors. They were the ones dealing with the direct impact of the economic recession on children whose families were being evicted or who were already homeless.¹⁶¹ Often when I tried to catch the principal for a

minute to ask for permission for a special activity, I had to grab him in the hallway for 30 seconds before he dashed into a meeting with parents and sometimes with police officers. This situation is why I strictly controlled my students' access to school staff to protect the community partner's time and energy.

However, working with middle school children entails legal responsibilities since they are minors. I had to have a constant mechanism for assessment that did not tax an overwhelmed and over-burdened community partner. So I utilized a weekly, low-impact form of assessment that did not require anything of our main community partner other than letting me hang around the school for a few hours once a week. I call it "L-U-N-C-H" or "Listen Unreservedly to Children." School lunch period was the main mechanism for continually evaluating the impact of the program on Sherman Middle School students. I kept a record of this assessment in my teaching journal and memos that I used to problem-solve. Over a four-year period, once a week I visited Sherman Middle School to attend the lunches for sixth, seventh, and eighth grades (the grade levels eat at different times). During these lunches I sat at different tables with our children and with children who were not in our program. I chatted with them, asked them questions, and mostly listened to how they described the club and our activities to their peers. Approximately 250 Sherman schoolchildren have participated in our program over a four-year period; I spoke weekly with a majority of these children just to check in with them. A few of these children were neighbors and I came to know them very well. A few of them dropped by my house occasionally on weekends to show me something they had found in the park or to ask me to take a walk with them in the park.

After and between the middle school lunches, I drifted through hallways reading bulletin boards and examining the artwork and accomplishments that school staff so proudly displayed

on the walls; this was another rich source of information. I also dropped by the offices of school counselors and nurses, the librarian, and the after-school recreation staff. All these staff members, particularly the school counselors, regularly took time out of very busy days to talk about the children and to offer advice. Their input was critical to the program's flexible and evolving design. These staff members also provided more information about the children we were working with (although they were careful about protecting the children's privacy). Many times I was able to immediately relay this information to our college mentors. This provided individual mentors and often the class as a whole, with the context to understand what was happening with these children.

I also sometimes could catch a teacher or two in the hallway between classes. They shared quick stories about how some of the children were writing about the park and the animals during the school day, or how a usually quiet child was suddenly raising their hand in class to share a story about an animal they had seen in the park. One teacher also helped me design a weekly homework assignment.

Annual registration was the other main form of assessment at Sherman Middle School. The program started four years ago with six middle school children on the first day; 101 registered in September of 2014.¹⁶² The children vote with their feet. Sherman Principal Michael Hernandez explained the importance of adapting to this growth: "It started off smaller and has progressively gotten larger. This shows...that you were able to adapt and change the program to fit the children wants, needs, interests...The flexibility that you've shown to grow is what made this so successful...These children are return customers. They keep coming back."

UW-Madison student mentors: Assessment

By immediately reading and grading student reflection e-journals within an hour of receiving them, I could also change the upcoming week's activities to meet my students' needs. If our student mentors had had a particularly difficult week with their children and needed more context to understand why a child's family was being evicted or why a child might be acting very badly (sexual abuse, a mother's long illness and death), I scheduled an indoor class discussion instead of an outdoor birding session. This course's flexible calendar allowed me to meet these needs.

I expected my student mentors to know what was going on with their children; I needed to do the same for my students. I invited student-mentors to have a coffee and discuss difficult situations face-to-face. I insisted that they attend office hours and held these hours in a coffee shop to attract more students (it worked—some weeks several students showed up and the office hours turned into a little party). I gave them my home phone number and asked them to call me if something was really troubling them.

In evaluations at the end of the semester over a five-year period, our student mentors consistently gave high marks to this course. I think the best indicator of impact is that some of our student mentors became so attached to their middle school co-explorers that they decided to repeat this course for independent study credit. Nearly every semester, at least one student decided to enroll again the following semester for independent study credits. Seven out of 123 students have repeated this course.

One of these students enrolled in the course for three semesters. When Mike first enrolled in the course he was on academic probation and ready to drop out of school. He enjoyed working with the children so much and was so talented that he later was hired by the Madison School

District as Sherman Middle School's garden coordinator. Now a graduating senior, he is once again acting as a student-mentor in the Nature Explorer's program. He is not enrolled in the course. He simply shows up every Wednesday to work with the children. At the end of his first semester, he described the impact of the course on his life:

This was my favorite course of my college career...and it motivated me to be a better student, mentor, and person in general...Coming into this semester, I was in a very rough spot. This class served as a critical hinge in a personal turnaround for me. The support provided by the instructors, my peers (even though none of my peers knew of my situation), and the joy of seeing my co-explorers and their youthful energy every week was critical. (12/17/12)

Chapter 5 Children as Teachers: Redefining “Community Partner”

This chapter is written as a series of six lessons that the children and my students taught me about community-based teaching.

Lesson 1: Roll that Teacher Down the Hill

In 1912, Anna Botsford Comstock described the Junior Naturalists clubs organized in New York State by Mr. John W. Spencer as:

Most impressive... The president of the club, some bashful boy or slender slip of a girl, would take the chair and conduct the meeting with a dignity and efficiency worthy of a statesman. The order was perfect, the discussion much to the point. I confess to a feeling of awe when I attended these meetings, conducted so seriously and so formally, by such youngsters.¹⁶³

When I started this club, I knew very little about middle school children. I did not expect them to cite Robert’s Rules of Order during our walks to Warner Park. However, I did envision a somewhat quiet line of children, pointing shiny new binoculars at a Ruby-throated Hummingbird delicately sipping nectar out of a neighbor’s birdfeeder, and then the children reverently asking their college mentors for help using their field guides to identify the species.

Here's what really happens every Wednesday afternoon: drivers slow down to gawk and sometimes neighbors emerge from their homes and stand in their driveways, hands-on-hips watching the approaching herd of jumping, running, hopping, pointing, shouting, and stamping children. Children streak across the street, pull each other's hair, stuff leaves down another student’s shirt, stuff snow down a shirt, stuff dirt down a shirt, or stick a clump of burrs on a distracted professor's back. Instead of rapturously observing birds at feeders, middle school children are diving headfirst into my neighbors' neat leaf piles or tossing snowballs back and forth, depending on the season. Some are talking with their college mentors, swapping stories of

their week. And a few are pointing binoculars at a male Northern Cardinal singing from the top of an ash tree.

When I began this program, I had just finished an advanced ornithology course for pre-veterinary students. I thought I could use that same structure and teach an “ornithology light” course to the middle school students with the help of my college students. I decided to call the after-school club “Bird Buddies.” I now realize that “Bird Buddies” must have been one of the most uncool names in middle school history. But five years ago, I had not yet discovered the culture of “cool” that is so important in middle school.

In the beginning I started each outdoor "class" on Sled Hill, the park's highest point with a sweeping view of the wetland, woods, and meadow. We began with a ten-minute "listening post" exercise during which the children had to sit quietly, close their eyes, and then list all the sounds they could hear. Then we scanned the horizon for birds and conducted a weekly bird quiz during which the middle school children had to write down both the common and Latin name of the bird. This routine lasted several weeks. Then one day, as I stood in front of the squirming group to begin the lesson plan, some of the children started rolling sideways down the hill.

My college students stared back at me with huge eyes that asked--What should we do now? They did not wait for an answer because I did not have one. They followed the children's lead and started rolling down, too, arms and legs outstretched.

I found myself standing, alone, on top of Sled Hill and a very steep un-learning curve. I put down my clipboard, my binoculars, my backpack, removed my eyeglasses, and rolled down Sled Hill.

For the first two years, this became the club's opening ritual because that is what the children wanted to do. We all went to the hill and started rolling down it together, a colorful

jumble of humans large and small. I realized that it had become an initiation rite on the day that the school librarian came as a guest. The children told her she had to roll down the hill to "join" the club. She laughed and obliged. Months later, the mayor of Madison came to walk with the children. He had just had major hip surgery. A week before his visit I warned the children that he could not roll down the hill. One enterprising girl asked the school's gym teacher if we could borrow rubber mats to create a more comfortable path down the hill for the mayor. Fortunately for the mayor, the gym teacher said no.

That first roll-down-the-hill day the children began to teach us what they needed and what they wanted *their* club to be. Our main goal and the principal's goal was to get as many children outside every week as possible. I realized that day that in order to meet that goal, the club had to become theirs and ours, not just a program administered by the university. As a club, we had to develop a sense of "We-ness" (Lewis, 2007) identified by human ecologists and education theorists as essential to developing a sense of belonging in school, particularly for African American children.

It took months of unlearning to let them teach us this adaptability. Every Wednesday when our UW-Madison class left the university for Warner Park, we had to leave our Ivory Tower heads back in the Ivory Tower. This was not easy. Every semester most college student-mentors were initially convinced that they should be teaching the children "science." And they believed that they should be teaching the children in the same way that they had learned in a university setting: the lecture delivered to the recipient in a formal, didactic and linear fashion. The children taught us all otherwise:

Every day that I worked with Megan I saw how little it mattered to her if I actually knew what family every bird was in or whose theories could contribute to how Warner Park should be best laid out to preserve species of birds. What really mattered to her and got her interested in caring for birds was simply seeing them... And while I was very

concerned about my scientific ways and spelling or pronouncing names properly and using guides to ID every bird, she was much less interested in learning about the birds if we spent time doing those things. I therefore have learned to leave behind a little bit of my scientific reasoning when I enter the field, and to open up space for error so that the birds can be enjoyed more...this course made me realize how important social aspects are in environmentalism. (12/15/10)

That day as I watched my students and the children roll down the hill, I began to redefine my concept of community. I had started the program to meet a community need, but who was the community? I was still thinking of "community partner" in a conventional sense, as the institutions and their representatives and members. In my mind the main community partner was Sherman Middle School and the principal. But five years later, after reading through my own field and teaching journals and student mentors' weekly reflections, I understand the concept of community partner very differently. The middle school children are the community partners, not just the school authorities or organizations like Wild Warner.

This program involves two types of community partnerships: institutional and individual. It does not just mean the authorities and institutions that represent the partners, i.e. principal of the school, school counselors, MSCR, class instructors, the parks department, chair of Wild Warner, and other community groups. It means every single participant: all the middle school children, and every single college student, as well as community members and neighbors.

This broader definition of community partner also includes the non-human neighbors: the birds, other animals, and plants and trees in Warner Park; as well as the park, itself, the meadows, woods, lawns and wetland. This became evident on the very first day of the club when a Sandhill Crane family, two parents and their chick called a "colt," flew towards our class and landed 50 yards away from the children to graze. In a living lesson plan, the crane family occasionally lifted their heads from grazing to stare back at us as my college students and I

explained to the children that the cranes were getting ready to migrate. They would stay together as a family group for that first year.

Without the 141 species of birds, as well as foxes, deer, beaver, mink, frogs, fungi, trees, insects, and all the other biota of Warner Park, this program would not be possible. They are all community partners and teachers. This outdoor classroom in the city's second-largest urban park hosts a high level of biodiversity. It is also walking distance from several schools. These factors are what made this program possible.

Within this constellation of community partners, the most important one was still Sherman Middle School and Principal Mike Hernandez. I learned this when I set up a service learning program for Auburn University in a rural high school in Alabama in 2003: the principal of any public school is king. When working with a public school, it really helps to find one with an excellent principal. We were lucky. Mike Hernandez just gave general guidelines for safety. He hoped we could help encourage his students "to put pen to paper," which is why in the beginning each middle school student carried a fieldbook. But for the most part, we were free to walk with the children, see what they needed, and study how the club needed to evolve to meet those needs.

The often invisible, unpaid community volunteers embedded in our public schools are also vital community partners. Gilma Arenas, a volunteer at Sherman Middle School with Centro Hispano, a community center organized by Madison's Latin American community, is an artist from Colombia who was in charge of recruiting tutors for the school's Spanish-speaking students. She loved our program. She encouraged these children to join and consequently, by the third year we had a large number of Mexican American children and a boy from Venezuela. The relationship was reciprocal. Gilma is a dynamo community volunteer with incredible people

skills and negligible computer skills. She needed to recruit UW-Madison students to volunteer as tutors and work with Spanish-speaking children at Sherman Middle School. But she needed help accessing university list serves and email to find and recruit these student tutors. At the beginning of each semester, all I had to do was send out a few targeted emails for her. Within a few weeks, Gilma had recruited over a dozen college tutors for the school. This is an example of reciprocity as a best practice in community-based work (Pulido, 2008).

In order to strengthen the community partnership, I also had to learn to see each college student-mentor as a partner-in-teaching and as a co-designer of this project. That very first fall semester was an experiment to determine how to organize a future course and program; I had not yet set up the capstone course. College students that first semester enrolled in a one-credit experiential learning seminar called "Birding to Change the World." Every Wednesday they spent three hours in my neighborhood mentoring a Sherman middle school student to earn that one unit. Since it was just one unit, I could not require them to attend a morning bird lab. Other than an initial crash birding session to teach them how to use binoculars, and how to identify a robin and a crow, I had to trust that they would study birds on their own. They had to learn 30 of Wisconsin's most common birds and they would be tested on these birds for their final grade. The seminar structure was not ideal but I could not require students to do anything else in a one-credit course when they were already spending three hours a week mentoring in my community.

Thirteen undergraduates signed up. There were seniors and three freshmen. A few were environmental studies students. One student was a female David Attenborough and born naturalist who knew far more about botany and ornithology than I did. Another student was a hunter who had spent a lot of time outdoors. But the majority knew nothing about birds and the natural world. They were majoring in political science, history, English, and environmental

studies. An English major described his knowledge of ornithology: "Sure, I had the knowledge of birds common to the general public, which is to say, able to identify a seagull, and a general appreciation for penguins, but beyond that I was clueless." (12/15/10)

On the first day we met on campus, I told my new students that they were part of an experiment to design and develop a place-based capstone course to meet an immediate community need for environmental education programming in my neighborhood. As college students, they were also helping to develop a course for future environmental studies students. I explained my Warner Park action-research dissertation project and the political strategy behind it. This program was one of three interventions to change how the park was perceived and to protect bird habitat. By helping me create this program, they would also be helping the birds and other animals of Warner Park. I wanted the alders, community leaders, parks department officials and neighbors to value this space because we were going to turn it into an outdoor classroom.

On the first day I told them that you have signed up for a political movement, not just a class. You are going to create something. This is your reward, not a grade. You have just enlisted in the cause to save Warner Park. I have no idea what will happen or how it will happen, I said. I asked for their patience. I admitted that I knew nothing about middle school children.

Fortunately, some of these first mentors had considerable experience working as summer camp counselors or high school tutors. So I told them that I would teach them about the birds if they taught me how to work with children. We were all going to bumble along together, learning by trial and error, I told them.

After reading through an eight-inch pile of weekly reflection journals spanning four years I realized how critical that first semester was and how foundational. I believe that the reflection journals and comments by students from the first semester are very important because these

students had nothing to lose by writing the truth. During the second semester this became a five-unit course; three units for mentoring, two units for a field ornithology lab. But since this was a just a one-unit course during that first semester, and their grade was based almost entirely on mentoring, this was the semester with the least grade coercion. These first mentors knew they were creating the foundation for the future and that their honest criticism was going to help future UW and middle school students.

As I reread and analyzed their weekly reflection journals, I realized that the first student-mentors in this course were really studying the middle school children more than the birds, and their recommendations helped plan this course. The UW-Madison students didn't just criticize what was going wrong, they proposed solutions. They were problem-solving every week to try and meet their co-explorer children's needs as they tried to learn how to relate to the kids:

Today felt like a major step forward, during previous days, I had felt disconnected with my student (Sam) simply due to his (and my) quiet nature. I have been having trouble getting a conversation going...but today I just sort of dove in. Somehow we ended up talking about pets...which although [was] not the most relevant or important subject, was at least something we could meet in the middle on. He could talk about them and give little anecdotes and I could comment on those and bring up related anecdotes of my own. It does not matter what it was we discussed, just that it gave me a window, a door into him. I think what it took to get a decent conversation going was not just asking a question (ex. "Do you have any pets?") but going deeper with them, asking the questions, but upon the response, maybe throwing out an anecdote, maybe asking..."What kind of cat did you have?" "What's he like?" "Where did you get him?" I choose to put this stuff down because the underlying strategies surrounding it can apply to many situations. (10/4/10)

The course and program has evolved but almost everything we're doing now began that first semester. Those 13 original students were really the co-architects of this course. Despite the fact that it was just a one-unit course and that a grade of "A" was practically guaranteed, they were deeply invested in the future success of this program and deeply committed to working

with these children; three students from this first experimental class asked to repeat the course a second semester so that they could keep working with their children as mentors.

This is the first major lesson I drew from analyzing and studying my students' reflection journals and from post-graduation interviews: I had to listen to them. In a community-based project like this, they were also partners. In an experiential course, the typical hierarchical academic structure can inhibit the development of a true partnership because of the coercive grading system. It is important to create a learning space in which there is the time and structure for students to provide weekly feedback, and the time and structure for the instructor to absorb that feedback and use it to immediately modify the course and assignments. This means the course structure and syllabus must be somewhat flexible in order to respond to issues as they arise. A flexible syllabus allows the community-based instructor to turn so-called "problems" into teachable moments.

One method for proving to students that they are real partners is to use their work and writings as a basis for classroom teaching. As a writing instructor in a prison and at two universities, I have always read my students' work out loud in class. I use sections of student papers to teach. I used this technique in this course. I noticed that when students heard me reading aloud from their weekly reflection journals, and using *their* thoughts and insights to help teach the class and even change the design of the class, they invested more in the course. They realized that what they said and thought really mattered. I was trying to teach them that they could make a difference in the world so I had to let them make a difference in the course structure, itself. Sometimes that means throwing out assignments, creating new ones at the last minute or otherwise changing the syllabus. I wanted them to meet community needs as they

arose, so I had to try to meet their needs. This reflexive teaching takes more time but it is also more rewarding.

As my definition of community partner broadened and deepened, I understood that my highest priority had to be the relationships with all of these partners. Original goals may be unrealistic, as mine for an orderly ornithology club were. Administrators, teachers and college students will change over time. Structures will eventually change, too. But the relationships with the players who are going to be around for awhile are the social glue of the community-based course. Michael Johnson, CEO of the Boys and Girls Club of Dane County and one of Madison's most important civil rights leaders advises: "You can't solve community issues if you don't have a personal relationship with people."¹⁶⁴

In this program, the school principal, counselors, the middle school children, the community volunteers, and the park and its animal residents were these players. Every semester I had a new set of college mentors. But many children started the club in sixth grade and stayed with us until they graduated at the end of eighth grade. So over those three years I began to know some of these children very well. Some of them also lived on my street or a few blocks away. I ran into them and their families in the street, in the park, at the local library and grocery store, and sometimes on the bus.

My students and I also learned from the children that "partner" means equal, whether that partner is a child, principal, college student, bird or fox. It is a very different word from "beneficiary" or "subject" and other euphemisms used to describe people of color or people living in economically poor neighborhoods. Our college student mentors learned every semester that they could learn more from a child than from a textbook. This surprised some of them greatly. Their weekly experiences in Warner Park with the children challenged many of their

assumptions: "I'm not embarrassed to say that most of my assumptions were off and many of my ideas crashed and burned, which might have been my favorite part of the whole experience."

(12/15/10)

I never realized that this teaching experience would not only be about what we, as college students, could teach middle school students but also what they can teach us. Over the course of the semester, I learned that I was inspired by Ostara, that she pushed me to learn more and that she actually helped me grow and appreciate birding and the outdoors in ways I didn't know I could. Thus, I will not only be taking away teaching experiences from what I have learned from her but also I have been shaped by her enthusiasm and love for nature. (11/15/10)

These realizations occurred over and over again every semester. For example, on day one of the third year, an 8th-grade girl named Megan who had been in the club for two years taught her new college mentor the difference between red and white pine trees. While they walked together to the park, the eighth grader pulled a bunch of needles off a tree and showed the college student how the fascicle of the white pine contained five needles while the red pine only has two. "You can remember it by the number of letters--five--w-h-i-t-e," Megan told her. Megan's very first college mentor had taught her this lesson, two years earlier.

On that same day as we walked into the park's meadow, two Mexican American boys ran to the milkweed pods that were bursting open, their silky feathery contents streaming in the wind. The boys grabbed the seed pods and fingered the long creamy strands and smooth brown seeds. They explained to their new college mentor that these plants help the orange butterflies fluttering around the meadow, the Monarch butterflies getting ready to head towards Mexico. The boys ran from milkweed to milkweed, scattering their seed. A year earlier, their previous college mentor had taught them that if they helped the milkweed, they'd help the Monarch butterflies. Now they were teaching this to a new college student mentor.

Lesson 2: We Are Not Your Students, We Are Your Co-explorers

That very first semester, an energetic curly-headed boy from Puerto Rico became one of my most important teachers. One day as we walked towards the woods, a chipmunk scurried through the leaf litter, delighting him. He immediately pointed out to me how the squirrels hopped through the leaf litter while the chipmunks scurried, something I had never noticed. We closed our eyes to listen to the difference between a hop and a scurry. He wanted to follow the chipmunk without scaring it so we practiced lifting each foot and carefully placing it down to minimize leaf crunching. For 30 minutes we became two moonwalkers, tracking the chipmunk. Later that afternoon he told me that this was the "explorer" class; he came because he loved to "discover" stuff.

Because of this boy, "Bird Buddies"--my original name for the club—became "Nature Explorers," and we all became "co-explorers." I did not know what I really meant by the term "co-explorer" when I first started using it. So I asked undergraduate mentors during subsequent semesters to develop their own definitions. Here are three examples of their definitions:

- **Leading by following, and learning with, not from:** I've heard for a long time about 'leading by example,' or the leading of a group through setting an outstanding example of what should be done...I felt like a lot of what I did in this class could be considered 'leading by following.' I allowed my co-explorers to choose the places and activities that they wanted to enjoy. I tried to see the park through their eyes, and enjoy the park in the same way that they did. They reminded me that...I don't know everything, and running and jumping through the park is a great way to get to know it. ..Why not see if we can build a floating log-bridge? Why not test the ice to see if it is frozen? How do I know that it is not thick enough? I learned a great deal from my fellow mentors—where good birding spots were, what types of rocks and trees were in the park. The important thing though isn't what I learned from them, rather it is that *I learned with them*. The same goes for our younger co-explorers. We created a community that was dedicated to exploring the world around us. (5/14/13)
- In Nature Club you fit in. No matter who you are, or where you came from. You're accepted. You do brave things, and adventurous things on the daily. Every kid is a leader, every leader a kid, and everyone is part of the flock. (5/14/13)

- When I originally signed up for this class, I envisioned walking around with doe-eyed children who were hanging onto every word that I said about the birds, trees, and mammals in the park...I was going to be their teacher and they were going to learn so much from me. I am not really sure why I thought this. Let's just chalk it up to my pride or ignorance. Then on the first day of class...I was told that I was going to be a co-explorer and not so much an actual teacher. I had no solid idea of what that actually meant...I kept picturing Dora the Explorer and her sidekick Boots the Monkey. This is what I thought it was going to look like: I was going to be a sidekick, co-exploring monkey. ...acting as a monkey turned out to be the best part of my semester. Except no one is a sidekick. We are all the stars of the show, exploring Warner Park and helping each other along the way. (May, 2013)

Another student described how the process of co-exploring works. The children are intimately familiar with the park's layout and where their special places are. The college students might have some knowledge of birds and plants. These two things come together on a spring day when a sixth-grader named Zach decides he wants to catch toads. He leads his college mentor team to a swampy stormwater canal where the toads hide:

I am so impressed by Zach's inventiveness and his ideas. He saved his clear plastic box from his snack, poked some holes in it, and brought it with him, just in case we caught a frog or something...Here in what had been frozen ice just a month or so ago was a green swampy toad paradise. They hopped off the banks, swimming around in the water, singing with their little throat pouches puffed out like they were blowing bubblegum bubbles. And -oh God-they were having sex like crazy, dozens and dozens of them. Mostly in pairs, but Zach reported a 'six-toad pile up.' ...if you put a big stick in the water, they'd jump on that, too and sing...Zach though it was really cool how you could feel the vibration of their singing all up the length of the stick. The sound was amazing...so I actually got us all to be quiet and recorded a soundscape on his iPod...Well, we caught 3 of them to share... They still kept making little chirps in their little container habitat. You know what Zach said to one of his friends? (OK, I swear I am not making this up!). 'Well, now I know where the word 'horny toad' comes from!'...Observing the toads actually led to some great questions, like how they make their sound which we're going to research. (5/2/13)

My students and the middle school children taught me that co-exploring means that anyone and everyone can be a teacher from the woolly bear hiding in the grass or the huge carp that died during a recent fish kill. To accept that everyone is a teacher, to actually learn something from someone else means that you respect that person or creature; it means that they

are important. It means you are open to changing your views and behavior. It means cultivating what Buddhists call the “beginner's mind,” not the expert's mind. It is the opposite of academic culture. It requires a new culture.

As we tried to create this new culture, our entire flock--instructors, college students, and middle school students-- had to unlearn the hierarchical, competitive behaviors that characterize our education system and that can be particularly damaging to children of color (Boykin, Tyler, Watkins-Lewis, and Kizzie, 2006). The new culture emerged as we invented our own language and rituals such as "Silent Fox," a method for quieting the children suggested by college students and our initiation rite of rolling down the hill led by the children. Our most important weekly ritual became the sharing circle which replaced the quizzes and mini-lectures I tried to conduct during the club's first year. For the last 15 minutes of our park session, everyone gathers at the oldest and largest Bur Oak, a bicentennial tree. Everyone who has found something interesting that day lays his or her treasure at the base of this huge tree: Zach's plastic container of toads, a perfect blue robin's egg found lying in a path, a piece of an old hornet's nest, an unidentified mammal skull with smelly brain bits oozing out of it, a tin can, an ancient flaking lipstick, and always, several large sticks. We form a large circle and one by one, those who wish to share pick up their treasure and carry it to the center of the circle. That person speaks. We listen. We applaud all treasures great and small. The next explorer steps to the center. At the beginning of the semester, the shy children, the misfits, shrink back, hiding behind their college mentors. By the end of the semester, many of these children are in the center proudly displaying a toad or a cattail, or just giggling about nothing at all:

Something that I found very endearing about the items the children chose to share was that they put no limits on how big of an item they were going to show. It seems like between the groups that went into the big woods, they brought a good chunk of the big

woods out with them. Some of the stories were told with such delight that I had to think to myself: what a good kind of medicine nature is. (9/26/12.)

Naming is another important way to create this new culture with the children. The children gave their college co-explorers special nicknames. They also began naming the places that they loved in the park: Sled Hill, the Big Woods, the Big Thicket, Armand's clearing, Sam's Fairy Glen, Cuddle Corner, the Heart Tree, the Bur Oak, Barn Swallow Bridge, The Fort, Castoff Point.

This new culture is what human ecologist and education researcher Jeffrey Lewis (2007) calls a sense of "we-ness." In a study of teaching methods in Oakland and Los Angeles in schools with high success rates for lower-income African American children, his research team attributed student success to a teaching framework of "solidarity in community" which is "a form of social cohesion characterized by mutual respect, reciprocity, commitment, connection, and accountability."¹⁶⁵

Five years ago when we were designing the program, Principal Mike Hernandez told me that he wanted the college students to stay outside the school and stand by the flagpole to wait for the children to come out. He did not want us dribbling into the building one-by-one. He wanted that large group standing there in full view. I did not understand exactly why, then. In an assessment interview during the program's third year, he explained why:¹⁶⁶

"Children look out that window and see a large group then you hear: 'Who's this?' 'What's that?' 'What are they here for?' And children can say 'Yeah, I'm part of that.' At the end of the day parents picking up children are also asking 'Who's that?' That large group is powerful. And these children, my students all know that you guys are *college* students."

Lesson 3: Just Walk With Me

Some of the first children in our club were very interested in nature and birds. One boy's father even asked me to give his son "homework" over Christmas vacation. The boy called me on

Christmas Eve, very excited. He had just finished an excel spreadsheet showing the migration ranges for every single bird species in Warner Park.¹⁶⁷ But most of the children were not that interested in nature. That very first semester, among the nature buffs and bookworms there was one tall, lanky boy who did not seem interested in anything at all. His name was Jeremy*.

I paired him with an undergraduate majoring in English. This student-mentor seemed centered and unflappable. I thought he wouldn't take Jeremy's disinterest in birds, personally. And I thought that Jeremy would drop out of the club soon, anyway.

But I was wrong. Week after week Jeremy showed up and walked beside his college mentor. He was the kid always doing something annoying like walking on the ice or swinging from the bridge like a monkey while the school's social worker shouted to stop. His favorite activity was whacking things with a big stick. He rarely smiled.

His college mentor was very patient at first. In his reflection journal he wrote:

Despite his lack of interest...I think there are merits in our simple interactions with each other, and his happiness in just being outside. I have learned a lot about his personal life and I can sense that he is looking for something outside of his home situation--which deducing from the little details I know, is not a very good one...and I can sense that this club and time to climb trees could hold more meaning than it appears. (10/18/10)

But after several weeks this college student began to get frustrated. Some of the other college students were mentoring perfect little bird buddies who gave short speeches about the habits of eagles and how woolly bears survived the winter. The college mentors bragged about these children in class. Finally, this college mentor came to see me during office hours. He felt like a failure. Jeremy wasn't learning anything and didn't want to. The college mentor could not figure out why Jeremy kept coming to our club.

I couldn't figure it out, either, but I remembered the advice of an African American principal in Loachapoka, Alabama, years earlier, when I was trying to set up a journalism service

learning program at his high school: "Students don't care how much you *know*, until they *know* how much you *care*."

So I told the student-mentor to just keep coming. Jeremy was coming because he liked him and needed him. At the end of that first semester, this student-mentor was one of three out of 13 undergraduate mentors who had become so attached to their little bird buddy, that they decided to repeat the course. I've taught hundreds of students. This had never happened before.

Despite the college student's devotion Jeremy did not change or become a model co-explorer that second semester. The pair muddled through the winter together, sloshing through snow, with the undergraduate mentor still trying to keep Jeremy from hurting himself or someone else. My student started bringing a video camera to the club every week for Jeremy to use. He had hoped to teach Jeremy how to make a little movie but instead Jeremy wanted to spend two minutes filming a dangling leaf.

Then one day, late in the semester, I was at the middle school perusing the bulletin boards. The school staff continually praised the children and the hallway is full of framed photographs lauding their accomplishments. One bulletin board was dedicated to school "leaders." There was a head shot of our Jeremy. Each student "leader" had been asked this question: "What is the most important thing that happened to you this year?"

Jeremy's answer: "My mother died."

A few weeks later, just before the semester ended, I announced to the club that a renowned ornithologist was coming to teach them. John Robinson, the author of one of our class texts, *Birding for Everyone: Encouraging People of Color to Become Birdwatchers*, was going to walk our group through Warner Park and help us find the 100th bird species (my biodiversity survey had been stalled at species 99 for months). A newspaper reporter would cover the event.

This was going to be a public coming-out party for our club. I needed a middle school volunteer to give a little speech to impress our guest-author and the reporter. I was hoping one of our young bird experts would volunteer. Instead, Jeremy's hand shot up.

His mentor and I were astonished. As far as we could tell, Jeremy did not know anything about birds. He'd spent nearly a year in Warner Park beating things with sticks. But a week later Jeremy stood in front of the group clutching two hand-written notebook pages, his hands trembling slightly. His mentor stood beside him.

In a quavering voice, Jeremy announced: "I'm going to out-do everyone who came before me." Then he read 18 funny and fascinating avian facts while the newspaper reporter scribbled away. The next morning, there was Jeremy expounding on birds in Madison's Capital Times: "It's pretty cool when we find a new kind of bird. I'd say my favorite is probably the Indigo Bunting because their feathers are actually black, but because of diffraction of light through their feathers we see them as this amazing shade of blue."¹⁶⁸

I was astonished. When had this boy ever seen an Indigo Bunting? What had happened to this kid?

A month earlier, Jeremy told his mentor that he had done something "very bad." As punishment, he was grounded for one month. He became very bored at home, so bored, he told his college mentor, that he picked up his bird field guide and started reading it. Fascinated, he read it a second time and underlined all his favorite lines. The Indigo Bunting's ability to transform sunlight into color was one of those facts that leapt off the page and grabbed him.

Of all the children least likely to become interested in birds, Jeremy had topped my list. I believe that his mentor's weekly presence, patience, and kindness, changed that. According to Sherman school staff, our college students teach the children that they can trust an adult, that

someone will listen to them and respect them. This relationship then helps them learn to trust other adults.¹⁶⁹

“They're looking for someone to just listen and give them that attention. In this club, every Wednesday, they know that that's going to happen. They can always count on it. And for a lot of these children, they don't know if they're going to get that in a week,” explained Betsy Peterson, Sherman Middle School's after-school club coordinator.

At the middle school lunch period one day, I listened to one of our sixth-grade explorers describing our club to a new kid who wanted to know what it was about: “It's really cool” our sixth-grade co-explorer said. “They *give* you a college student.”

During the program's third year, when six of our middle school co-explorers gave a public presentation about the program at the local library for Earth Day, all the middleschoolers kept referring to “*my* college student.” Finally a woman in the audience raised her hand and asked: “What do you mean by *my* college student?” An eleven-year-old named Dakari answered:

Well, we all have certain college students. I have a really nice one. I'm paired with one of my favorite nature explorers-Jen-short for Jennifer. She is interested in aquatic animals, birds and different herbs like I am. So, we really get along. Every time we see something new, we look it up, either I do or she does.... I figured out how to tell them [turtles] apart from male or female, how to tell how old they are by the size of them and colors, and also I learned something really special--like if they have fungus on them.

The weekly program in the park not only gave the children their own college student, it gave the entire group a space and time period conducive to building a relationship. College mentors reported that they had some of their deepest conversations walking those two miles round-trip to and from the park every week:

Our children just want someone to talk to; the park is just a good place to do that. Unlike in the rest of their lives, where people are texting or playing video games or cooking

dinner or anything else while communicating, at the park, we're just walking and listening to each other...this club is so successful not because these children intrinsically love nature, but because the outdoors is the best place to hold a conversation. It's the best place to learn without being forced, and to talk without feeling ignored. (2/23/12.)

Although Corrie* was a little hard to deal with...we did have a good talk on the way back to Sherman Middle School...I got to tell him a little about myself and I was quite surprised at how much we have in common. It turns out that we both have read the series "The Adventures of Captain Underpants" and also play some of the same sports! (2/8/13). *not his real name.

She wants to talk to me a lot, but she doesn't want to talk about things that require too much thinking. I have to fight the urge to ask her too many 'poignant' questions about nature, her life, and so on. What she really wants is someone to really listen to her talk about her Halloween costume ideas, her pets, and to sing 'Lean on Me' every week on the walk back to school...Sometimes I find out later that she really was listening when I thought she wasn't. I was floored when she pointed out the specific tree that we saw a woodpecker on, where we saw a heron, and where we'd seen a chipmunk last week. She was right about all the spots and the animal names. She has a gift for noticing little signs and movements in the woods, when she puts her mind to it. (10/11/12)

While they walked and talked, the middle school children often held hands with their college mentors or their mentors threw an arm over their children's shoulder. As the group trailed out of the park starting the one-mile trek back to Sherman Middle School, college mentors carried children's backpacks, chunks of trees, piles of leaves, rocks, and bags of trash that their kid had collected. Some middle school children opened up during these walks and shared the stories of their lives: a father in Iraq in the military, a father murdered in Chicago, a girl whose best friend in middle school was cutting herself, a mother's breast cancer:

She [middle school student] has a lot of siblings-I think 8- and she is in the middle. She talked about her mom having breast cancer for two years and described how scary that was. At first, I was not sure exactly what to say. Though I know she is younger, and that must make it even harder, I also have a parent who has cancer, so I tried to think about what has been helpful or not helpful that people have said to me and do the same for her, which is mostly just listen. (2/24/12)

In the space of those two hours and the 213-acre expanse of the park, the children and their college mentors made connections I could not anticipate. One of our middle school children

was Jewish and hungry to know more about his heritage as his family did not go to a synagogue. While standing around mixing prairie seeds one afternoon, by chance he started talking to a college student who was not his mentor. This boy had an unusual name so the college student asked what his name meant. This was how the mentor discovered his heritage. Since the college mentor was Jewish too, she shared with the middle school student what she knew about the Jewish community on campus.

Principal Hernandez emphasized the importance of mentoring relationships to his children. For some of them, he said, another adult mentor is "...right next to or in place of their parents":

All the children really enjoyed that one-on-one, two-on-one. Those ratios were great. A lot of them [college mentors] are mirror models. That's something for our children to see—women in higher education in a different sense than school teachers, and seeing men and people of color. They [his students] saw the interactions of how adults and students treated each other and the children, always respectfully, jokingly. I know relationship-wise we've had several people from your program who have come back and tutored and followed up on this, dropped off books, gloves, hats for some of our students. How do you get better than that?

The mentoring was reciprocal. The middle school co-explorers taught their mentors important life lessons about their role in the world and about themselves:

They taught me that it's ok to have fun (Carl), and sled down the hill on your butt (Mabion). It's ok to fall off of tree branches (Hunter) and if you land in the swamp, then you can explore with the fear of getting wetter (Marcos--it's actually really deep the more you think about it). It's easy in the college setting to get wrapped up in only being successful and smart...but it's about having fun, too. That's something I feel my co-explorers taught me. Nobody wants to be lectured about fungi or swamp ecology, but learning by exploring like a kid is fun for everyone. After our day in the swamp, we all knew more about ecology and fungi and made a positive connection with Warner. (5/13/13)

Lesson 4: You *Can* Make a Difference

Every week when I visited the sixth, seventh and eighth grade lunch periods at Sherman Middle School, I always found a select few of our children sitting at the end of the long tables by

themselves in a huge cafeteria full of screeching, laughing, chattering children. These were the shy, quiet, more intellectual children, the ones carrying a several-pound Harry Potter book under their arm, often a little pudgier than the other children. When I sat down next to them or across from them while they ate lunch, they looked so happy. I felt sad to see them sitting alone. These were children that the college student mentors really loved but they did not fit into the general middle school culture. They weren't sporty or popular or gregarious. We had several of these children in our club every year. Some of them stayed in the club for three years and formed their own quiet group. These lonely quiet children had a huge impact on their individual college mentors:

When we were sword fighting on Sled Hill Megan [seventh-grader] told me [college mentor] I am the only real friend she has ever had. This experience means something entirely different to her. Sometimes I get caught up in myself, and how this program is changing me, or pushing me. I forget that I am interacting with a little person who lives in an entirely different bubble than the one I inhabit. I am constantly thinking about how to change the world, how to push people harder and challenge everything. My mind is obsessed with finding the answers to global issues...And then a thirteen-year-old girl tells me I am her only true friend. It changes a lot. I don't need to have all the answers. I don't need to be actively solving the problems of hunger and disease and population growth and climate change. Perhaps at some point in my life I will be on the ground, fighting those battles with my hands and my words. I will never choose to ignore those problems. But on Wednesdays, I have a friend who deserves my attention, and the rest of the world will have to wait. (April, 2012).

One thing I will always remember about this class was one of the days as we were waiting for all of the children to come outside, Kaylee confessed to me that she really didn't have any friends. And that one of the other students had told her that she needed to be 'different' in order to make friends. The smile that covered her face when I simply said, 'and here I thought we were friends,' completely made my week. It made me realize that even though I'm just one person in her life, that I could make a difference. It's a great feeling. (12/15/10)

Many of the children spoke of how they were teased, bullied or made fun of for being more educationally earnest... When [he] would talk to me of how children made fun of him or his friends, I was never quite sure exactly what to say. I never recalled facing direct harassment of that type...I encouraged him that things will get better as he goes on in school, especially if he makes it to college. Over time, I explained in different words, knowledge becomes more valued and the ignorance displayed by those making fun of

him would be seen as petty and stupid. I implored him to keep up with his studies... That all sounds a bit corny when I put it like that, but I would like to think that he took it to heart... and it would sadden me if he ended up becoming disillusioned with school from teasing or harassment.¹⁷⁰ (12/15/10)

That first year, we had another little girl in the club who was a very talented birder, better than most of the college students. She had a very difficult home life. She rarely spoke up in school. Within a few months of joining the club, her teacher told me that she was suddenly speaking up in class, frequently. She enjoyed showing the teacher drawings that she had made in the park. The teacher believed the mentoring relationship and the club were greatly benefiting this child. The relationship was also greatly benefiting the student mentor:

I felt as if we really bonded this week. She [the middle school girl] was collecting leaves for me, giving them to me as presents and holding my hand! As we walked through the park and walked back to Sherman she kept grabbing my hand and linking arms with me and it was one of the most fulfilling experiences, as I truly believe she is starting to view me as a friend! This little gesture made the biggest impact on me and truly reinforced how this class is not only about birds and bird watching but about making a difference in the lives of a middle school student. (10/26/10)

This leads to an assessment question: How do you measure the impact of a single child reaching for the hand of a college student on a fall day walking through a city park?

The children taught our students how change can happen incrementally and at the individual level. This was a very important lesson for undergraduates learning about social movements in their coursework. Many of my students have the impression that social change can only happen on a grand scale. In our celebrity-driven culture, they learn that these movements had extraordinary leaders such as Martin Luther King Jr. and Rosa Parks, but they do not hear the stories of the thousands of ordinary people involved in these movements who exercised daily leadership. As Diane Nash, a student leader in the 1960s civil rights movement explained during a lecture in Madison in January of 2015, mass movements for change are made up of micro-

movements for change, every-day relationships, negotiations, and messiness. But generally, this is not how most of the undergraduates I have taught perceive it.

This hero-worshipping vision of social change can be intimidating, overwhelming and paralyzing for undergraduates (for all of us, really). How can they possibly solve the world's problems? In a hands-on experiential course like this one, they see the change in just one child and in themselves over the course of a semester or a year:

This class also gave me perspective on how change is made. It can start from something that at the time seems almost insignificant, but turns into a connection or foundation to build from. (12/15/10)

I've been teaching Laura to identify white pines and red pines and today she told me that she taught her cousins, and that her oldest cousin taught his friends. We just need ignition, a few sparks here and there, and we'll light up the world. But what's the best way to spread that inspiration? Can I do all these things--art, education, research--or do I have to focus on one, build a 'career?' (3/2/13)

I get so excited for this class every Monday. I think about it all day, and after preparing on Sunday, just to make sure I remember everything we talked about the week before, I just imagine what random things are going to happen the next day...(this student taught the club how to differentiate between different oaks and oak and maple leaves during this session). ...I love Bur Oaks. There's just something about them, a kind of history that speaks through its branches, even through the uniqueness of its strangely pinched leaves. The walk out of the park was wonderful. I finally feel like I'm getting to know all the children in the class, young and old alike. Everyone was running up to me asking, "Is this a Red Oak?" "Is this one a Red Oak? Oh, no, it's got long, round fingers, White!" I felt so encouraged--these children just learned something from me, and they're actually excited about it. What? Really? That was such a good and rewarding feeling. (10/25/10)

Joe asked me if I would be around for Nature Club in the spring. I was caught a little off guard, but told him I didn't think I would be...He looked a little upset and said that he hoped I would be there. It was a moment that I won't soon forget. It made me realize just how much of a difference I was actually making, Sure, I may not be changing lives, but I've been exactly what I wanted to be for these guys, a mentor and a friend. (11/30/12)

One week later, the same student-mentor above had to say goodbye to his middle school co-explorer Joe. He wrote:

My favorite moment as a mentor happened this week. It helped cap off the entire experience and make me see it all in an entirely new, positive light. I was walking back

with Joe and we were talking about animals...and he said, 'I'm really going to miss you.' He didn't look at me when he said it, and I knew why; he was trying not to get emotional. It was one of the proudest and most sad moments I've ever experienced. 12/7/12.

This student-mentor decided after this encounter that he did not want to leave "his boys."

He enrolled the following semester and repeated the course.

Lesson 5: We *Are* Learning About Our Environment

Inevitably, every semester, after a few weeks one or two or more of the college student mentors began to express frustration. What were these children actually learning? This seemed like "glorified recess." Some felt like "babysitters." They were used to grades, measurements, assessments. As a graduate student lost in the land of the quantifiable, after the first two years I too began to wonder what the children were learning and how to measure this.

In the spring of 2012, the public library asked if our Nature Explorer children could give a public presentation about the park on Earth Day. Six children volunteered. I prepared a long Powerpoint presentation on the park just in case the children did not show. Earth Day fell on a sunny Saturday, one of those spring days in Madison where everyone wants to be outside basking in the sun like a turtle after months of ice and snow. But as I was setting up in the library that afternoon, the six children and their parents marched in carrying chunks of tree trunks, live plants in pots, coffee-table bird books, and cardboard boxes and odd-shaped Tupperware full of empty beehives, rocks, and feathers. They covered two large tables with nature paraphernalia.

I gave a five-minute introduction. The children took over for the remaining 85 minutes. I had no idea what they would say since we hadn't prepared any presentations. They all talked about very different things. We had a bird boy, a beehive and burdock boy, a native plant girl, a tree-defender girl, and an ardent turtle defender and aspiring researcher.

They were nervous at first but after awhile they could not stop talking. Several children spoke at the same time, interjecting points and adding information: "making connections," Dakari called it. As I listened to the tape later, I was struck by how they repeated some of the things I or their college mentors had told them, practically verbatim.

The Bird Boy taught the audience that Canada Geese fly in a V formation because it is easier to fly that way; they save 50% of their energy. He also shared that the Blackpoll Warbler, a tiny bird, flies 90 hours non-stop over the Atlantic Ocean to migrate to its wintering grounds in South America.

"That's equivalent to a human marathon runner completing 50 consecutive races without food or water and without losing speed from the first leg to the last leg. So they're very strong," Boaz said.

Then Dakari, the boy who had defended his birthday tree before the parks commission just a week earlier, took over and lectured the audience about his greatest passion--turtles. He had discovered where they nested in the park's wetland. He'd studied how to tell males from females. He'd figured out how to estimate their age based on their size and color. And he'd learned something "really special," whether or not they have fungus on them.

Dakari had also learned something that alarmed him. On the Wisconsin's Department of Natural Resources' website he read that people were not supposed to touch the turtles until July 22nd, until they were bigger. When he first found the nests, he was very excited and so he told his neighbors. But then they came and took a lot of the baby turtles home.

"I had to study it because I felt really bad, so I can tell somebody else if they've got one [a turtle], just to leave it alone. Anything I know about animals I really keep it to myself. If people keep on going after them, there won't be any turtles for next year."

Dakari said now he tells neighbors looking for turtles that "They nest by the trees, like the birds." He is trying to keep his neighbors away from the real nests.

Emily Patzer, a sixth-grade native plant enthusiast, took over after Dakari. She stood in front of the table covered with potted native plants she'd brought in from her family's garden: Trillium, Mayapples, Trout Lilies, Jack-in-the-pulpits. She described how Nature Explorers had pulled garlic mustard and some of us made pesto out of it to eat. She taught the audience that the "Tri" in Trillium was Latin for "three." She held up each plant as she talked about it. She told the audience which ones they could eat.¹⁷¹

The children's favorite plant was burdock. When one of the speakers mentioned this plant, all of the children started talking at once. I had to interrupt them to calm them down. A boy named Carl summed up the reason for their enthusiasm.

"Actually there was one kid who was totally obsessed with burrs. At the end of the day, whenever he moved, you heard a crackling sound because he had covered himself--all his clothes were really fuzzy. He had walked around finding burrs and just rolled around in them so he was covered in plate armor," Carl explained.

Lesson 6: *We Are Teaching You* How to Function in the Real World: The Wisdom of 1000 Zombies

Employers in recent surveys complain that college graduates lack the interpersonal skills or "soft skills" as referred to in the literature that they need to succeed professionally (Greenberg and Nilseen, 2014). This weekly experience of building a relationship and communicating with someone entirely different taught some of the college mentors these interpersonal skills.

Every semester there were college mentors who complained that some of the middle-schoolers just wanted to talk about video games; they were not interested in nature. I

remember in particular one college student who was alarmed because her middle school student, a girl, talked non-stop about how she could not wait to get home at night to play a video game where she had to kill 1000 zombies.

So talk about video games, I advised her and other mentors. Talk about zombies. This is not about you. Find a way to connect with every kid. That's your job. As I studied their reflection journals and listened to the stories that they shared in class during our debriefing sessions, I realized that the middle schoolers were teaching our college mentors how to communicate effectively face-to-face, instead of just Facebook-to-Facebook:

Sam [middle school student] caught a grasshopper and kept it on his arm. Somehow it stayed for about twenty minutes. Thomas [college mentor] and I sketched it. I continued to ask Sam questions, and when he gave an answer about himself that I could relate to, I made a comment about it and asked some further questions. I think this is a pretty effective way of getting to know a middle schooler. (10/8/10)

The first few weeks were very formal, and both of us were not completely comfortable. I was focused on setting the standard for how I would be teaching [him-middle school student]. I also was asking a lot of questions and trying to tell him [the middle school student] everything I knew about anything. This did not work...so I relaxed. This did work. I still wanted to teach [him] everything I knew about nature and why I love it so much, but without a connection between us I was not going to be able to do, either. One moment that stands out to me is when I plucked a giant wad of burrs and hurled them at [him.] We practically spent the rest of the day throwing burrs at each other and everyone else. This small act showed him that I liked to have some fun outdoors and it is okay to joke around with me...We were able to talk about anything after that: school, friends, boy scouts, girls, the future, and even some birds. (12/15/10).

What I learned from my co-explorers was more about my role with other people and gaining perspective about what kind of life that I have and how it differs from other people's lives. For example, from Marcos [seventh-grade recovering burn victim who was in intensive care for 12 weeks], I gained perspective on a life situation that I have never encountered. Although I do not know what it is like to have serious life-altering burns, I have a better idea of what it might be like. It also strips away the nonsense in life and reminds you of what is important. I also had the opportunity to be in a situation that I haven't really been in before--I haven't had the opportunity to interact with youth of different races before and this class gave me the opportunity. I have learned a bit about what it might be like to be a minority. I also learned how I interact and respond to situations with racial minorities. (5/17/13)

The mentoring program also gave college students another advantage when seeking jobs, particularly the students who mentored the most difficult children; it gave them a compelling story to tell during job interviews. One year after the college mentor of Jeremy, the troubled boy in Lesson #3, graduated, I received a call from a prestigious law firm in San Francisco. This mentor had applied for a legal internship. He graduated as an English major but because of his work with Jeremy and the other children, he had become more interested in social justice and a possible legal career. The caller wanted a reference for this former student. She told me this was an extremely competitive internship and there were 200 applicants. His application “stood out,” she said, because he told a story about a boy he had worked with in my education program. The story was so touching, she said. It showed my student’s strength of character, his persistence. It made a deep impression on her. She wanted to hire him, but she had to check to make sure that the story about the difficult child whose mother had died, was true.

Every semester for the past five years I have given references similar to this one for graduating students. Future employers want to know how college student applicants dealt with challenging situations. Student-mentors from this program are now working in AmeriCorps, Teach for America, the Peace Corps, public schools, church outreach, nature centers, and children’s museums. They are conducting ornithological research in various states in the US, in Indonesia and Hawaii. One student became the director of Madison’s wildlife rehabilitation center, one of the largest in the nation. Another student became land steward for a major Audubon waterfowl sanctuary. Yet another became a school garden coordinator.

In addition to teaching our students how to relate to them, the children also taught their mentors lessons in authenticity. They showed them how to stand up to peer pressure and to accept their true selves:

Karl is a particularly interesting young man. While he is not my co-explorer, we have formed a really great friendship. And although I'm sure he is affected by the middle school atmosphere--which can be hostile at times--he also appears to be uninhibited by what his peers think of him. He chases butterflies and sings out of key in a loud, booming voice. After our interactions, I am always reminded and encouraged to put forth my most true self in the world. It is all too often that we, as adults, modify ourselves in order to appear a certain way to a certain person or group. (4/18.12)

Being you is the truest way to learn about someone else. I think that Laura [sixth-grader] taught me how to be myself. This is a difficult thing to explain. I'm sure some people, those that are always themselves, can't even comprehend this. How do you act like someone you're not? When I'm not being myself I care more about what other people think about me. I don't get excited about things like cool plants or birds. I'm irritable or quiet, or I can't think of things to say...I feel boring. I know it sounds like I'm describing depression...I think that Laura has helped me figure out that switch--from 'Who am I?'--to me. I don't have to be sassy or sensitive to others' opinions of me. Laura and nature Club helped me realize that if I relax and appreciate what's going on around me, from people to nature, I don't focus on me so much. That switch frees me to be myself...a wild child in the woods--crazy about life, feeling the weather under my feet and sharing breath with the trees...That's me. (5/14/13)

Some of the middle school children were wrestling with their own identities. As they struggled to figure out who they were becoming, they also unknowingly helped the college students wrestle with their own issues. One college mentor who was gay told the story in her journal of a seventh-grader in our program who had been the target of ugly bullying at the middle school. This seventh-grader was a gentle and sensitive girl who loved flowers and colorful clothing. Sherman teachers protected her and the school started extensive anti-bullying campaigns. The girl confided in her college mentor that the bullying had really hurt her. She told her mentor that one of the mean things that children had said about her was that she was "a homosexual." The middle school girl did not know that her college mentor was a lesbian:

I'm always unsure of what to say when my identity is brought [up] as an insult--especially around children; it's hard to know what you're allowed to say. I'm stuck trying to decide how to respond when Emily [a seventh-grader and friend of the kid who was bullied] says 'Don't let stupid people change who you are.' Bam. I'll tell you...she knows what's up. I really love that this club puts [middle school] students in a place where they can talk openly about these things. They don't have time at school to share stories or swap insights. What if the only thing Katarina* took away from the experience of having a

mean girl write bad things about her was that she shouldn't wear ties and rainbow socks because it means she's gay and that's a *bad* thing? She could be scarred for her whole life, trust me...those things stick. But a conversation had during a walk with a classmate and an older person who you know will protect you--I think it has the power to mend.
(11/14/12)

*Not her real name.

Chapter 6 The Magical Place: Warner Park and its Animal Teachers

Warner Park is a 213-acre space where young bodies, imaginations and brains can roam. After five years and over 100 hours teaching in the park, I believe that the space itself, and its wild and varied corners and habitats, is what makes the Nature Explorers program possible. Without this huge greenspace, its ecological variety and its animal residents, this type of outdoor education program could not work. Just the size of the open space and the varied topography—high, low, wetland, meadow, open lawns, woods, mowed, unmowed, thickets—physically affects us all the minute we step into the park.

The unique nature of this space and the nature in this space also affect the quality and depth of the mentoring relationships that can develop between the college students and their co-explorers. Sherman Middle School social worker Julie Wilke, who worked with us the first three years of the program, observed the differences in the kind of relationships that can form at school compared to the relationships that develop in Warner Park every Wednesday:

In terms of the effect of being out in the environment...it really has increased, I think, their relationships. At least with me, you know, there's certainly more to talk about with the children. They open up in a way that they don't here at school, and as somebody who works here and interacts with them on this side, getting them outside and walking down a street, and going into a woods, and saying 'Hey, look there's a Black-capped Chickadee' or sledding down the hill with a kid, takes it to a different place where I think it increases the trust relationship. I think they feel valued more deeply as an individual, as a person, that what they feel or what they say, counts. I think it still counts here [at school], but I think it just creates an opportunity to really develop a deeper relationship. And what we know about relationships is that that's crucial to having behavior changes or influence...What it provides is learning opportunities for children that are real, that are related to life...It's not *just* a Nature Club. It's not *just* walking to a park for two hours and then walking back. It's so much bigger and deeper than that.

One example of this deeper bonding is described in a journal entry below by a mentor who developed a very close relationship with her middle school co-explorer, Laura. When the

college mentor graduated, Laura wrote letters to her. I assigned Laura new mentors but she never bonded as deeply again with a college student. Months after this mentor graduated, Laura broke down and sobbed in a school hallway when she told me how much she missed that college student.

It was a beautiful day out--the kind of weather we've been longing for all winter. It was sunny and warm but breezy, taking the edge off the heat...Everyone was eager to get to the park...After strategically laying down our pennies, taking careful note of their location, we wandered down the [railroad] tracks. We had planned to go and visit the fox den...There are still places we haven't seen, niches we haven't discovered, and places we haven't lingered. As we passed over the [railroad] bridge we stopped to sit and dangle our legs over the edge, the view was too inviting to pass it up. We watched a goose glide across the lake towards our shore, In the water below, a fin appeared here or there as fish passed underneath us. They came and went like massive shadows. We threw stones into the abyss, seeing who could cast them further. We listened to nature's symphony. The frogs were awake and singing, an army of amphibious sounds. Blackbirds called like broken cuckoo clocks. A pair of male mallards squawked as they paddled past, investigating the ripples of our cast stones. Their green iridescent heads were gorgeous in the sunlight. A yellow warbler flew past us, a flash of impossible gold. It was as if the Warner wildlife was putting on a show for our entertainment. We had perfect seats on the bridge. Then in the distance a train sounded. Laura and I looked at each other with excitement and worry. We quickly pulled our legs of the edge of the bridge, just in case. We sat cross-legged facing each other, and waited for the train to approach. We were only 15 feet from the tracks. The ground shook as it passed before us--so much weight, so much metal; it was a giant mechanical beast. Twelve cars later, we jumped up and ran after it, chasing it to our pennies [on the tracks]...After looking around, we began to turn up our flattened pennies in the shadow of the ties and rocks. (5/3/13)

Mike Lu, an undergraduate mentor who worked with the program for three years, noticed how differently the children behaved at their middle school vs. the park. He described the park as a kind of “forum” that “brings them together, mixing them up, socially”:

Just being outside of the school relaxes them [the middle school children] more, makes the children feel more comfortable. All the other spaces are associated with the structures of their academic day...You walk through Sherman [middle school] and they walk in lines. It's weird, but it's a lot easier to get them to line up in Sherman [middle school] than in the park. (Mike Lu, Nov. 7, 2014)

On 96 Wednesday afternoons over a four and half year period I watched a physical transformation of both college students and middle schoolers as they walked the mile together from Sherman Middle School to Warner Park. When the whole group entered that narrow sumac corridor and emerged into Warner meadow, we all breathed more freely. Some children began running and screaming, exclaiming and pointing at the grasshoppers leaping out of our path, searching for toads, or scanning for the fox or the deer we occasionally see. Other children talked animatedly to their mentors, telling them about their week. Some of the shy loner children that I visited during their solitary lunches were talking very fast to their mentors or laughing or singing or skipping down the path with their college mentor hurrying after them.

Once we walked further into the park, these were some of the Comstockian activities that the children and college students engaged in: collecting and throwing the large oozing black walnuts that litter the park's edges; being a "Squirrel for a Day" by digging holes and planting acorns in the fall; stalking the fox, poking at animal scat, making videos of the fox, flying kites, staring at the sky, drawing, playing with crickets, catching toads, organizing toad races, building grass houses for toads, building grass houses for caterpillars, finding animal skulls, making music with icicles, making music with grasses, using honey locust pods as maracas, poking at the eyeballs of dead carp, chasing migrating geese grazing on the park's mowed lawns, finding big sticks, beating tree trunks with big sticks, finding wild ramps and chewing on them, planting garlic and eating it in the spring, trying to solve the mystery of the mutilated rabbit bits; balance-beam races on the railroad tracks, putting pennies on the railroad tracks and then collecting the flattened treasures the following weeks, picking up cool rocks to take home, chewing on trout lily leaves, following the herons as they fished and imitating the Great Blue Heron's stilted stalk-walk, singing "Frozen" on a 20-degree day, playing soccer, crawling on all fours and bellies

through the thicket, dragging an algae-covered shopping cart out of the marsh (that took about 10 middle school and college students working together for at least an hour), scattering seeds, collecting seeds, planting trees, planting prairie plants, tossing milkweed seeds into the air and watching them float, creating a golden snow flurry by rubbing on cattails, finding and cuddling woolly bears hiding in the grasses or along the paths, finding turtle's nests, looking for baby turtles to rescue, picking wildflowers, walking in the rain for the first time, sledding down the hill, catching falling leaves, building tree forts, building snow forts, drumming with broken sticks, pulling on the long grasses, stroking the grass blades, caressing different tree bark (sometimes blindfolded), standing and looking out from the dog park bridge, leaning over the bridge, climbing on the bridge like a monkey, staring down at the changing water and ice freezing underneath the bridge, walking on the ice, skipping pebbles across the ice and listening to the sounds, examining owl pellets, telling stories, studying the difference between male and female pinecones, making birdhouses out of large tomato cans, decorating those bird houses, cleaning out those birdhouses, rescuing stray dogs and cats in the park, pretending to be superheroes in the park, thumb wars in the park, snowbird sculpting, doing the worm in the snow, following and identifying animals tracks in the snow, following and identifying sneaker tracks in the snow, climbing trees and sitting on branches waving around a sword-stick yelling "I'm a Nature Ninja!," dissecting a huge dead carp with sticks, covering themselves with burs in a body armor, covering someone else with burs, drawing a giant valentine heart in the snow with sticks and grasses, telling fairy tales in the park, finding "mushroom graveyards" in the woods, finding geo-caching film capsules left by other park-users and leaving their own messages in them, poking around the "hobo camp" where a homeless man occasionally camps.

The huge space and the variety of activities also give young imaginations a place to roam.

People—and academic studies, for that matter—say that children no longer use their imaginations...that view was knocked around today. Kaitlin told me all about how fairies make the weird shapes sometimes found on trees. Strangely-formed branches, grooves and bubbles in the bark all apparently created through magical processes in which fairies transform living things into parts of the tree! (She doesn't necessarily believe this, but it's a theory...) Ousman explained to us just how fast he'd have to run in order to outrun an Irish Wolfhound (pretty darn fast)...By the end of the day, I looked at a bent tree and said out loud: 'Look guys! A leprechaun bridge! (9/26/12)

I had a similar experience with a Mexican-American kid nicknamed "Junior." He was hanging over the dog park bridge that day with another boy, pointing at something on the ice and snickering. A small boy with huge black-rimmed glasses, Junior was the class clown and very mischievous. I was afraid he might be about to launch himself or someone else off the bridge so I scurried over to ask the boys what they were laughing about.

"Look," Junior pointed down at a white shape in the ice. "They're faces."

I took a hard look, my cynical graduate student eyes not seeing anything more than ice. The boy looked up at me, waiting.

"Oh yeah," I said, bending over the rail to look more closely. "Now I see it. There's a ghost down there with very long hair." I pointed to a curving line in the ice.

Junior gave me a big smile. "Rapunzel of the Ice," he said.

Another sixth-grader named Ostara always had a bird story to share with her college mentors. She told them that a bird had landed on her head, that she had rescued a nest of abandoned baby birds, that a crow had built a nest out of strings it pulled from her shirt and that an owl regularly peeked into her bedroom window at night.

Animals as teachers

The animals that live in the park are also very important to the program. Although the children in Nature Explorers live in a state with abundant wildlife, where wolves are making a comeback and deer hunting season is a cherished tradition for many, some of our urban children

had never seen a deer before (a very few of them had fishing and hunting experience.) When they did see a doe cowering behind a spruce tree in Warner Park for the first time, they screamed, jumped up and down and stared at it in disbelief. In general, the children became very excited about all the animals they saw, great and small from woolly bear caterpillars and toads, to red foxes and bald eagles:

There is this innate curiosity that is hard to describe. Today we are so accustomed to city life we often think of ourselves as something removed from the wild or removed from the environment, but when you have an animal encounter there is a profound excitement and celebration. (11/1/12)

Destinee and Grace...wanted to explore further and were very alert to animal sightings...The fervor of seeing animals really got to both girls, which is understandable since we saw a downy woodpecker, monarch butterfly, great blue heron, cardinal, fox, and chipmunk all within three minutes of each other. It was providential, as if the spirits of the park were trying to work their best magic on the girls, getting its wild surprises under their skin. It worked on me, too. We were all standing together in the golden wood, mesmerized by the beauty of the leaves. The girls were uncharacteristically quiet...Grace, that bundle of energy, said to us, 'Wouldn't it be great if we just sat here, so quiet, that the fox came back and just sat here, too? We would pet it, and it would love us.' (10/3/12)

On a cold spring day a group of middle school students and their college mentor watched mallard ducks standing on the still iced-over marsh:

One of the males slipped and fell clumsily on the slippery ice, but then quickly redeemed himself by catching a fish by PIERCING through the ice with his bill! I was so glad we were all able to see that, it was so cool. Watching our duck take slippery steps on the ice back to the open water was hilarious. (4/5/13)

A West African boy named Habib spent over an hour one day walking along the park's main paved path, carefully picking up every worm and placing it in the grass. When I asked him what he was doing and why, he said that he did not want the worms to get stepped on. He later told me he wanted to be a veterinarian or "a children's cancer doctor."

Semester after semester, both college students and children often became very excited when they were able to see birds up close, particularly the largest birds such as Canada Geese,

ducks, Sandhill Cranes, swans and hawks. The geese were among the most popular because they were so easy to see and chase. A varying number of Canada Geese nest on the park's marsh island and hundreds of them stop in the park to feed and rest during fall migration.

“To see them gives me a sense of accomplishment. We [children] can see them. I can tell my class about them. They can come here and see them.”¹⁷²

There are the words of sixth-grader Boaz Fink, an 11-year-old who lived in an apartment right on the park's border. I met him during the very first Nature Walk that I led in Warner Park on May 1, 2010. He had heard on the nightly news that the city was planning to kill the geese. He asked me if it was true. He said he was very upset about this proposal. This boy later testified at two parks commission meetings to try to persuade commissioners to leave the geese alone.

Some college students expressed the same satisfaction when they began to recognize the larger birds:

At first it was a little discouraging because I could not identify them [wood ducks] in the air, they all just looked like flying Mallards, which I realized is my default duck. But after the fourth and fifth pairs flew over, I caught the right angle and lighting to see the male's patterning. It was such a satisfying feeling. The feeling only got better once we saw the Yellow-bellied Sapsucker. These are two birds I have never identified in the field before, and I love when moments like these happen. (4/4/11)

I told a few people [college students]...that I was watching Tundra Swans (I was REALLY excited about it, and still am) and they instantly asked me where I found such a thing. I told them Lake Mendota while sitting on the Lakeshore Path [on UW-Madison campus] and they were stunned, just as I was when I found out there was so much biodiversity on campus. Campus has meant so much more to me since I've started looking for birds. (11/5/12)

The birds also helped at least one struggling college student fall in love with learning. He found joy in watching birds: “This was my first real hands-on learning science thing where it wasn't awful. I could apply it instantly. Birds did things for me, personally. They made learning

not terrible...it wasn't learning in the sense that I'd come to really hate. You're there, and it happens." (11/7/14)

The children's delight over just seeing the animals also led some of their college mentors to reconsider how they themselves viewed or valued the animals. This mentor worked with two middle school girls, twin sisters, who were much more interested in boys than birds. Wednesday afternoons in the park sometimes turned into a bad tween movie with one of them sulking or crying over a middle school romance gone bad. Their mentor describes the effect that two Sandhill Cranes had on the twins:

We also had one of our most exciting moments with nature this week! The girls were leading me through the big woods...After examining some pretty big logs and tree stumps we made it to the end of the path where there was a clearing into a basketball court. Sandybel [middle school student] stopped and said 'Shhhhhhh!' so Marjorie [middle school student] and I both stopped in our tracks...Sandybel then pointed to the courts where two sandhill cranes were standing. Immediately both girls picked up their binoculars and looked through them at the cranes. Marjorie pointed out that they had some reddish marks on their heads and showed Sandybel where to look to see them. For me this was probably one of the coolest moments we've had so far. Just knowing that even though a second earlier they were yelling and running through the woods, as soon as they saw those birds they fell completely silent and nothing mattered except being able to look at them from the edge of the woods. We were even able to hear the birds make their call, which was fun because then the whole walk back to the Bur Oak Sandybel and Marjorie were making sandhill crane calls at one another. Overall, it was just sort of a magical moment and one of those times when all of a sudden it felt like everything in the world stopped. Those two cranes truly put a trance on the girls and seeing that kind of power come from the nature around them made me feel really moved by the work that we are doing in the class. (10/5/12)

The birds that college students see on campus and in Warner Park also give them an opportunity to test and apply course concepts. Birds can become the lens through which students examine our society's consumption patterns. In a course reading on avian migration by ornithologist Bridget Stutchbury, students learn how birds migrating thousands of miles every year face a growing number of human-made obstacles on the ground and in the air. Students start

to think about the importance of small places like Warner, the migration gas stations for migrating birds.

Warner is used as a stopover point for probably hundreds of birds. These little areas, such as the marsh island and the big woods are very special and important for many birds that come through in spring...One of the most upsetting parts of the [Stutchbury] reading was about how lights from people's houses can disrupt bird's migratory flight patterns. It was really scary how much these birds could be thrown off and even killed by lights. I think that is a difficult issue for a lot of places because people perceive lights at night as a great thing. Especially on things like the bike paths in the arboretum and along the lakes. I think that the issue is difficult because people perceive safety in lights. (4/18/12)

The red fox is another very popular character and teacher in the park. One college mentor called the fox “the spirit of Warner Park.”¹⁷³ Every semester there are children who make it their personal mission to find the fox. One West African boy named Khadim lived next to the park and saw the fox, frequently. Each week he reported the fox’s comings and goings to his college mentor. That semester, a vixen had several kits in a visible den on the railroad tracks and we took the children over to watch the den entrance. Khadim’s college mentor describes Khadim’s behavior that day: “He spent a long time looking for the foxes but unfortunately they did not decide to leave their den while we were there...he was determined to get a dead carp out of the pond so he could take it to the fox den to feed to the foxes. Thankfully, it was too big to carry because it was very stinky and rotting.” (4/30/13)

Dead animals seemed to be even more popular with the children because they could physically engage with them. Two undergraduate mentors describe how the children reacted to a large winter fishkill of carp in Warner’s lagoon:

At first they just stared at the dead fish, wondering about them. We talked about how they died due to lack of oxygen and how the oxygen was depleted...Then, Zach [a middle schooler] touched a fish. They all said ‘EWW’ and laughed. Then Isaac touched a fish. Then Levi. Then Joksan. Then Donovan. And Carlos picked one up. Pretty soon, every boy was holding a fish. They would pick up the fish and wiggle them around....They were looking intently at the fish, petting and feeling the body and making it swim through the air. They were learning without even knowing it!...The boys kept on shouting that we

dissect the giant carp. I was not a huge fan of that idea, so I suggested we dissect the smaller one. I pointed out the different organs that I recognized inside the fish. They all thought the insides were gross, but they also could not take their eyes off of it. (4/5/13)

Wednesday was filled with flying fish, but not like those I have formerly encountered. Launched by, it seemed, every younger Nature Explorer, dead fish arched through the sky, once again landing in the open water where they floated on their sides. Screams of disgust and laughter filled the air, especially when a large, deceased carp was found beneath the bridge. Robbed from its aquatic resting place, the carp experienced the fluid above its home for the first time. The air whipped past it as it swung by the tail in the hands of its discoverer--at first over gravel, then to the grass. Under the Bur Oak, the carp flew through the air, nearing the lowest branch, before gravity brought it back down to the unforgiving frozen lawn. Though dead, the carp was subjected to sticks and verbal ridicule. Jocelyn commented how it was like *Lord of the Flies*, and whoever held the carp had the power of command. I reflected back on my own encounters with dead animals when young, and I, too, had a similar fascination. There was the dead calf in the barnyard. I remember that I experimentally poked the jet-black eye that stared at me. There were those run-over frogs in the driveway that my friend and I inspected with sticks...Learning about death in the world is an important aspect of growing up. (4/3/13)

When I began studying birds and noticing them, I also started noticing dead birds for the first time. They were often lying next to the sidewalk as I walked to various bus stops--a White-throated sparrow, a House Sparrow, a Mourning Dove—all intact, still warm and with no discernible injuries except broken necks. They were probably victims of window collisions which kill approximately 100 million birds annually according to the Cornell Laboratory of Ornithology. I started collecting them and keeping them in a basement freezer. I liked to study them closely, take pictures of them, draw them. I began to call this growing collection “The Bird Morgue.”

In five years of the Nature Explorers program, despite Wisconsin’s fickle and occasionally fierce winters, we have been able to walk to Warner Park nearly every Wednesday afternoon during the school year. Each semester, there might be one day when the weather is so bad (sleet, below 15 degrees Fahrenheit), that we keep the children inside at Sherman Middle School. This is always a serious challenge. The children are desperate to get outside after eight

hours inside. We have neither the space, equipment, nor the expertise, to keep a large group of children occupied inside.

I decided to bring the bird morgue on dry ice to Sherman Middle School on one of those difficult indoor days. That day even the most rambunctious of the Sherman children, the children who never showed an interest in birds or other animals, the ones who were too "cool" to show an interest in nature, changed in the presence of a dead bird. There was a certain reverence, a shift in the air:

Donovan, Carlos, and Joksan probably sat at the frozen bird table for an hour inspecting the birds. The way the wings folded in and out fascinated them and they seemed genuinely interested when I told them about the different parts of the wing and the different feathers on the wings....Outside, they have never taken a liking to or interest in birds that I showed them. Holding birds up close and examining every part completely changed that! I taught them about different coloring between males and females and then we brainstormed why this could be the case. It was so fun!! I loved seeing them want to think and learn more about birds! (3/22/13)

Thus, we arrived at the dead birds. I was amazed at how long these specimens were able to hold their attention. Even Isaac [middle school student], who just wanted to leave and thought it was dumb, got interested. I've learned that working with Isaac and getting him interested means challenging him to do things, but not to do things that he thinks are just too hard...Once Sandybel picked up that Baltimore Oriole, she seemed content to look at it and touch it for the next hour--which I think she actually did...Isaac dared me to touch one and I told him I would only if he did too; he did. (3/20/13)

Warner Park, the idea laboratory

Warner Park is also a place for young minds, not just bodies, to roam. Every week it becomes a 213-acre laboratory that gives college students a place to learn in three different ways: 1) by testing, challenging and applying course concepts and connecting those concepts to ideas learned in other courses; 2) by questioning and expanding their own nature/environmental ethic; and 3) by learning about citizenship from passionate sixth-, seventh- and eighth-graders.

1) **Testing, challenging and applying concepts: Louv, Comstock, Sobel**

Every semester minor incidents happened in Warner Park. But in five years we never lost any of our co-explorers. Every Wednesday afternoon we left Sherman Middle School with a certain number of children, usually between 25 and 45, and every Wednesday afternoon we returned with that exact number of children to the school. But during the two hours in between, as they ranged and rambled through the park's wetland, woods, thicket and meadow, rolling down hills, crawling on their bellies, dangling from trees and bridges, and walking on ice, occasionally a child broke a wrist, a foot, twisted an ankle, fell out of tree, fell in the pond, or crashed through the ice. The children's clothes got dirty and wet. They found things we had not contemplated in our lesson plans like knives, used condoms, old tents and tons of trash. And then there was the golden September day that turned into a Hitchcockian scene of screaming children, college students and instructors running terrified through the park after a child stepped on a hornet's nest.

Fortunately, Sherman Middle School's principal was extremely supportive of the program. The parents were the problem. I knew that if too many parents called the school to complain, our program could get cancelled. I lived with this fear every semester, never knowing how much was too much. I had to fight my own growing impulse to control the children, to put them on leashes and watch them every second. I hate to admit it, but I always felt a tremendous sense of relief at the end of every school year when the program ended until the following September because we had made it through another year without a major mishap. I was in the throes of what Louv (2005) calls "a growing obsession with order," and increasingly controlled by the fear that drives the criminalization of natural play.¹⁷⁴ I began to give sterner lectures to

college mentors about keeping the children “safe,” contradicting the whole spirit of this experiential learning course. One student mentor wrote:

It struck me how many people seem to have their eye following us--the teachers, the social worker, the school principal, the parents, and the park advisory board...The underlying question that surfaced within me was: *What are we all so afraid of?* Are we really that afraid of people getting hurt? Or are we afraid of lawsuits? ...I found these questions distracting as we were in the park with the children in the afternoon. Suddenly I became hyper-conscious of all the things that may cause protest...We were running in the mud, and I thought, 'Is it okay for the children' clothes to get dirty? What happens if a kid slips in the mud?' Perhaps my worries stretched a bit too far, but...[since] our program is being judged by how well we are returning the children in the 'exact same condition in which they arrived to school that day,' [the social worker's words], I found myself consumed with a mixture of feelings...I nevertheless am struck by how the norms about safety have infiltrated and impacted how schools relate to children. This idea of returning the children in the same condition as that in which we received them has continued to ring in my head throughout the evening. I could not help but sense a loss in the process of being human the more I thought about rules of safety. It seems that we (the school system, parents) are continually boxing children in order to protect them. Ultimately, however, we strip the spirit out of being what we are--imperfect beings that are living day by day. We are going to get hurt. We are going to fall down. That's part of the process of being alive. By pretending that we can avoid all that sucks the life out of living. It's no wonder to me that the students don't like being at school...what I was really feeling was sadness--sadness that children are not able to be wild because we are chasing an ideal that ultimately dehumanizes us. (2/16/12)

Another student mentor commented:

A middle school science teacher once told me to 'never allow your curiosity for knowledge to settle.' This class reinvigorated my curiosity...But once again I begin to question the culture that we live in. How can leaders and teachers let children explore the world around them if they always fear a lawsuit or even just a stern phone call from an upset parent? Our society, our culture is preventing children from exploring! How terrible! (5/14/13)

In addition to the criminalization of natural play, one of the other main themes that Louv sees as “de-naturing” our children is the growing use of screen technology. Louv (2005) writes “In the space of a century, the American experience of nature—culturally influential around the world—has gone from direct utilitarianism to romantic attachment to electronic detachment.”¹⁷⁵

Every semester after the college students met the children, this was one of the first questions they asked instructors: How do we deal with the children's cellphones? Despite the fact that the children lived in a lower-income neighborhood, almost every single one had a cellphone or iPod; many of the children carried these devices into the park. In the college course, we discussed different strategies for weaning the children from their phones while in Warner Park. Here's how one UW-Madison mentor dealt with the children's use of technology. His approach—to engage the children in conversation or to do something more interesting—became the default strategy for most student mentors.

Once we got to the park I managed to walk next to Olivia [middle schooler] again. She had put her headphones on. I'm not sure I like using Richard Louv's term "nature deficit disorder" when talking about a specific individual. Louv spoke of his discomfort with it, too, and its medical connotations. It works, however, to identify the disconnect between people and the natural environment. And having headphones is a sign of that disconnect. Rather than yell, 'YOU HAVE A DISEASE,' I figured the best way to get them off her ears was conversation, more questions, and hopefully a buildup of sincere moments in that open and beautiful park. (9/23/11)

These two student mentors had both worked as camp counselors in the summertime. The Louv reading and their weekly work with the children in Warner Park led them to think more critically about their prior environmental education experiences:

Parents complain about children being on computers too much, too much social media, too many text messages, video games, apps, TV shows, websites, and electronics. Why aren't children excited to experience the outdoors? Perhaps because it's hard for parents to let go? Young parents these days are just as plugged in as their children. They need status updates on what their children have done or are doing right now, they demand structure to activities so that they kid won't be 'lonely' (or maybe just self-inquisitive?), 'left out' (maybe choosing to explore something they enjoy more?). These updates and structure demands seem to be a product of our connected, communication-rich, and information-seeking world. Parents should trust that children are learning during these unstructured activities. Letting children go and explore without their parents' watchful eyes and approval needs to be encouraged. (5/14/13)

As a [former] summer camp counselor, whenever Touchou picked up a large stick, or began to wander close to the water, my pulsating instinct was to stop him. During my [camp counselor] training I was informed that for the purpose of 1) safety of the child 2)

restoration of the creek beds and 3) controlled influx of complaints and suing actions of parents, children were to be watched closely at all times. The criminalization of play as discussed by Louv was evident at my workspace. Though geographically, we were in absurdly close proximity to nature, my day campers were forbidden to romp with the mysteries of the forest without rigid educational structure. And when the children were forced to adhere, the delight of romping transformed into chore. The main outcome? A strong resistance to learning... But the true rights of children should be to learn from their experiences, their mistakes... For this reason, although I kept a close tab on Touchae... I wanted to encourage him to fearlessly conquer his own adventure. I wanted a little bit of Darwin's unconstrained curiosity..I wanted Touchou to be given a chance to taste the wonders of body experimentation in order to better understand the unknown. (September, 2011)

As they spent more time in Warner Park working with the children, some students, particularly those with ecology or biology backgrounds, began to use Warner as a testing ground for concepts from those courses. They grappled with definitions of “habitat” and “nature” and what is natural. The space itself and the way the children played and learned in it started to challenge some of their ideas regarding biodiversity and wildlife ecology. Some ecology students were very surprised at the level of biodiversity in Warner Park. They did not expect such an abundance of native bird species and mammals since some of the park’s vegetation is not native to Wisconsin. One ecology student, who later became an ardent defender of the program and of Warner Park, looked at the honeysuckle and Canadian Goldenrod on the first day she walked through the meadow and said: "This is not an ecosystem. This is not habitat."

The way the children interacted with non-native plants also challenged what some student-mentors were learning about “invasive species.” In wetland ecology courses, for example, students learn that cattail marshes are indicative of a degraded environment. Yet a cattail “snowstorm” was one of the most magical moments described later in student journals in the spring of 2013:

They [middle schoolers] also loved ripping apart the cattails and flinging all the white fluff into the wind...I had to think of Louv and how he would have loved seeing all the

children running around with cattails in their hands and using them as swords, wands, and pencils in the snow. Actually picking up plants and examining them closely is such a great way to learn. (2/22/13)

Looking at the marsh areas in Warner Park, we might think about how beautiful the cattails are and how "at home" they seem in that environment. To consider the native species and original ecology of the area, though, is to view the cattails in an entirely different way--a way that almost makes them the enemy of what we construct as natural. Does it devalue a space designated as 'natural' when we consider the decades of manmade transformations that have altered and shaped it? Do the animals that call it home feel differently than their ancestors felt when the land was untouched by human hands and machines? (9/26/12)

The presence of wild animals in an urban park like the red fox also raised questions for at least one college student:

It seems problematic that these animals are winding up in these spaces. I don't know enough about ecology to make any judgment, but I wonder what this very public presence says about the options available to wildlife. It makes me think of the fox in Warner. Does he live there because he's been forced out of a more pristine environment... There are obvious advantages to having wildlife like him in the park. He, like the birds, is a portal... it makes me happy that the children from Sherman can see additional animals like the fox so close to home. I just want the fox to be 'happy', too, and for Wisconsin wildlife to have enough space where it needs it. (12/5/12)

2) **Developing Their Own Environmental Ethic**

Gaylord Nelson, the founder of Earth Day, has a daughter who is an environmental advocate in her father's mold. Tia Nelson lives in Madison and became one of the first supporters of the children's program. She personally raised the money to buy every child a bird field guide. I invited her to the club's closing Christmas party that first year in 2010. At the party she shared stories about her father with my college students. One student mentor asked Tia how her father became an environmental activist. The student recounted this conversation in her journal:

When people asked what inspired him to become an environmental activist, he would share the story about migrating turtles in his Wisconsin hometown. As children, he and his friends would pick up these turtles as they migrated across the town from one body of water to another. They would turn them around, or hide them in trees, or put obstacles in

their way. Somehow, the turtles could still find their way! They always knew which way to go, and he [Gaylord Nelson] said it was fascinating. So, 'maybe it was the turtles,' he would answer. Maybe one of our students will say, 'It was the birds.' (12/15/10)

Every semester as they watched how the children interacted with their surroundings—poking at the eyeballs of fish, holding toads, digging up plants—many undergraduate mentors begin to question their own environmental ethics and the meaning of conservation. They grappled with this conundrum: how to teach an ethic of respecting the natural world without restricting our children's needs to explore, touch, poke, hold and smell. They read stories about how naturalist and environmental leader John Muir learned about nature by shooting gulls. In class they studied David Sobel's critique of traditional environmental education as one of the causes of children's alienation from nature:

Much of environmental education today has taken on a museum mentality, where nature is a composed exhibit on the other side of the glass. Children can look at it and study it, but they can't do anything with it. The message is: Nature is fragile. Look, but don't touch. Ironically, this 'take only photographs, leave only footprints' mindset crops up in the policies and programs of many organizations trying to preserve the natural world and cultivate children's relationships to it. (Sobel, 2012)

The question—What is conservation?—became very real every semester in Warner Park. These are some of the questions that arose during class discussions: Should we allow the children to make and use slingshots? Should we let them throw rocks on the ice? Should we allow them to chase the geese? Should they pick up frogs and toads and build houses for them? Should we be sliding down Sled Hill during a winter when there is very little snow?

In the first minutes of the game, the students saw a frog. They all started frantically trying to catch it. I'm not sure if it's true, but I remember learning that it is not good for the frog to be handled by humans. Therefore, I instantly had the instinct to tell that to the students so they didn't disturb it. Then I had to remind myself that when I was younger, I too had the opportunity to be amazed at catching and holding a frog. So instead of telling them to put the frog down, I asked what they would name it. (3/23/12)

I have been in enough environmental studies classes to know that sledding can be damaging on hills, let alone when there is no snow covering the earth. I felt myself

wanting to say, 'Children, let's not pull out the grass by sledding down that hill.' I wanted to say that, and yet I stopped myself, thinking that perhaps we don't always have to have a missionary sense when it comes to the land. Just like almost all of the writers in our readings reflecting back on their childhood, they all had to steal a few birds' eggs, squash a few bugs, tear off a few tree limbs, and remove a few turtles from their habitat to learn what it means to really take care of the earth. We all need to experiment as children and really get our hands dirty for us to learn limits and make that connection with the earth. If I were to tell the children not to sled down the hill, I would be telling them that the Earth is just as untouchable as I had learned as a kid. Besides, if I want to uphold my environmental ethic, there are lots of bigger problems out there than a few children sledding down a hill. The question does arise, however: How do you teach children an environmental ethic? Is it something they have to learn on their own, or is it something that can be taught to them through role models? (3/7/12)

While I was watching Ali delicately sprinkle the contents of her seed packet, *Rudbeckia hirta*, onto Sled Hill, I started to think about the reciprocal relationship between the park and all of us students, both college and middle school. The park has contributed to the shaping of our attitude and perspective on what nature is and has shown us, or at least me, that you don't have to be in a designated State Natural Area to see a bird like a double-crested cormorant or visit a State Park to enjoy the splendid colors of the native prairie plants of Wisconsin like asters or purple coneflowers...It is important for the children to understand that the park, and natural places in general, are not distant, untouchable landscapes but rather are greatly affected by what we, as humans, do to them. With that understanding and power comes great responsibility to act respectfully and humbly, for what happens in and to the park ultimately happens to us; every prairie that is paved over to provide more parking also paves over us as part of that prairie, every tree of the Big Woods that is cut away to provide a "safer and more friendly" park ambience cuts away at future young co-explorers from discovering the joy of climbing a tree or seeing the incredibly diverse wildlife that dwells within. If our co-explorers have learned nothing else during this incredible semester, I hope it's that it is fun, enjoyable and safe to spend time tolling, jumping, running and playing outside, and that the ability to do so is worth fighting for. (12/2/11)

Finally, spending so much time exploring an urban park challenged some of our students' views of nature, wildness and wilderness areas. They began to see wildness in places where they previously thought it did not belong. Warner Park becomes a new lens through which they viewed nature:

Warner Park and its wildlife showed me that 'wilderness' is everywhere. Warner is a public green space in the suburb of a major metropolis. Yet, when I walked through the Big Woods before I came out to the basketball courts, I felt like I could have been hiking through Devil's Lake or Baxter Woods. Since taking this class, every time I drive by an abandoned, grassy lot, I think of the potential of that place to provide habitat for animals

and recreation for people...Warner showed me how valuable such places are both to the people and to the animals. The Sherman students had formed connections to specific places around the park and the Bur oak. I...I think Warner Park is sort of an unsung land of imagination...Since spending time in Warner, I've also become more interested in public green spaces in underserved and urban areas. (5/14/13)

I was born and raised in Madison, WI and now I am raising my children here, as well. I am ashamed to say that I was unaware of the vast natural beauty that is present in this park. Growing up, I only associated Warner Park with the Rhythm & Booms event, and I also vaguely remember the celebration for building the new community center over there. There is so much more to this park...I am a little baffled at the struggle to preserve and conserve within Madison. For example, I live in Middleton and there are a TON of conservancies, natural area preserves, and beautiful parks...Now that I am an adult, however, I realize that there are political and bureaucratic explanations of why there is such a vast difference in neighborhood amenities. (9/28/12)

Warner Park taught me to not judge a book by its cover and to dig deeper into what you think you already know. I have been going to Mallards games since I was very young. I never had any idea of the rest of Warner Park and what kind of habitats and wildlife it had in it. The birds of Warner taught me the most of all, because we had to know them for the class. (5/13/13)

The regularity with which we visited Warner Park helped me to appreciate the journeys that different birds, animals, and plants take yearly. I have a better appreciation for the long journeys of our short-time visitors just passing through, as well as those that stuck around for the winter to retreat further northward for the summer. It instilled in me a sense of enthusiasm as we waited for more birds to come and then excitement when they arrived. I think the returning of birds is something that I will notice more frequently in life, but had it not been for the time we were required to put into going to the park, I don't think I would have noticed enough for it to make an impact. I also learned about the importance of wildlife in areas that border residential areas or any areas with people. Although there were homes and other structures that attracted people in the area, the wildlife can still live there. What different students and people knew and felt about the wildlife there was also an important part of my learning process. Nothing is ever just about one thing. Warner Park is not just about the birds or just about the animals, it is about how they relate to one another, to humans and to their environment...I was also reminded of my role in the scheme of things--patterns and trends, my connection with the land. How distant and similar I am to the people, animals, plants...were brought to light while visiting the park--my note in the song of all life and all life history. (5/17/13)

3) Engaged Citizenship: The Lessons of the Heart Tree

Just outside the cafeteria of Sherman Middle School in a hallway, there is a 3X4 frame

hanging on the wall. At the top it says "Treasure Map of Warner Park". This project came out of the program's first year. We asked the children to pick out their special places in the park. Then our students pasted photos of the children and little poems the children had written onto the map. Some kids gravitated towards hidden spots--"fairy glens" one boy called them--scruffy forgotten corners described in Louv's book *Last Child in the Woods*: "...research suggests that children, when left to their own devices, are drawn to the rough edges of such parks, the ravines and rocky inclines, the natural vegetation. A park may be neatly trimmed and landscaped, but the natural corners and edges where children once played can be lost in translation." (pg. 117)

Environmental psychologists have studied the importance of "special places" to children, particularly children living in stressful situations like a war zone in Gaza or in the urban economic war zones of the US (Boyden and Mann, 2005).

A college mentor described how her middle school co-explorer viewed special places in the park:

Megan [middle school student] was so proud to show me the areas of the park that she loves. She had a plan for where we would go and about how long we should spend at each spot. I could tell that these places are sacred to her for very personal reasons. I also noticed that she kept saying she was hoping no one else had discovered these areas and that we would be the only ones there. It must be so important to these children to have some space where they feel that they can be alone. One of the greatest things that I discovered about nature when I was young is that there is no judgment. At school you are constantly reminded who is "cool" and children don't hesitate to tell you exactly why you are not. But when you stand inside of a tree and watch birds through your binoculars, every being becomes equal. The birds don't care who you are in school. I can't speak for Ben and Megan, and the rest of the children, but when I was young I certainly appreciated escaping the judgment. The spots where you can think and breathe on your own are sacred. I hope every one of them can find their spot. (2/23/12)

Megan, the middle schooler that the mentor above wrote about, was one of our first and most enthusiastic explorers. By the end of an exploration Megan would be so loaded down with leaves, sticks and branches, she had to ask her college mentor to help her carry it all. She was

also the girl eating lunch alone at school while reading a historical novel about the life of Egyptian princess Cleopatra. She had owl-like eyes behind her glasses. For fun she wrote plays. At home, she conducted funerals for bumblebees and buried them. She could not bear to see them just lying on the ground, she told me.

She did eventually find her own special place in the park. It was a huge, old elm in the park's woods on a main path. The tree was over 100 years old and had somehow survived the Dutch Elm tree scourge that wiped out most of these trees in the US in the twentieth century. The wide bottom was hollow. The children called it "the heart tree" because according to one girl: "You can stand in the center of it and feel as if you are in the beating heart of the tree."

For the first two years in the program, Megan told her succession of college mentors that they were her only friends. She held hands with her mentors as they walked through the neighborhood. Sometimes she walked beside me and told me how lonely she felt. I kept telling her that I had hated middle school, too, and that things would get better in high school and college. The heart tree was not only her special place, it was her refuge from the storm of middle school. She spent time there every Wednesday afternoon and she proudly showed off her tree to visitors.

Near the end of the club's second year, I discovered that the Parks Department planned to cut down the Heart Tree. A city official in charge of litigation had decided that it, and dozens of old trees like it, were dangerous. For three days I called, emailed and met with parks officials to try and save the tree, or at least the bottom portion of it. I proposed that if the tree was indeed "dangerous," that the parks department leave the bottom 12 feet of the trunk for the children to play in. This proposal was rejected.

When we entered the park that week and Megan saw what was left of her "dear friend," she sat down on the ground and sobbed for one hour. Her college mentor sat down, put her arms around her, and cried with her. Megan cried harder when I tried to reason with her. I told her I did all I could to save her tree. I felt the same way she did, I said. But as I listened to her and watched her cry, I realized that I really didn't feel the same way. I did not understand the depth of her relationship with this tree. As I tried to explain why the parks employees thought they needed to cut it down--to protect children like her-- Megan yelled: "But it was still alive!"

"In elementary school, I had my tree. I went there to cry. It was an old tree and they cut it down. Now in middle school, they cut down my tree. That's where I felt safe."

At the end of the day, we gathered in our ritual sharing circle at the huge bur oak to display our discoveries. Megan was still sniffing. Two other boys were very upset about the tree and had been trying not to cry. But many of the children did not seem to care. They snickered at Megan and the two boys. They stopped snickering when I started crying, too.

I told the children and their college mentors that it was not enough to cry. If we wanted to change city policy and save old trees—or at least the bottom of their trunks--we had to go to the parks commission meeting that same night and explain why this tree was important to us. Megan did not want to go--she was shy and too distraught to stand at a podium in front of adults at a public meeting. I asked for another volunteer. Dakari, an 11-year-old boy who was also very upset, offered to speak for Megan and her tree.

Dakari was a young neighbor who lived on the park's edge. The first day I met this boy, he told me he was named after a Ghanaian slave ancestor who had escaped to freedom. He became one of our best nature explorers. A miniature David Attenborough, Dakari could step outside and identify birds without binoculars. He called himself "turtle man" and he spent hours

watching the turtles in the wetland. He'd named several of them: Sparky, Princess. He had birds in cages at home and a salamander named "Sal" that he adored. When he wasn't in the park with the animals, he was at the public library across the street doing Internet research on how the animals lived or on botany websites trying to identify the park's plants (the librarian told me this). He lived around the corner from me in one of the city's worst apartment buildings, occasionally plagued by guns and drugs; the parks' woods was his refuge. Like Megan, he had his favorite tree and he was afraid that it was next on the cutting list.

I obtained his mother's permission and picked him up later that night. Dakari loved to talk but I was worried that the public meeting's formal setting would scare him. I'd been speaking before the parks commission and other public bodies for nearly three years, trying to defend the park and its wildlife. It still made me really nervous. During the public comment segment of the meeting, any citizen had three minutes to speak and then a bell went off. I spent hours crafting those three-minute messages, trying to get the right mix of fact and emotion, to put the commissioners in that wetland and make them see the animals. I found it hard to do. What would it be like for an 11-year-old?

When we walked in, there were at least 25 adults sitting in the audience. I took a seat. The commissioners sat behind a long table in the front, each behind a microphone. Dakari made his way to the podium and had to stretch to reach up to the microphone. He stood there trembling slightly in a torn t-shirt and cutoff jean shorts, looking out at the crowd. I held my breath. Then in a high squeaky voice he said he was scared. He asked me to come up and stand beside him. I walked up to the podium and put a hand on his left shoulder.

I feel really emotional right now. But I don't want to cry in front of so many strangers. It really hurt me and all the children to see the big tree cut down. Megan was too upset to come here so I came. I hope you don't cut down my birthday tree, too. My family goes

there to eat cake with me in the park. We sit under it. I see a lot of animals in my birthday tree. It's an old tree, too. Please don't cut down my birthday tree.

Dakari and I shuffled back to our seats. There was a brief pause. The commissioners looked stricken. They praised Dakari and thanked him for coming. During my three minutes I requested that commissioners reconsider the city's policy towards old trees that were diseased and could fall over in a storm. Instead of cutting them down completely, leave the bottom portion for children to play in and for woodpeckers and other animals. The trees are natural jungle gyms.

Three of the parks commissioners seconded this idea and agreed to pursue it. I kept pushing for two more years but they never followed through with it. As of 2015, the city had not changed its tree policy. In emails, public testimonies and private conversations with parks officials, I've tried repeatedly to explain what the trees, both healthy and fallen, meant to the children and our program, and to the ecosystems in Warner Park. Wild Warner, several neighborhood associations, and individuals have petitioned unsuccessfully for the city to change its tree policy. In meetings I have attended where city forestry officials explain policy, they refer to the city's "canopy."

City officials do not seem to understand the value of individual trees to people who live next to them or to the children who play in them, and not just in Warner Park. This became evident in October, 2014, when irate residents challenged the city's policy to preemptively cut down thousands of healthy ash trees (one-third of Madison's total urban forest) to combat the emerald ash-borer. Some of these adults were just as upset as Megan about the city cutting down trees that they have lived next to for years. At a parks commission meeting in October, 2014, Linda Haglund-Lynch and Kathy Soukup of the Eastmorland Community Association choked up and cried during their testimonies before the parks commission. Soukup and Haglund-Lynch

then organized a massive ribboning campaign to mark the trees to be cut in order to raise public consciousness. Wild Warner assisted them in these efforts. Most of the trees were still cut down.

Sherman Social Worker Julie Wilke described how Warner Parks' trees became teachers:

There was a whole group [children and college students] all sitting around the stump of this tree that had been cut down on the block before we turned to get into Warner Park. It was an old tree and as I approached, the group kind of broke up but the adult [college student] was still standing there with one of the children and they were counting all the rings in the base of the tree, and just as we got there he was saying '...49...50.' This was a 50-year-old tree that they took down. That sense that it takes time for nature to develop and I think Nature Club has increased, for many of these children even in a short amount of time, an appreciation for the natural world.¹⁷⁶

The undergraduate mentors have also documented what the trees mean to the children and how trees become teachers:

As the children took on monkey-like personas I resisted my urge to restrict them from climbing, and let them be, scaling the tree's trunk. I realized that the children are fine monitoring their own safety. At one point, Jose, observed that one of the branches he was going to use to stabilize his weight, was unstable, so he did not use it...When people (college leaders, parents, school supervisors, or others) take it upon themselves to gauge and be responsible for a kid's safety the kid ignores their own sense of their limitations and follows the pre-set limits. At this age many children are unaware of their body, what it can and can't do, but throw a kid in a tree and they will begin to find a sense of balance, they will trust their gut. To rob them of the ability to trust in their own intuition about safety and limitations is to limit their growth...Authoritative, militaristic approaches to education drive students to put their trust in other people over themselves, robbing children of the chance to develop independence and self-trust, it's terribly really.
(2/24/12)

After venturing a few paces into the woods we came across a large tree split at the middle and leaning over. It made the perfect climbing bridge. Lou was the first to get to the top and once he reached the point he exclaimed, "It's so high. I'm scared!" As if those were the magic words, everyone ran to the makeshift ladder to begin their ascent. It reminded me of how free-spirited and connected to their bodies children are. It also really emphasized how much danger and risk factor into motivation. Once we were all on top with Sydney on the ground as a safety net, we made our presence heard with a few bellowing roars of excitement. (2/22/12)

Right when we got to the park...we came across a few fallen trees in lumps that created the best natural obstacle course across the stream I had ever seen. It was a monkey's paradise. With Louv in my mind, I challenged the children to climb on the tree and across

the stream. It honestly was safe...but we are totally in a culture that tries to limit all risks. Why do we have to conform to that culture? Trees are fun. Obstacles are fun. Where is the downside? To make things better, right when I suggested the challenge, huge- and I mean HUGE- smiles spread across all four of their faces, even Destiny. It was like I had just served them Christmas on a silver platter. "Really?" they asked with a hint of fear creeping into their voices. "Only if you want to," I said smirking, knowing full well that there was no way they were going to turn it down. We spent the rest of the time trying all possible ways of sitting, standing, swinging, crawling, and lounging on the tree. It was a bridge, bed, dance podium, rest stop, and a crow's nest on a ship. There was so much laughter and joy coming from all four of them that other groups started flocking towards us, anxious to attempt the great feat of crossing a river! I think Louv would have approved. I am not too sure the [school's] social worker would have. (2/15/13)

College students also found that the children listened better when they were sitting in trees. One college mentor recounts trying to teach her co-explorers about how animals survive the winter: "...I told them the story about hibernating bears when they were all sitting in a tree, and as a captive audience, they were much more receptive. They thought it was cool that bears hibernated and can have caves underground." (3/22/12)

In the college classroom, the "Heart Tree incident" as we began to refer to it, provoked an emotional discussion. The depth of Megan's feelings for one tree had a deep impact on college students. One graduating senior burst into tears. She was worried about going out into the "real world." She asked how she could possibly make a difference when we couldn't even save one tree, and she knew that I had tried so hard.

Another student wrote:

Most people only see pictures of trees, and a few trees missing here or there doesn't really bother anyone in a before and after picture. But our children notice when one tree is missing, and it really matters, to the point of evoking tears and possibly having to take a break from visiting the park in which it once stood...I think this is what we need to get across to the parks commission. It isn't that the chopping down of a tree in itself is a bad thing. It makes sense; it was a hazard to the safety of the patrons of the park. But what they don't understand is that Megan isn't the only girl who has a special place in that park, and Dakari and Eric aren't the only other children who were affected by it. Even the children who don't have connections with the Heart Tree personally do have a relationship with Megan...it was not to make everyone, at least for a moment, mourn the loss of something that mattered to *someone*. And every time we lose anything in the park,

be it the croak of a goose or the stump of a dying tree, it is a loss that affects *someone*. And that knowledge, that every action in that park has a personal effect on someone, needs to be an overriding presence in the decisions made by the commission. (4/18/12)

Megan's ability to so freely show her love for this tree reminded me how quickly the shell of cynicism grows over an adult heart. She was not the first or the last child to pierce that shell. One day while walking through Warner Park with a stocky 12-year-old blonde and freckled boy named Zach, an enthusiastic hunter, he threw a pudgy arm out and pointed at the marsh.

"This is all going to be built up. I hope I'm dead before nature is gone."

At the end of the Heart Tree semester, Mayor Paul Soglin came to walk with our club through Warner Park. With television cameras following, Megan led Mayor Soglin straight into the woods where parts of her tree still lay on the ground. She then stood on top of a large piece of the trunk and read a poem she had written called "Big Tree." She begged the mayor to stop cutting the old trees down.

Her college mentor later described Megan's reaction to the mayor's visit:

Megan was quite disappointed with her interaction with him [the mayor]. She told me immediately after that he didn't care at all about her tree. She said that she could tell by this facial expression that he wasn't interested in what the tree meant to her. I am impressed that Megan can read these things in adults. I assume that most children her age aren't paying attention to the adults around and what their facial expressions may be swaying. She also told me that she wasn't surprised though, because people of power don't understand emotions. (5/3/12)

Megan did not forget about her tree and she did not let city authorities forget, either.

Eight months later, we had a Christmas party with the children in the Warner Park Community Recreation Center. This was a new class of college mentors who had not witnessed the heart tree debacle. During the party, the president of the Parks Commission stopped in to meet the children

while they ate cake and played games. A tall imposing man, he stood at the front of the room and asked the group of about 50 young people if they had any questions about Madison's park system. Megan's hand shot up in the back of the room.

"Are you the man who decides to cut down the trees?" she asked.

Some of the new college student mentors stared at her, amazed. The parks commissioner hesitated and then said "I've heard about you." He seemed flummoxed by her question. College mentors described the encounter:

It was really funny hearing Megan give him a piece of her mind...She really told him how much she loved the tree that was cut down and made it clear that she didn't want this happening in the future. I loved how you could tell how much she loves this club and this park. (12/5/12)

Something that really made me smile while in the community center was Megan's comment to the Parks Commissioner. Her bravery and confidence in mentioning her special tree really touched me and obviously the commissioner; he was at a loss for words. This little moment showed how powerful a middle schooler can be and that they do have a strong voice that should be heard in these situations. (12/7/12)

These are the children that could lead a campaign against high tower transmission lines, windmills on migration routes, or fully-lit skyscrapers. They're the educators, the bird savers...the planet savers of tomorrow. I know that sounds cheesy, but you definitely get a sense of it when Megan stands up to a man eight times her size and demands to know why his people cut down her tree making him stumble over his words as he attempts to justify the sadness that such an action has caused. (12/5/12)

After this I designed a conservation worksheet for the children to fill out with their mentors. I wanted to get the children's voices heard and I thought that if they could write down how they felt about the park, maybe I could take their words to the parks commission. I explained first to the college mentors that neighbors in a newly-formed group, Wild Warner, wanted to try and turn the wild parts of the park into a conservancy and get greater protection for wildlife habitat. It would help to have the children's input.

The worksheet had several questions such as: "Which parts of Warner Park should be protected and kept wild?" "Why?" Then there were four numbered spaces where the children could write in the special places and areas that they thought should be protected.

In their teaching journals, several student-mentors reported that the children simply did not understand the exercise; they would not answer questions about which areas of the park to protect. The college students struggled to explain the conservancy idea and tried to prompt the children by asking them where they had seen the birds, the fox, etc. But the worksheets came back mostly blank. This was not what I had expected at all. I knew some of the children had very strong opinions about their special places. The mentors told me later in class that I needed to do a better job of explaining the conservancy idea to the children. This exercise was one of the semester activities that simply did not work. The children did not want to fill in these worksheets.

Later when I studied the worksheets and read the mentor's reflection journals, I realized that it wasn't that the children didn't understand the question we were asking them—what parts of the park should be protected. Some of the children rejected the assumption that my questions were based on. They did not agree with the idea of carving up the park to protect some places and developing or building on other parts. One boy summed it up: "The whole park! If half of the park is gone half of the animals will die and if people say 'that's all right we will still have half of the animals' but all animals are important."

Chapter 7: **The Power of the Flock: Honoring Diversity and Understanding Privilege**

I admire how birds form mixed-species flocks during Wisconsin's winters. According to scientists this can help them find more food and avoid predators (Gill, 2007). Their different abilities, biological needs, and behaviors allows different species to coexist in a group. Their individual differences can become the flock's strength.

Our weekly human flock is similar in that our diversity is our strength. The college students come from a variety of academic and ethnic backgrounds. Recent classes included aspiring geologists, conservation biologists, foresters, lichenologists, wetland ecologists, botanists, history and English majors, and artists. There were former soldiers, single mothers, aspiring teachers, bartenders, and waitresses. A few were from inner-city Milwaukee. Most were from small rural towns in Wisconsin. Some had years of experience working with children. Some had no experience. They said they were "terrified" on the day I introduced them to their middle school co-explorers.

Their knowledge of birds and ecology has also varied greatly. Some have studied ornithology and ecology. Most have not. They learned to identify 50 Wisconsin's birds in our course. But I've found that even if they have studied ecology, too often that coursework does not translate into a working knowledge of a place and the creatures that live there.

The middle school students who join our flock every Wednesday afternoon are even more diverse as a group. According to Sherman Middle School After-school Coordinator Betsy Peterson, our group is the most diverse club in the school in terms of ethnicity, interests, personalities, ages and performance on standardized tests. Our club attracts some of the school's top academic performers as well as children who are chronically truant. Principal Mike Hernandez noticed this diversity while reviewing student attendance records. He was struck by

the fact that a few of his students who were perpetually truant, always came to school on Wednesdays. When he asked them why, they answered “Nature Club.”

This program is another form of personalized pathway... Sometimes children might not be enjoying what’s happening within these four walls. But they’re still coming because this is their pathway. This is one of the things that they have personalized and said ‘I enjoy this.’ You have some children in there that I’m like—Eesh—there are some behavioral concerns, safety concerns. Children are children. But they were like—‘I will be good, Mr. Hernandez, because I like doing this.’... They weren’t being unsafe, malicious and mean because why? Because they had a high interest in whatever you might have been doing that day or that week or that month... They never missed it whether it was cold, whether I was rainy, whether it was hot, they never missed it. Because somewhere along the line—maybe it was the college student they were connected with—maybe it was multiple ones, maybe it was some quirky things that you guys do that the children enjoy like making up birdcalls—I don’t know. But it was one of those things and I attribute that to the mentor part.

“Problem-Children” as Teachers and Flock-Builders

Our club also attracts a number of children diagnosed with various syndromes: ADD, ADHD, Fetal Alcohol Syndrome and Asperger’s. Some of these children did not function well in group activities during the school day; nature club became their first and maybe only successful social outlet. One college mentor wrote how his sixth-grade Sherman co-explorer, when he introduced himself on the first day, told his new college mentor that he was “missing chemicals in his brain.” The college student was disturbed that this bright, imaginative, energetic and funny boy defined himself by what he supposedly lacked. Another mentor wrote of a kid with ADHD:

He started talking about how he has to take pills each morning for his ADHD and anger management issues. I did not realize that was something he was dealing with. I have read about rising rates of ADHD in children today ('children today'--makes me sound old), but I had never really dealt with any children like that. This realization sort of made some things click into place, but at the same time, it made me sort of worried... it was the first time that these issues which I had read about so many times before had become real for me. It is sort of uneasy to think about. What are we doing, as a human race that is causing this rise in mental disorders? (10/11/12)

Despite these syndromes and differences, during the afternoon session with the middle schoolers, categories of "lower-income," "troubled," "challenged," or "special needs" as well as academic hierarchies defining who or what is a teacher became blurred. Everyone became a teacher as we explore the questions and mysteries posed by our 213-acre meadow, woods and wetland classroom. A seventh grader explains the difference between a Cooper's Hawk and a Red-tailed Hawk to his college mentor, a former marine in Iraq in school on the GI bill. Another seventh-grader shows his college mentor the secret spot where the marsh turtles come out to sun themselves. Professor Jack Kloppenburg pulls out a pocket knife, cuts some trout lily leaves, and starts chewing vigorously in an edible plant demonstration, encouraging incredulous students to join him in a snack. A geology student pulls out her rock hammer and splits rocks for the children, thrilling them when they discover a geode. A forestry major teaches her middle school co-explorer about fungi (the girl is a fungi fanatic). Then the girl shows the forester where the parks' puffball mushrooms emerge in the fall.

Some of our best teachers have been the middle school explorers diagnosed with these syndromes. For two years we had a boy in the club with Asperger's syndrome. A strong, energetic boy with the personality of a bulldozer, Leroy (not his real name) loved to poke and prod the other explorers. He had little sense of boundaries and personal space. At the middle school he was ostracized. He often came to the club with his head bowed, dragging his feet, fighting back tears. His mother told me no other club would accept him.

When he first joined the club, two of our most diligent and enthusiastic middle school nature explorers threatened to quit. These two boys told me they felt very uncomfortable around this boy because of problems at school. I promised that his college mentors would control him

and that these middle school students would be safe. Flocks have many different kinds of members, I told them. I asked them to please give Leroy another chance.

Leroy stayed in the club from sixth through eighth grade, and so did the two explorers who had complained. He tested the patience of a series of college mentors and even scared one with his physical strength. But he also became one of our most passionate nature explorers and a powerful public speaker. His excitement about nature was contagious. He taught his first college mentor the different names of many plants and spiders. He dragged huge chunks of trees home and he had a collection of old bee hives and wasp nests that he cherished. This boy was also uncanny at finding the weirdest stuff in Warner Park, objects I'd walked by every day and never seen. One week it was an old metal safe rusting in the stormwater canal feeding into the wetland. Another week it was a parachute hanging from the top of a tree in the Big Woods.

Leroy was also an imaginative storyteller. According to one of his several college mentors, during their walks to the park he told her about the different kinds of automatic guns he owned, about the hidden millions of dollars of which only he and his aunt knew the location of, and about the number of times he'd been on television.

When Wild Warner set up a public registry book in the Warner Park Community Recreation Center where anyone could record wildlife sightings in Warner Park, Leroy begged to be the first kid to write in it. He named the registry "the golden notebook."

Leroy excitedly ran over to and opened the book in the lobby and found a spot to put his name. He told me, 'I was one of the first people to put a sighting in here.' Finding a lightning-struck tree and recording it in the book gave Leroy a tangible reason to feel proud of himself. He felt like he did something good, and that other people recognized it as good, rather than they usually telling him to go away or stop talking to them. (2/17/12)

That first year, this boy taught everyone who interacted with him, myself, included, to be more tolerant, patient and to give more of ourselves. By the end of the second year, Leroy was

mixing with other children and exploring with them in the park, sharing his discoveries with them instead of just with his mentors. According to his mother, the club changed his life because it was the first social space in which he was accepted.¹⁷⁷ A college mentor described this scene the second year on Valentine's Day, when the club had a "nature art" day and made a giant heart around the park's bicentennial bur oak:

As we all gathered under the big oak, the heart fashioned out of branches and found objects around the trunk, children with lips stained red from cupcake frosting, I looked over to see Leroy in a circle with about a dozen other children. He was not throwing snowballs. He was not being teased. He was telling stupid jokes and other children were laughing...I walked back [to Sherman Middle School]...making small talk. Valentine's Day is, after all, about love...and most of the love in this world is not of the Grand Romantic Kind. It's showing up week after week, loving a place, being a friend to a kid, a bird, a tree. It's growing where you're planted. (2/15/13)

Our flock was able to keep Leroy and other children like him because of the individualized mentoring and loose structure. This allowed us to honor children's different ways of learning and what one college mentor called their "unique rhythm."

Jack Kloppenburg and I made it part of our teaching-flocking philosophy to respect difference and keep the flock together, regardless of difficulties. But it was not always easy to keep the challenging children in the club. College mentors and instructors alike sometimes found it frustrating, heartbreaking and exhausting to work with these children. But this taught us another lesson—what public school teachers had to deal with on a daily basis and with increasingly limited resources.

Boyer (1997) argued that by engaging with the public school system, university professors could greatly enrich their teaching and their own knowledge about the real world. This engagement happened in our program. College student mentors wrote that they could see that teachers are overworked and underpaid. A few wrote about how exhausted they were every week as 21-year-olds, after just two hours with the children. They wondered how a teacher could

manage 20-30 children all day long. They began analyzing the differences between this school and the schools that they had attended. They began thinking about the impact of budget cuts on the public school system, and the immediate impact of the student-teacher ratio and how it means teachers do not have the time or energy to honor the individual way that children learn:

Through this course I have learned that humans are almost as diverse as birds, not solely in physical appearance but also in habit. One cannot expect that a Wilson's Snipe would be able to survive in a world without shallow water any more than a student be able to be holistically educated in school that has budget-cut all its electives and provides no extracurricular enrichment. In order to cater to the needs of the individual the structure needs to provide direct attention to the qualities that make each student unique.
(12/18/12)

Every semester the challenging children start off the first few weeks acting out. They are a little wilder than the other children. They tear through the meadow screaming, tumble down the hill, glower from treetops, carry enormous sticks. We let them do whatever they need to do at the end of a long school day mostly sitting in a desk. According to the college mentors' weekly reports, within four to eight weeks, most of these children start to calm down. Some of them who do not have friends during the school day start to make friends with other middle school children in the club. If they started the semester sitting alone at a lunch table, by the end of the year they are sitting next to someone, often another member of the club.

In "Last Child in the Woods," Louv recounts the story of a boy in California who was so hyperactive that authorities kicked him out of school. His parents noticed that if they let him run outside, particularly on the beach and through forests, he calmed down. That hyperactive child became the renowned nature photographer Ansel Adams (Louv, 2005).

We've also had children in the club who are sometimes notorious for bad behavior during the school day, even though they have not been diagnosed with any particular syndrome. An Iraqi refugee I'll call Mazin was one of these students. When a school staff member asked

who was in our club that semester, and I mentioned his name, she gasped: “Mazin is in Nature Club? He’s a bully,” she said. Mazin was big for his age, tall and strong. She described how Mazin was known for picking on younger children, especially students who were disabled. I wondered what life must be like for an Iraqi refugee boy with a Muslim name in a school in the Midwest when the US had militarily occupied his country.

In the beginning, Mazin was sullen and rarely smiled. While talking to him during the school lunches, I found out that he spoke five languages, one of them German. I paired him with Meghan Kuehnel, a college mentor who also spoke German. That pairing was magical. As Mazin walked with Meghan every week, chattering away in German and English, he physically softened. We never had a serious problem with Mazin. I had a hard time reconciling the teacher’s description of him with an image of him sitting down in the meadow next to Meghan, scribbling a poem about the red fox into his field notebook. He was so taken by the fox. A sudden glimpse of the fox tearing across the meadow or slipping through the thicket is a moment that many of the children look forward to and talk about.

I believe that Mazin acted very differently in our club because of the individual attention he received every week from his mentor:

I was in disbelief about how much of a different person we saw in bird club. Whether it was the birds or the one-on-one time he got with someone who was willing to listen to him, [he] was a changed man when he strolled through the meadow with us. I can only imagine how many other children could be waiting for that special activity to unlock their wonder and desire to learn. Educational and social justice programs can be the difference in saving or losing an individual to a future of stereotypes and hardship, especially in an era where social programs are viewed as wasteful spending.

At the end of the semester, when his college mentor finished our course class and the mentoring program, Mazin decided to drop out of our club. But because he had bonded so strongly with his college student, he asked her if she would tutor him in other subjects. She

began going to the school every week to help him in math. The school's foreign language teacher also took a great interest in Mazin and began spending extra time with him. According to school staff, Mazin's behavior in school improved as well as his grades. I do not know where he is today or if this experience had a lasting effect on his life. I do know that his relationship with Meghan that year helped him in ways that cannot be measured. We watched Mazin physically change. He no longer wore a sullen mask all the time.

The relationship also had a major impact on his college mentor's life. Five years later Meghan Kuehnel wrote in an email: "It truly inspired me to go into teaching middle school. I've been teaching for four years now, sixth grade science. I have absolutely loved it... Tutoring him [Mazin] is actually the reason I had the confidence to go into teaching." (4/25/15)

In four years, we never had to expel a single middle school kid. When one of these difficult children or any of the children broke the cardinal rule—they were unkind to someone—I visited them during the lunches to "have a little talk." I told them they must apologize or they would be expelled. They wanted to be in Nature Explorers. The threat of expulsion was enough. They apologized. Usually, there were no further problems. I attribute this to the personal relationships that the college mentors had developed with their children, and to the relationship that I developed with individual children because of my weekly visits to the school.

Social worker Julie Wilke talked about why some of the children act out in the park and how the program gives them a safe space to do that:

Some of those instances where you guys might be seeing children really going deeper or living out some of that frustration or anger, maybe some of that stuff that gets pent up and just pushed down, pushed down, pushed down... and there's nobody maybe here [at school]. The focus is on education, on staying in your classes, staying on task, okay now its break, okay now it's lunch, now you're with your friends. There isn't a safe place for that to get released. And even though it's important and children could come and say to Mr. Zipperer [the other counselor] or me... 'I'm feeling mad,' they may not necessarily think that's okay no matter how many times we say 'you know, if you need anything, let

me know.’ Especially if they feel like they’re not valued, that they don’t have a voice. And if they don’t have a voice, then they’re not important and...nobody’s really going to care about them from their perspective. And being out there [in Warner Park] with people that care about you, and you’re having fun, sometimes that emotional stuff just bubbles up, and then it pours out ...”¹⁷⁸

Wilke also noticed how the physicality of the club’s activities—running, climbing trees, screaming, jumping—as well as the huge physical space of Warner Park gave the children, particularly the ones with more serious behavioral issues, a place to blow off steam (many of the children in our club were not interested in organized sports which would have given them this physical outlet): “...I think...[it] gets something moving out of their bodies. The fact that they are *walking* over to Warner Park and back—it’s visceral. You know, I think we hold anger, emotion, tension, anxiety and stress in our bodies, in our muscle tissues... You know that all gets worked out.”

The challenging children like these two boys and the others who joined us every semester also strengthened our morning college flock. In our morning class, we spend time strategizing and problem-solving how to keep them in the club: "I feel like this is one of the first classes that I have ever been in which I have formed lasting relationships. There is something about having to work through issues to constructively teach children that really brings people together. Through working together for a common goal I feel we have been able to get comfortable more quickly." (12/5/12)

The college mentors agreed to help each other with more challenging children. Some agreed to work with extra children so one mentor could focus on working with a particularly difficult student. Many of our college students also had prior experience working as tutors or summer camp counselors. Some of them taught me how to manage conflicts and turn them into life lessons.

According to Principal Hernandez, the club also had a positive impact on his quiet students by giving them a chance to become leaders. He described how the school regularly walks to Warner Park to read under the trees or hold celebrations. During those walks of the entire student body, some of the children in our program would lead the walks:

This is their time to shine. They can lead the group when we're walking there—"This is the way we walk when we walk to the park when you guys go on Wednesdays. And they go-Hey, this is where...I walk with them...They'll talk to me about the lake, and there is where we saw this. They tell their class...It's neat to see that it's built up some leadership capacity as well as some self-confidence for other students as well.

The Larger Socioeconomic Context and Environmental Privilege

Some semesters we had a child or two who did not have a "syndrome," but who would suddenly start acting out by hitting someone or yelling or using violent or sexual language. These children were usually well-behaved. Because of my weekly visits to the school over four years (the LUNCH assessment model) and my relationships with school staff, I was able to obtain more information about the children and their home situations. I learned quickly that when one of these children started acting out, it was usually because of a situation out of their control. I shared this information carefully during class discussions with the college mentors, keeping in mind the children's right to privacy. This information not only helped the undergraduates understand the children they were working with, it enriched concepts from course readings on the socioeconomic context of my neighborhood, and on race and privilege. It also helped the college mentors understand how larger socioeconomic forces were impacting our co-explorers, our public schools, our co-explorers' families, and their lower-income neighborhoods in this supposedly affluent college town where the median household income was \$51,180 in 2012, according to the City of Madison. It forced college students to examine the socioeconomic privilege they had grown up with and how that privilege gave them a head start in life:

Perhaps most of all, the class made me more conscious of the social problems in our city and across the nation--and has made me more committed to trying to solve them...the school system and its social environment seemed a lot different from what I remember them being. A lot worse, that is. Usually in the past I have been focused more on the "big picture" side of things... However, this class gave me an up-close look at many social problems... Working with these disadvantaged and sometimes harassed children showed me the real problems I had read or heard about but never experienced--bullying, harassment, the overburdened school system, poverty, and so on--and gave them a face. Not that the children represented these problems themselves, but the problems affected them more than they have myself and those within my circle of friends.

Walking through Brentwood put me in a position to walk through neighborhoods of those often forgotten in government, in policy-making, in education, in appreciation, and in society. On campus you forget what's out there. I mean, we see hungry people and homeless people, but we comfort ourselves with ideas that they chose that life, that they don't want to live another way, but walking through Brentwood reconnects us to the people, the families and the children that live in these situations. It is easier to write someone off when you don't know them, but when we see how the Sherman students are affected by their environment, it changes things. We become connected and invested. It is not just people that are struggling--it is our friends, people we care about, people we look up to, or people that just need someone to be there for them. Walking through Brentwood is a reminder of how people that are good, happy, hard workers, people that are 'normal' can come from situations that are not great. It is a reminder of overcoming, but also a reminder of development, support and respect. (5/17/13)

Our college students also learned about how environmental privilege—particularly the right to play outside—is linked to socioeconomic privilege and systemic racism. As our students listened to the children each week and as they listened to each other during class discussions, they began to see the structural socioeconomic barriers keeping some of our children from playing outside after school.

Students commented weekly on how much their Sherman co-explorers just enjoyed being outside for those two hours. Many children lived in apartments without yards and in parts of the city with higher crime rates. They told their mentors that their parents were afraid to send them outside to play. This was straight out of course texts for the class. These children forced some college mentors to reflect on how they grew up in safe places. The children taught our college students to recognize that this was a form of environmental privilege:

Throughout the semester I was always watching closely to how the Sherman students were reacting to the program. I could tell the majority of them did not have the opportunity to just be outside in nature and play. I began to think about how I had taken for granted the opportunities I had growing up to experience nature. I grew up in a smaller suburb that was filled with parks and woods. The majority of my free time was spent running wild in the parks, building forts in the woods, or going fishing with my dad. (12/6/11)

I didn't realize how lucky I was as a kid to have three acres of woods in town and 64 acres at a lake up north. And a family that was always willing and able to spend time outdoors at these places and elsewhere. (9/21/12)

Our students also learned from the children that not everyone thinks they are going to college or expects to go. Mazin, the brilliant Muslim refugee who spoke five languages and wanted to learn 10, only expected to go to a police academy if he was “lucky.” Mark, an African American boy who loved turtles and could not stand to see them run over by cars on the park's borders told his mentor that he planned to drop out of high school to be a truck driver like his father. Our students learned that some of our children would get in trouble at home if they rolled down the hill in the park and got their clothes dirty. Student mentors were shocked when they recounted in class discussions and in their journals that their children's families did not have washer or driers or cars, so their children's families had to take their clothes to the Laundromat on the bus. Students realized that the right to get dirty in the park was a luxury some families could not afford.

Our students also could not believe that some children had to share rooms and even beds with several siblings. One college mentor paired with a vivacious boy named Guillermo (not his real name), one of our most enthusiastic bird children, learned that he was often tired during the club because his entire family slept in one bedroom. He shared a bed with two brothers: “This totally shocked me, and I know that this isn't anything too out of the ordinary but it just

reinforced how I feel about being unbelievably fortunate and sometimes I feel spoiled that I've never had to share a bed let alone a room my entire life." (4/5/13)

Guillermo was also the kid who carried his bird field guide with him every week and proudly checked off each new species he discovered. And yet, this same boy was not doing well in school.

This college mentor was enrolled in a public health course at the same time as our course. She was studying public health literature on the importance of sleep to children's development and the impact of sleeplessness on children's health and their school performance. She began to worry about Guillermo:

Guillermo taught me, as a firsthand example, that there is a problem in our country and even in the small 'liberal' city of Madison. There are children from the Northside that are unbelievably underserved, and I think some of these children have to grow up way before they should have to. They take on responsibilities as sixth graders that someone my age or older should be handling...He made me realize all of the difference in growing up that he has to go through compared to what I went through...due to his family's struggles and his inability to get a full night's rest due to sharing a small bed with two siblings. He has money worries one second and then will pull out a little beanie baby looking animal and give it a tiny squeaky voice. He's struggling with...being a kid to a 'mini-adult' who is concerned about paying the rent...he's in his crazy situation and he's just trying to make it. (5/14/13)

Our students began to notice some of the barriers keeping our children from playing outside. Some of these barriers are the same historical barriers to parks use by the general population described by leisure research theorists: 1) marginality: class differences; 2) ethnicity: values, norms, and socialization independent of class or ethnicity; 3) racial hostility or discrimination (Floyd, 1998) and 4) fear of crime (Brownlow, 2006).

In our UW-Madison class discussions, students of color who took the course also taught their white peers to think more deeply about race, privilege and access to the outdoors. For example, nearly every semester during discussions, a few white students questioned why so

many of our children did not play outside or go to the park with their families on the weekend. They insisted that for someone to say that they do not have time to go outside and birding is just an excuse. If people have time to be on Facebook and watch television, they argued, then they have time to walk with their children in Warner Park. A Latina student pointed out that many of our children's parents were working long hours and weekends as immigrants in the service economy. They were doing physical work that exhausted them like cooking, baking, waitressing, roofing. They didn't have the physical energy or time when they came home to do more exercise. She was one of the only students to emphasize how leisure time is a scarce resource and a luxury for working people. She criticized Louv for pointing out the importance of having an adult, preferably a parent, to explore the outdoors with. "What if their parents do not have time?" she asked in class. She explained how time was a resource that more privileged people take for granted.

I learned over five years that not only were many of the parents in my neighborhood working two minimum-wage jobs, some of our 11 and 12-year-olds were already working, too. Every year there were always two or three children who loved the club, who came every single week, and then they just disappeared. They came to me during the school lunches to apologize. As I sat with them, they told me that their mother's work schedule had changed and they had to go right home from school to take care of younger siblings and cook dinner for them. Or their mother just had a new baby and they had to babysit. Or their father had just lost his job so they had to move. Or their baby sister had a life-threatening disease and was in the hospital so they could not come anymore. So although I had applied for and received community grants to get binoculars for all the Sherman children, although our club was free and the university paid for all parties, field trips, books and other incidental costs, although Sherman Middle School had a

room full of donated winter clothing for the children to wear outside and provided them all with a nutritious, free after-school snack to take to the park, none of this changed the reality that some of our children had become childcare workers and entered the informal economy at the age of 11 or 12. Their families could not afford to let them participate in an after-school program like ours even if everything was free.¹⁷⁹

Racism in the Land of Aldo Leopold

Two students of color also shared painful stories during class discussions about how white people stared at them when they went birding in Wisconsin's parks and in Madison's predominantly white neighborhoods:

I live in Middleton, and it is a lot different than Madison where I grew up. There are a lot of nice parks and conservancy areas in Middleton; however, I do not see people that look like me walking through them. In addition, these beautiful landscapes tend to be in wealthier neighborhoods, where I also do not see people that look like me. Although, I enjoy and look forward to birding in my free time...I do struggle with the confused looks that I receive when I am strolling through the park with a pair of binoculars hanging from my neck, and a field notebook and pencil in hand. It never occurred to me that this would be such a shock to people, more specifically Caucasian folks right in my own neighborhood. On the other hand, this is more determination for me to share my passion with the children of our future, in hopes that perceptions can be changed regarding the relationship between people of color and nature. (10/26/12)

Another college student mentor of color who was paired with an African American middle school student said that she felt as if being a birder was "crossing over to a place" where she and her middle school student did not belong (10/7/11).

This undergraduate forced me to think about every single bird event I had attended in Madison, every Audubon meeting, every Wild Warner meeting, every Christmas bird count, every conference—there wasn't a single black or brown face. How could a person of color feel welcome?

The racial segregation wasn't just in the ornithology and environmental world. In 2014, Madison in Dane County, Wisconsin, made the list of the top ten cities to live in the US. That same year Dane County was also listed as the worst county in the US for an African American child to grow up in, according to the Annie Casey Foundation. The following spring, when protests erupted in March of 2015 after Madison police shot and killed a 19-year-old black man, African Americans in Madison, particularly young men, began publicly sharing their stories in the local press of how they experienced daily life in Wisconsin. Many of them had come from southern cities or Chicago. They told local press that Madison was "weird" and had more "racial tensions." They described moving here as "culture shock."¹⁸⁰

I know that what I am saying is nothing new. But what the student mentors of color taught me was new and sobering and humbling: that even with 20 years of experience in human and civil rights, living amidst starvation-level poverty in Nicaragua and Guatemala, and studying the structural reasons for that injustice as a researcher, how easily I could forget these structural barriers in my own neighborhood in Madison as I watched the birds and butterflies fluttering through Warner meadow. These students forced me to remember that the Louvian critique of technology and the electronic babysitter comes with a huge caveat: electronic babysitters are the easiest and cheapest for a tired harried parent. Feminist leisure researcher Karla Henderson (1998) has documented this in interviews with working women of color.

Bullard (2014) includes access to green space as a key challenge to address in terms of a more just distribution of amenities in cities. College mentors of color also helped me understand how the preservation of urban greenspaces like Warner Park is an issue of environmental justice. A student-mentor from our class reflected on how she enjoyed walking and birding in a white affluent neighborhood with her white boyfriend, but that:

“...I get this sense that people will think I am invading their privacy-property by walking around with my binoculars. I have not had anyone come up to me and question what I was doing but I think about it every time I go out. Youth of color often live in neighborhoods that lack green spaces. So even if they were to ignore the scrutiny of people in their neighborhood, they might not have a great space to bird. If these youth were to find a nice neighborhood like mine to walk around and bird, they might not be welcomed. I guess this is why public parks like Warner are so important.” (11/11/11).

At the same time this student and others pointed out that in order to make Warner more accessible, and for this course to be truly transformative, as a class we needed to work with the parents—not just the children. Many of our children’s parents were recent Latin American and African immigrants who were unfamiliar with Warner Park and the neighborhood. They could not trust the area and just send their children outside to play. We needed to work more with the community and set up family days and picnics. I told my students to take the initiative but they did not have time during the course of a semester. I decided to try and do it, myself during the summer.

My neighborhood association had asked me for help organizing a series of “Nature Nights” for families. I applied for a small city grant, hired four student mentors from the capstone course to work as summer interns, and these students worked in Warner Park taking families on summer nighttime bird and tree walks. A “Warner Water World” event these interns organized in the marsh drew over 30 children of color and their parents. This summer program was a success and much appreciated by the neighborhood association. Neighborhood organizer Dave Meyer wanted to continue it. The college student mentor team was really good—I hardly had to do any work at all. They organized themselves and planned all activities. But I was still supervising this program as a volunteer; like most grants, there was no money for salaries, although I insisted on paying my interns a stipend. I was exhausted, overwhelmed with the demands of graduate school, and could not continue this summer community program.

The college mentors calling for more of a community focus were right. I just did not have the capacity to make this shift as a graduate student. Students like these taught me that we were not doing enough. The university course structure was too limited and rigid to really meet community needs in a deeper, truly transformative way.

The Race Education Vacuum in Higher Education: A vaccination is not enough

The critique from some of the student-mentors of color made me want to change and deepen my teaching, but I do not know how to do this within a three-unit semester course in which students need to learn to identify birds and work in a community with a child. The course is already demanding. Because of critique from an African American student, I added several readings on race and privilege. Then other students of color from different ethnic groups in our course expressed their frustrations with the black-white binary, and the lack of readings and discussion on their cultures and the racism their peoples had experienced. One Native American student wrote:

After living on the reservation for most of my life, coming to Madison was actually very terrifying. Most people I met came from privileged backgrounds and saw the world completely differently...I can totally relate with many of the social justice and environmental justice issues that we've been reading about. The only difference is my culture is drastically underrepresented because the Native American presence is so low in today's society. I suppose this is largely due to the lack of education on Native American history in this country, which I could probably write a book about in frustration; another topic entirely. I'm not giving priority to any ethnicity, but I definitely think that the world is more than just Black and White, and I find it frustrating at times when those are the only two colors being addressed.

I did not want to add even more readings to a course that emphasized learning-by-doing. Our students already had to make a considerable time investment. But here I think I am falling into the academic trap of viewing the teaching of race and privilege as a vaccination: give students a reading or two on these subjects, one lecture, one discussion, and we've covered 'the race thing.' Too many universities like UW-Madison deal with systemic racism in this way.

One of my greatest frustrations as a teacher is how to deal with this vacuum of race education and history in our universities. Most of my students taking this course are seniors. They have made it through four years of education at a top-ranking school and yet, they know almost nothing about our country's complex racial and cultural history or the land they are walking on beyond a cookie-cutter Disneyfied "I have a dream" view of Martin Luther King and Rosa Parks, the sitting-down passive seamstress. I'm teaching at a university built on top of Indian villages, with dorms literally built on top of Indian mounds. And yet, a student can graduate without knowing anything about the people who lived here for 11,000 years. In a class of 20 students, we are lucky if there are one or two white students who have taken any courses that dealt with privilege and race. Those students have greatly enriched our class discussions and have helped teach their peers. These students and our students of color have helped me remember the structural barriers keeping some of the children who most wanted and needed our program from continuing to participate. They reminded me that these same barriers could keep these middle school children from participating in college prep programs offered by the Madison School District: the lack of a national living wage, the lack of affordable decent housing, the lack of affordable (free), high-quality childcare and a criminal justice system that keeps black families living in fear and many black men living on the run, including the fathers, brothers, and uncles of some of the children we work with (Goffman, 2014). Their participation in class discussions reminded our predominantly white and privileged group that these issues are *also* environmental issues. If one of our nature explorer's families cannot cover their basic needs, going outside, particularly in an extreme climate, becomes a luxury. As one student mentor stated: "Nature is expensive."¹⁸¹

The vaccination approach to teaching about racism and privilege in our universities is not working. We have a deep structural gap in our education system that is handicapping our students because we are not preparing them to be citizens in a multicultural society. We are failing them in this respect. By inoculating white students with one or two sessions on race and privilege, we may just be angering some of them. Without the historical context, without the time to fully digest that history and compare it to their own experiences, without the time and right forum to deal with their own feelings, many of them cannot really understand their role or connection to present socioeconomic injustices.

Birding *Could* Be For Everyone (who wants to do it)

Black ornithologist Drew Lanham describes how birding helps him personally deal with racism:

Sometimes the birds are a balm, an avian anesthesia that numbs pain or blocks unpleasant things. It is the Zen of putting field marks together—plumage, shape, behavior—into something that becomes a bird...In that peaceful pursuit, the quarry is collected on a life list without having to give its life in return. It has been this way for most of my life: Me escaping to the birds. The birds providing something people couldn't—comfort in my own skin, peace in stressful times, and acceptance without question of who I am or what I do.¹⁸²

Despite the pedagogical frustrations described in the prior section, at the same time I cannot generalize about the college students of color who have taken this course any more than I can generalize about the middle school children. One student of color loved the course and the children so much that he enrolled three times. Another Latino student enrolled twice for the same reason. Another student of color, a black student from inner-city Milwaukee, who had never been interested in birds, wrote about the thrills of watching Canada Geese and spying on the great blue heron in Warner Park with his young co-explorers. This student fell in love with

hawks and identified with them, personally. By the end of the semester he had become such an avid birder that he said he felt like “an amateur ornithologist”: "This concept of using birdwatching as a way to relieve stress is a very good concept. I feel as though I am one of those people. Being outdoors just gives me a clearer mind and can be very releasing and therapeutic for people with anxiety or emotional stress." (10/24/12).

This same young man also wrote about the importance of being a role model for the middle school children. One week he spent time with Arman, a tough acting African American kid who loved a clearing with boulders in it hidden in the middle of the thicket. Arman insisted on showing his “special place” to all the college students:

He [Arman] thought I was from Madison. I told him... that I was originally from Milwaukee. He seemed a little surprised to hear this and then asked me if it was 'bad' in Milwaukee? I told him that Milwaukee is not a 'bad' place, it's just that the people who live there can sometimes do really 'bad' things...After telling him this, he quickly stated how he wasn't going to join a gang or do anything really 'bad' when he grew up...I told him that no matter what, he should definitely at least try attending college. I explained to him how the college experience is one like no other in the world and that it's not impossible for him to do....I gave me as an example for inspiration to show him that he could also be a black kid in the US and go to college and make something more positive out of himself for him and his family. It's crazy how many minorities believe that they can't go to college or finish high school because they don't think they're capable of doing it or they think they can't afford it. (12/5/12)

Yet another student of color had similar thoughts about the importance of being a role model:

I believe that this class has made me more confident in my ability to provide a positive example to underserved students. I've spent so much time trying to figure out how to piece together the bits and pieces of my life, from southern Milwaukee all-black neighborhood to sleeping on my cousin's floor for a year to the upper-middle class suburbs of Chicago...I've never really been sure how to make my life experiences something that gives back...I volunteer, but I wanted to do more. This class asks you to give a bit of yourself; it's more than just a time commitment or credits. Without giving yourself, you can't connect with your co-explorer and achieve very little in the long-run. Rather than spending time trying to educate my co-explorers, I spent time watching them laugh and play, and talking to them about the mundane things in their lives... Through

this, they became a small piece of me, 'my children.' I learned that just having a story to tell and sharing it is the best way to give back to a community. While the children might not have wanted to hear about the bird or tree species, they wanted to hear about how I was Puerto Rican just like them and attending college. (5/14/13)

During discussions of how race and class impact our children's access to nature, our students learned from the children that as individuals they did not fit into any one category. They found it hard to generalize about the children because they were relating to them as individuals, not as a victim group. They saw complexity. Together as instructors and college students we learned this semester after semester. Every middle school child was unique. Some were little nature nuts, some hunters, others videogame addicts, and some a combination of all of the above. We had boy-chasers and girl-chasers. A black boy whose family rehabilitated wild animals and told stories about a baby kingfisher. A girl from West Africa who raised bluebirds with her white grandfather. The boy who shared a bed with several siblings was also the kid who insisted that his parents buy him the exact same bird guide as his college mentor. He carried it proudly for three years and kept a bird list in the back of it. The girl whose family was evicted twice in a year played the violin and loved to give oral reports to the group on birds. The boy whose father had been sent to prison was the nature explorer who discovered species #116 in Warner Park, a Barred Owl. Some children played several musical instruments. Some had better vocabulary than our college students:

Nicholas was fully equipped with his binoculars, a 'critters' book and a naturalist's guide. He was 'a detective on a backcountry beat'...He was excited about everything around him. When I asked him what he wanted to be when he grew up he responded "a naturalist, an ecologist, a geographer, a geo-cartographer" and he continued to rattle off professions I had never even heard of. I also want to mention Nicolas is black and he was not the only non-white kid in the club. (9/22/11)

This same boy introduced himself to another college mentor as "a polymath." When the college student asked the eighth-grade boy exactly what he meant by "polymath," he said: "I want to be Da Vinci." I want to study everything." (2/8/13)

Since the children lived in the area and knew Warner Park, they quickly became the experts. Most of our college students had never been to Warner Park. The children became de facto guides. For our college students who initially viewed our kids through the stereotype of "lower-income children of color," this may have helped challenge that stereotype.

The act of learning from a middle school student also reverses the whole academic hierarchy and helps to break down the divide between university and community, the we're-helping-the-poor-black-children-white-savior mentality. One mentor wrote about his co-explorer, a sixth-grade Mexican-American girl from Ciudad Juarez. She could have been viewed as one of those "under-privileged" children. Her parents worked two jobs and she often had to babysit for younger siblings. Here is how her college mentor described her:

Brimming with energy and spunk...constantly running around looking, touching, poking things with sticks--she discovered the dead vole and was quick to try to pick it up with sticks...she mentioned a few times that she is used to exploring nature...from her experiences in Ciudad Juarez, Mexico, where she grew up, she said that our climb up the embankment to the railroad tracks [in Warner Park] set off memories of growing up in Mexico. (9/22/11)

Other student mentors described their wrestling with their own assumptions and how they learned from their co-explorers:

On the walk to Warner Park Cole was by my side the whole time talking my ear off about this family and his interests. He was telling me why he would want to go hunting. His reasoning left my mouth agape. He told me that it would be better because he would know where it came from and know that it was natural and not sprayed or processed or shipped on a truck from some distant land. I was dumbfounded thinking, 'Wow, I just learned that stuff in my 20s, this kid is way ahead of me. This was only one instance in which I was surprised by all the children. I talked with Michael on the walk, too, and he was schooling me on the names of the prairie grasses and trees. Michelle's birding buddy

was gabbing about everything under the sun and then out of nowhere she starts describing this Cooper's Hawk that they saw. (9/20/12)

I'm starting to feel more comfortable about what I know and what I don't know--I'm feeling a new excitement about all that I have yet to learn...Kaitlin (Sherman Middle School student) taught me some things about wolves, foxes, and coyotes (up-and-coming large carnivore conservation biologist, I'd say). Ousman [another middle school student from the Middle East] told me that before his family moved to America, he lived next to a big forest--so he's an expert! We shared raccoon stories and learned about each other's favorite and most feared animals. ...It's amazing how their brains work and it's amazing how smart they are--I don't mean to sound patronizing, but my expectations have been challenged and turned upside down. (9/26/12)

One thing that I have drawn from this experience, even more so than my other experiences working with youth is to not come in with an idea of what to expect and how to behave. Your relationship with whatever youth you are working with has much more potential when you don't know who the 'poor children,' [or] the 'smart children,' or the 'troubled children' are. When you walk in with judgments like this, you are treating these youth the same way that almost every adult in their lives has treated them. Your ability to learn from them and to connect with them is seriously diminished when you come in with who you think they are...If you have this idea of who they are, they know you have this preconceived notion. They have been shoved into a box their whole lives; if you don't let them out of that box then you cannot grow with them as they act on who they really are. (5/17/13)

These children helped some of my white student mentors think about racism and social justice issues for the first time. My students had to pay attention because someone they cared about could be directly affected by these issues. Racism and poverty were no longer just abstract academic topics to study in courses.

Chapter 8: The Political History of Warner Park’s “Wild Side” and Its Defenders

“...we create wonderful places by giving them our attention, not by finding ‘pristine’ places that will bring wonder to us. Gardens, urban trees, the sky, fields, young forests, a flock of suburban sparrows... Watching them closely is as fruitful as watching an ancient woodland.”¹⁸³

David Haskell, biologist

Introduction:

These are the research questions I attempt to answer in the next two chapters on Wild Warner: How and why did Wild Warner develop? How has this environmental group influenced environmental policy in Warner Park and in Madison? What was the group’s strategy and how did it implement it? Why has it been effective? And, how did this group develop strategic capacity (Ganz, 2009)?

These are what Yin (2009) calls “how and why” questions. Yin (2009) recommends the case study method for this type of inquiry, when the researcher has little control over events, and when the researcher is studying a real-life contemporary phenomenon. I found Yin’s case study method particularly useful to examine the history of the development of Wild Warner because I had little control over events, although I am one of the group’s founders. As an activist-environmental journalist, I was also studying, documenting, and trying to influence events as they occurred. I used the case study method for the two chapters on Wild Warner for these reasons.

The chapter is based on the following outline:

- I. Antecedents to Wild Warner: the first park defenders
 - A. Common characteristics of historic park defenders
 - B. Personal profiles of historic park defenders
 1. Jack Hurst
 2. Annie Stuart
 3. Heddie Jacobsen

- II. Wild Warner's Accomplishments During the First Five Years (2009-2014)
 - A. Policy changes
 - B. Characterization of Wild Warner within the environmental movement
 - C. Group demographics
- III. How Wild Warner Built Strategic Capacity through Research-Based Advocacy
 - A. The role of research and strategic communications
 - B. The role of environmental education
- I. **Antecedents to Wild Warner: historic park defenders**

When I began doing this action-research, I quickly learned that Wild Warner members were not the first to oppose parks management in Warner Park. Opposition to the urbanization of the wetland and park dates back to the moment the city first began filling in the marsh and sowing the seeds of the first turf grass in 1958. Of course, not all neighbors were opposed to the park's development. In 1965, Doris F. Hoppe, the secretary of the Brentwood Village Association (which later became the Brentwood Neighborhood Association) wrote to Parks Superintendent James Marshall that "The residents of Brentwood Village have watched the development of Warner Park with interest and anticipation. We are very happy to see the athletic area apparently in its final stages..."¹⁸⁴

However, as Warner Park became the default park for major concerts, rallies, festivals and organized sports, at least two alders complained to the Madison Board of Parks Commissioners about noise levels and disturbance to the park and neighborhood.¹⁸⁵

Some of the history that follows was buried in old newsletters of the Brentwood Neighborhood Association,¹⁸⁶ in the Board of Parks Commissioners archives of minutes in the microfiche catalogue of the Wisconsin Historical Society, in city documents pertaining to the development of the 2009 Northside Neighborhood Plan, and back issues of the local newspaper,

the Northside News. I counter-checked this information during formal interviews and informal conversations with neighbors, Wild Warner members, Northside activists, park users, dog park organizers, environmental activists and elected officials. As they told their stories and I studied the documents, I realized that although Wild Warner is the first group that has organized solely to defend the park's wildlife and its habitats, it is just the third or fourth wave in a series of efforts over the past fifty years to protect the wetland and slow the built development of Warner Park.

Over this fifty year period, many of the first defenders of the park's wild areas have died or moved away. There was an elderly neighbor named Earl who regularly planted himself in front of the giant mowers to stop the mowing of milkweed, brown-eyed Susan's, coneflowers and other native plants in the park's upper meadow. Another individual, Vietnam veteran Jim Wachtemdonk, who lived on the edge of Warner Park, lobbied the city for years to stop spraying pesticide in Warner and other parks. Wachtemdonk became sick from the use of Agent Orange in Vietnam. His children also became sick and his 30-year-old son died of related illnesses. Stopping pesticide use in Madison became his cause. Wachtemdonk's persistent lobbying is the reason that city parks stopped spraying dandelions in Warner.¹⁸⁷

Some of the most ardent defenders were members of the Brentwood Neighborhood Association who stopped a major development plan for the park's wild side in 1977. The Parks Department planned to build a shelter and a parking lot in the meadows to fulfill the parks original master plan. There was also a recreation proposal to encourage water skiing and motor-boating in the lagoon.¹⁸⁸ According to the Brentwood Association's minutes for February 3, 1977, the association "unanimously rejected" the waterskiing and motoring proposal, and began working on a counter-proposal for the meadows to turn the area into a wildlife and "bird

sanctuary,” with the help of the Mendota Garden Club. The plan included creating “a thicket.” The minutes read: “The main purpose behind the plan is to protect bird[s] and wildlife.” The association also created its own “master plan” for the bird sanctuary.

The bird sanctuary proposal was never officially approved by the Parks Department, although the area was later planted with wildflowers and native trees to provide wildlife habitat. Association members had “such strong negative feelings” about the parks department’s development plans for the shelter and parking lot, that they were able to convince the parks commission to reject those plans.¹⁸⁹ This is why Warner still has two wild meadows, today.

A. Historic Park Defenders: Common Characteristics

This chapter section focuses on the role of three main defenders who individually advocated for the park’s wild areas and wild residents decades before Wild Warner formed: fisherman Jack Hurst, small business owner Annie Stuart, and wildlife enthusiast Heddie Jacobsen. Along with the Brentwood Association, these three individuals laid the foundation for Wild Warner’s later organizing. Without them and members of the Brentwood Village Association, there would have been no “Wild Warner” left to protect.

The three historic park defenders, Jack Hurst, Annie Stuart and Heddie Jacobsen, share these seven characteristics:

- 1) They are all now over 80 years old (I began interviewing them a few years ago when they were in the 70s).
- 2) They have all been living on the park’s edge for 50 years or more. Annie and Heddie own homes that abut the park. Jack lives approximately three blocks away from the park.

3) None of them has biology or ecology backgrounds but they all have a deep and detailed knowledge of this place. Over the years they have developed intimate relationships with individual animals such as fox and deer. They know these animals' habits.

4) They share an historical baseline knowledge of the park's landscape, waterscape and soundscape. All three have witnessed the wetland's gradual deterioration and the park's loss of biodiversity. Annie Stuart has species lists from years ago listing birds that have disappeared from the park. Jack Hurst has similar species lists for fish.

5) They all use storytelling as a method to communicate with public officials and other neighbors about the park instead of abstract ecological and bureaucratic language. They tell stories about individual animals and the park's past. However, this knowledge is often not valued by public officials and college-educated environmentalists who believe a person must have an ecology degree to speak with authority about nature. Despite their deep knowledge of place, which can be invaluable to policymakers, theirs are the voices usually silenced or ignored during public planning processes or management conflicts because local knowledge is devalued (Fischer, 2000). All three provided vital information to Wild Warner that helped us understand the historical context and develop our strategy. Their participation in this study is an example of activist research that connects non-academics to their own world of knowledge through their stories, and then uses those stories as a basis for building a historical record (Nabudere, 2003).

6) Two of them do not even own a computer and none of them have ever sent an email. Their activism has always been and at least in Jack Hurst's case, continues to be, maintaining a face-to-face presence at public meetings and public testimony. They influence policy by showing up, speaking out and building relationships. This emphasis on face-time versus Facebook time is an organizing strength. When Jack Hurst picks up the phone to call someone at the Parks

Department or the WDNR, that public employee often listens and shows up at a meeting at Jack's request or drafts a letter or takes other action.¹⁹⁰

However, this last strength also became a weakness when public documents became available only in digital form. The digital age presents serious barriers for accessing public information for certain groups. For example, all three of these activists had "heard" of the 2009 neighborhood plan but not one of them had read the 165-page document online. The digital posting of city documents such as this one which directly affected a major region of the city presents a barrier for the elderly, for lower-income residents who do not have Internet access at home, and for residents who may have computers but lack the search skills to even locate documents such as this one. The cost of printing out this long document, full of maps and photographs, could also be prohibitive (I spent quite a long time cutting and pasting to avoid having to use expensive color-printing).

Cassandra Garcia (2011) documented this same online/offline divide on Madison's Northside in her dissertation on the role of public participation in a participatory process on local environmental decision-making (location of drinking water wells). Garcia (2011) observed that online public surveys excluded older residents and residents who were not computer-literate.

The history and analysis of these park defender's individual roles is drawn from lengthy structured and unstructured interviews with them, interviews with former parks employees and planners, as well as the Brentwood Neighborhood Association and the Northside News. This information is written in the form of personal profiles and stories to honor the first-person voices that reveal how this action-research was conducted (Calhoun, 2008). I have developed deep friendships with two of these three historic park defenders; my bias is evident in these three

stories. As Calhoun (2008) points out: “When researchers are participants in activist movements or organizations, their informants are colleagues.”¹⁹¹

1. Jack Hurst of the Yahara Fishing Club

At 81, Jack is the most important founding member of Wild Warner and one of the group’s most active members today. Jack Hurst does not own a computer. He has never received or sent an email. Yet in 2007, he was named "Conservationist of the Year" by local environmental groups. And in November of 2010, the Northside Planning Council (NPC) of Madison gave Jack Hurst a “Northstar” public service award for his defense of the fish and waters of Dane County. At the awards ceremony NPC representatives described Hurst as “the Aldo Leopold of the Northside.” He is well-known by city, county and state employees as “that elderly fisherman. Both the DNR and city parks told me to call Jack Hurst because “he knows.” Over the past 50 years he has spoken at literally hundreds of public meetings. He does it because he believes that fishing “is not just about taking.”¹⁹²

“There are all these fishing organizations but everybody has to get together and be one. A lot of people that fish and hunt don’t join organizations. All they want to do is take. They’re not givers. There are so many takers...I’ve been trying to do what’s right for a long time.”

Jack lives just an eight-minute bike ride away from me, across Warner Park and in a neighborhood nestled on a gentle hill facing the park. The first time I interviewed him, he had just returned from fishing. Two white buckets containing 40 fish sat in the kitchen ready to store in his basement freezer. Jack grew up on a farm and he caught his first fish with his father when he was four or five years old. He remembers having to walk a mile to get to the stream.

“I caught some little brook trout. I don’t remember how many. But I can remember trying to get them off the hook. They were so, oh, absolutely gorgeous, red, blue and orange spots, on them.”

Jack has been fishing and hunting his whole life. Most of his fish ends up on the tables of local churches at Friday-night fish fries, a Wisconsin-Catholic tradition, or in a bucket delivered to the homes of friends and neighbors.

At 17, he came to Madison to work in a local factory where he repaired machines for 20 years, working his way up to supervisor. When the factory closed down in 1971, the union contract was not honored and Jack lost both his severance pay and pension. Eventually he went to work for the city as a garbage collector and then in traffic engineering. He’d personally installed many of the city’s street signs, so he knew the paved arteries of Madison as well as he knew the watery arteries.

Jack’s life passion has been to work so that the next generation can enjoy the waters and the fish as much as he has. When I met him, Jack had been “retired” for over a decade, but his retirement sounded more exhausting than his former employment. Every year he organized the annual Kids’ Fishing Day in Warner Park, where the first 300 children received free fishing poles, tackle, and learned to fish. In his lifetime, Jack had taught thousands of children and adults to fish, including me on a 23-degree day in March, when he introduced me to the art of ice fishing.

On the morning of our very first interview in his bright and neat kitchen, Jack said he had something to show me. He knew I was studying ornithology. I followed him down a dark set of stairs just off the kitchen.

His basement felt like an exhibit room at a natural history museum. It was light and airy. A fish wall and a bird wall stood in the middle. Jack had been keeping local taxidermists busy. A two-foot long mounted northern pike stretched out on the fish wall, beside several crappies and a walleye. A wooden case full of rifles stood next to the mounted fish. A small flock of glass-eyed ducks occupied the bird wall: a Black Duck, a Ruddy Duck, several Mallards, a Pintail, a Widgeon, a Canvasback, a Hooded Merganser, a female Bufflehead and a female Golden eye.

Jack took the ducks down one by one and handed them to me gently. Each duck was a story, an explosion of wings in a marsh he loved. Many of those marshes had disappeared. Jack had seen half of Wisconsin's marshes and wetlands vanish during his lifetime, along with the waterfowl and fish that lived in those wetlands. He had been an unwilling witness to the transformation of the nation's landscape documented by environmental historian Ann Vileisis in *Discovering the Unknown Landscape: A History of America's Wetlands*. Vileisis describes how, when Jack Hurst was growing up, during the New Deal and Great Depression, government policies to promote agriculture through drainage led to large-scale wetland destruction as Midwestern farmers installed acres of drainage tiles and developers turned Florida mangroves into resorts. These policies had a devastating impact on marsh birds and animals. The birds lost the prairie potholed Midwestern landscape that provided their breeding grounds.

Stacks of old news clippings from local newspapers sat on several tables along with newsletters from neighborhood and local conservation groups, and years of back issues of duck and wildlife magazines. This was a man with a deep and micro-level knowledge of local wetlands and what was happening to them. He scoured the news every day for any bit of information on the watery places he loved. Then he clipped that information and placed it in a yellowed file folder.

Warner Park was one of Jack's beloved places. Fifty years ago, he moved just up the hill from the park. There were very few buildings between his home and the park, then. He could look out the window and see the marsh and as many as 50 pheasants foraging some mornings. He still misses the pheasants. Today there is a housing tract, blocks of low-income apartments, and a fire station between his house and the park.

"In the 1950s, you used to be able to walk on the fish. It was one of the best areas for the fish. There were no houses here, then."

To drive around Dane County with Jack is to drive through a land- and water-scape of what once was, of ghost creeks and ponds. He remembers all the great fishing spots, pointing to places that are now parking lots, buildings, roads. In Warner's wetland, the pheasants had left and Canada Geese had moved in. The pike were gone, too, replaced by large carp that thrashed around in the shallow water in the spring and summer. Catfish had replaced the bullheads he used to catch, he said. This was happening all over Wisconsin. There were not many trout left in Wisconsin's trout streams, he said.

"It's just not cold enough. Global warming is heating up the water."

The silence of Warner's marsh had gone, too, replaced by the baseball stadium across the road from the hill where Jack lives. Built in 1982, the 6,750-seat stadium is called the "Duck Pond" and is home to Madison's Northwoods League team, the Mallards.¹⁹³ In the summertime, over 200,000 Madisonians enjoy the weekly baseball games and rock concerts. All summer long the music blasts from the park up his hill so loudly that Jack feels the deep bass thrumming in his chest and hears it inside his house, even with his hearing aids off and the windows shut tight. Every summer he calls the city to complain. Every year the music seems to him to be getting louder.¹⁹⁴

As Jack talked about the dramatic land- and soundscape changes he had witnessed on his doorstep, he became sad, particularly when he talked about the wild animals. Ducks were landing in his neighbors' pool because humans were taking over their former territories; they had nowhere to nest. Before European settlement, this had all been a marsh. Now it was paved.

During that first interview, Jack brought up a stack of papers about Warner from his basement and laid them out on his white kitchen table. He had photocopies of old documents and maps he'd collected on Warner Park and the area. I'd scoured the archives of the parks department, the public library and the Wisconsin Historical Society. A DNR official has also allowed me to copy the agency's entire file on Warner Park. As I interviewed Jack, he provided the context for the documents I'd found, and helped me understand the fragmented and buried environmental history of Warner's wetland (see Chapter 2).

For a decade Jack had been carrying a photocopy of the 1970 Warner wetland easement agreement between the city and DNR to public meetings. This document which was supposed to protect the marsh as a "conservation area" was his personal manifesto. He was determined to pressure the DNR into honoring the agreement. But the DNR officials who had signed that agreement were either retired or dead. Current city parks employees and DNR employees either did not know about it or ignored it. The easement agreement restricted the city from "draining and filling" the perimeter of the marsh island. As regards the marsh island itself, the document stipulated "No wetland alteration without DNR approval." It also stipulated that the city should not burn marsh vegetation. These stipulations had been violated repeatedly over the years, particularly during the Rhythm and Booms fireworks show (see Chapter 8).

“It’s been eight years hitting against a wall because of communications problems between the DNR, the city of Madison, and the parks department. There are so many different committees. People sometimes don’t return phone calls” Jack said.

Private groups had also tried to encroach on Warner Park’s land. In 2002, Jack helped to stop the building of a private yacht club on Warner Beach, which is part of the park and one of Madison’s largest public white sand beaches. Jack personally collected 3,000 signatures to stop the yacht club.

Warner wetland’s water quality would be much worse today if not for Jack Hurst’s efforts. His advocacy can be seen in the physical landscape. He lobbied the Yahara Fishing Club which raised the money to help build the park’s first of two sediment catch basins in 2007. When Jack hounded city officials to clean out the trap for the first time, workers removed 66,000 pounds of sand that would have gone into Warner’s wetland. Sixty years after the Yahara Fishing Club first raised the alarm about the plight of the pike’s spawning grounds in the park, Jack’s efforts to protect Warner’s wetland finally prevailed. In 2015, the Wisconsin DNR and the city of Madison jointly approved a \$25,000 study to study how to improve the wetland’s water quality and the potential for restoration.

“Madison’s lakes are like a heart, and the marshes like Warner are the heart’s arteries. You destroy the arteries, you destroy the heart. This is a jewel that needs to be protected...if you don’t take care of what you’ve got down here in Warner and all the arteries, you’re not going to have anything left.”

B. Annie Stuart

Annie Stuart is another neighbor and octogenarian who has lived on the park’s perimeter for 30 years. Stuart owns a bed and breakfast abutting the park’s southwestern border. The

sprawling backyard has a gazebo, a dozen birdfeeders, a lily pond with huge, ancient goldfish swishing lazily around in it, and small stone benches that look out on the back of the park. Annie's border with the park is a huge unmowed area of spruce, pine, oak, maple and a scattering of apple trees. In two long interviews and several phone conversations, Stuart described how she had tried to defend the park. She said that she and a group of neighbors she called "the Wild Ones" had testified at various meetings over the years; most of them had died or moved away. They never organized a formal group; this is just how she referred to them.

Annie was very worried when she first heard about proposed changes to the park in 2009. An alarmed neighbor told her about the new Northside Neighborhood Plan. But like the rest of her elderly neighbors, Annie had not actually seen the plan. The 165-page document was only available online and Annie was not very computer-savvy.

During interviews Annie showed me several photo albums of the park covering four decades. Her family album included the park's animals and trees as well as 29 grandchildren. She talked about how the red fox came and sat next to her in the yard while she sang to it: "He smiles with his teeth when I sing to him. My husband—he's an old farm boy—he doesn't like it. He said—he's not smiling. He doesn't like your singing. He's thinking of biting you." She insisted that the fox and the deer knew her.

Annie apologized for all the stories that poured out of her, saying "This is fun to tell you because I'm getting to the point where people my age don't make much difference. And people aren't interested in this."

Annie's family moved to this area in 1948, just before Warner Park was built. Fourteen-years-old and in love with horses, Annie often rode her horse across the spring-fed marsh where Warner Park is today. At that time, the water hit her horse's knees. She described a marsh full of

snakes, salamanders, Whippoorwills, Bobwhite Quail, Bobolinks, Eastern Meadowlarks and Eastern Bluebirds, over 50 pheasants, and badgers that ended up as “road pizza.” This marsh stretched from the lakeshore all the way to Sherman Avenue, three times the size of Warner’s wetland today. The knee-high water that her horse tromped through covered what later became Warner’s 32,000 square-foot community center, the Mallards baseball stadium and a huge parking lot. A letter from James Marshall, Superintendent of Madison Parks to the Brentwood Village Association dated May 7, 1965, corroborates Stuart’s description of this marsh, describing it as a “former low marsh area between the wooded land and Sherman Avenue...”

The parks department began mowing and clearing the wetland and woods in the 1960s and 1970s to create fields and courts for sports. The “country” had become a suburb of Madison. The new young families moving in needed recreation facilities and more playgrounds. Part of the marsh became soccer, baseball and softball fields. Two basketball courts were built. A section of the park’s oak-cherry woods was cut down to make room for two tennis courts.

When I analyzed my interviews with Annie, I realized that the tennis courts are a perfect example of the continuing conservation vs. recreation conflict. The chair of the parks commission who toured Warner Woods with me said that these courts never should have been built. He said that today, the parks commission would not allow the building of courts in a woods of this quality. And yet, these courts provide a free and easily-accessible outlet to students at a local alternative high school. Every day a large group of young people ride their bikes past my house, toting tennis rackets, on their way to use the courts as part of the school’s new “wellness” program. I am sure that I would have opposed building tennis courts in the woods when this was first proposed. I am glad that they are there, today.

In the 1960s and 1970s, Annie said that the city did not consult people about its development plans. The parks department just went ahead and bulldozed. When she stepped outside one morning, she was shocked.

“By the time I saw it, it [the marsh] was half gone. They [the city] have their ways. They do it very quickly. They killed every snake and every little burrowing animal by plowing it. They leveled it completely, and took out every tree and bush and planted Madison park [grass] seed in its place.”

Another morning Annie woke up and heard a dredger in the marsh. The city was digging up areas of the marsh to make a lagoon deep enough for recreation. Her young sons enjoyed the dredging because of the dead animals they got to see—salamanders, toads, fish, and turtles. The city took the dredged material and used it to fill in other parts of the park so they could build structures and ball courts.

“They dredged because they wanted more grass for people to play ball on. You would wake up and whoa, there was the dredger. It wasn’t anything passed by the neighborhood or we would have fought it tooth and nail.”

Although she grew up and married, Annie never left Warner Park. She had always lived within a mile of that marsh. Then in 1985, she and her husband built their dream house and inn on the park’s border. She said that when they bought the land, they were given the impression that the side of the park next to their land was always going to stay in a “natural state.”

Some of the animals that had been living in Warner Park adapted and stayed. Some disappeared. New generalist species that could share urban spaces with humans arrived. The Red-tailed Hawks courted and hunted in the baseball stadium, even during home games when they occasionally thrilled fans by whizzing by with a freshly-killed squirrel. The red fox took

laps on the shaded tennis courts on hot summer afternoons. The Cliff Swallows built their mud nests on the concrete pillars of the Warner Park picnic shelter.¹⁹⁵ Eastern Phoebes nested on the high beams of the small wooden picnic shelters. The Sandhill Crane pair stood outside the glass walls of the huge community center peering into community meetings just a few feet away.

The generalist species survived and thrived. But as the city urbanized the park over the years, Annie witnessed the gradual disappearance of many of the other animals she loved, the species ecologists call “specificists.” These are species that cannot adapt to an increased human presence, particularly the frequent mowing, building and dredging. The park became much noisier and busier. The badgers disappeared along with the snakes, salamanders, Whippoorwills, Bobwhite Quail, Bobolinks and pheasants. Annie still missed the Eastern Meadowlarks, one of her favorite birds. Once a common bird in southern Wisconsin, the Eastern Meadowlark has been in “significant decline” since the 1960s due to habitat loss (Sauer et al. 2003). Warner Park was one of those places where it disappeared entirely.¹⁹⁶

“It’s just this little island of wildness that’s left that I feel like its disintegrating. I think in this day and age, precious as they are, open spaces are very important. We should do everything we can to preserve safe places for free wild things. There are so few wild spaces left. Somebody has to protect them. They can’t protect themselves.”

Where Annie once counted 14 bluebird nests, I’d found one male bluebird the first year I began the bird study. I found no bluebird nests in the park. The bluebirds returned to Warner Park only after Wild Warner and Madison-Audubon volunteer Paul Noeldner built bluebird houses and set them up in the park. He trained me to manage the houses. It took three years of hard work by Paul Noeldner, Tim Nelson, myself and a fourth community volunteer-in-training

to help the bluebirds nest again in Warner; we had two nests in my bluebird management area in 2015. It is easy to drive a species away and a lot of hard work to bring them back.

During the over 600 field hours I've spent in the park, I have never seen a single snake, salamander or badger. Mark Blankenship, a neighbor who grew up playing in Warner Park, asked me what happened to all the garter snakes that lived along the railroad tracks. He said there used to be "tons of them."

Annie's story was not just about loss, it was about fighting back. According to Annie, about every 15 years there was a push to develop the park. Annie and a group of neighbors had stopped the last big push in the 1990s when she was active in the neighborhood association. She called her group "the Wild People" and she began calling the undeveloped side of the park, the area adjacent to her yard, "Warner Wild." One man stopped a bulldozer from turning a meadow into a soccer field by standing in front of it until the driver gave up. Then he went home and called neighbors to organize them.¹⁹⁷

In addition to testifying at public meetings and in the neighborhood association, Annie decided to personally court the parks superintendent by inviting him over for breakfast on a regular basis. She needed the park to stay wild since her business was largely based on promoting that urban wildness. Her brochure advertised the inn as "Madison's most unusual lodgings," "quiet and ethereal," a place "of unsurpassed intimacy and peace." Customers chose her bed and breakfast because they could hike or bike the park's nature trails in the morning, play tennis on the courts in the summer, cross-country ski in the winter, watch birds in the marsh, and then jump in a car and be in downtown Madison or the university within 15 minutes. Stuart made a walking map of the park that she gave to guests with place-names she had made up for

wild places in the park, alongside developed recreation facilities: “Fireworks Island,” “Blue Heron Marsh,” “Owl Woods,” “Red Fox Glen,” “Deer Meadows,” and “Beaver Area.” These place-names for wildlife areas were still accurate in 2015. The red foxes den in the same area. The beaver still patrol the north side of the marsh. The “Deer Meadows” on Annie’s map are right across the street from my house. A doe with fawns, some years as many as three, always shows up in late April or May. I have found both Great Horned and Barred Owls in Annie’s “Owl Woods.

Former Parks Superintendent Jim Marshall became a regular breakfast visitor at Annie’s B & B. Annie defended the park’s wildlife with fresh pots of coffee and sweet rolls. Her strategy worked because the superintendent loved wild places and wildlife. He promised Annie that the city would leave the wild side of the park alone. He gave her permission to plant a variety of native trees and shrubs in the back of the park, near her B & B, to create more wildlife habitat. Three decades later, this part of the park is still one of the best areas today for birding and wildlife viewing, thanks to the habitat that Annie created.

Marshall’s promise to “leave the wild side alone” was just a verbal promise; there was nothing in writing. The park’s master plan had more soccer fields and parking lots drawn in near this area. When that superintendent retired and then died, each of his successors had different ideas. There were new and growing recreation demands on the park’s space as the population grew.

When I first began talking with Annie, she was in her late seventies and too sick to attend public meetings. She breathed heavily and moved very slowly. Her voice was brittle and shaky. She couldn’t hear well, and she got too “upset” and “emotional” whenever she talked about the

park. Her children had moved away. She told me that she had been waiting for the next generation to come and defend this place.

C. Heddie Jacobsen¹⁹⁸

The Jacobsen family which built a home on the park's edge in 1965, has also been a key actor protecting the park, although not in an organized form. The matriarch of the family, Hedwig Jacobsen, a German immigrant, known as "Heddie," has been observing, feeding and defending the wildlife of Warner Park for 50 years.

"In Germany our teacher made us save the seeds from the apples that we ate and make sure that some bird got them. I grew up with this respect and love of nature. I'm willing to share with the birds or whomever. That's my entertainment. I get so much enjoyment out of it."

Heddie grew up in a small German town of 4,000 people. Her father had a dairy farm in the countryside. Heddie spent every summer on that farm: "I was always with animals."

She came to Wisconsin as a teenage bride at the end of WWII, after falling in love with an American GI. The couple worked for decades at the Oscar Mayer plant down the road. She worked the day shift and her husband worked the night shift so that one of them was always home with their children. Like many immigrant parents, Heddie made sure her children went to college even though she could not attend.

Heddie lives directly across the street from me. She not only takes care of the park's animals, she takes care of us and other neighbors. On snowy nights, she comes across the street carrying plates of steaming breaded pork chops. In the summer, she comes bearing baskets of homemade currant jelly and homemade applesauce or a freshly-baked green-bean pie right out of her huge garden. In 2013, Heddie made 207 jars of applesauce from one tree in her backyard that she planted when she moved here in 1965.

The St. Francis of the neighborhood, she plants Swiss chard in her garden just for the deer and spends approximately \$200 every winter on birdseed. At least two dozen cedar waxwings show up to feast on her apple blossoms in the springtime. Her yard is right on the park's edge and all winter long, a narrow highway of different animal tracks leads from the meadow towards her sliding glass kitchen doors. It is a great place to study tracking. There I learned the difference between raccoon, skunk and possum tracks.

She leaves water in pots and pans just outside her bedroom window. On summer nights she sleeps with that window open so she can hear the animals lapping at it. Then she looks outside her window and watches the possum that comes every night and the mother skunk that brings one little baby.

“The mom skunk is kind of ratty looking. But the baby sat out there, the wind blowing in his tail. He was so pretty.”

When Heddie and her husband first built their home on the park's edge, a badger used to come and walk along her fence line. It disappeared after the first two years. She remembers as many as 28 pheasants in the meadow some mornings. When the chicks hatched, Heddie was horrified when park mowers showed up. Like Annie Stuart, Heddie used food and hospitality as a way to defend the park's wildlife. It was a hot sunny day when the mowers first came and Heddie invited the workers into her yard for cold drinks and a snack: “I always had cookies and lemonade and whatever on my picnic bench for those guys. That gave me the time to shoosh those little guys [pheasant chicks] out before they cut [the grass]. I don't know how many [chicks] didn't make it, but I always tried.”

When I first questioned Heddie about the animals, she told me that she “hadn't studied” and “didn't know anything.” But I soon realized that my neighbor knew more about how urban

animals lived than some biologists. She was very worried about the effect of global warming on the animals because she was seeing things she had never seen in 50 years living next to Warner Park.

“Nature is our living. We can’t exist. We’re killing ourselves. Look what’s going on. And there are still people who deny global warming. This is so goddamn crazy,” Heddie said.

During the severe drought of 2012, for the first time in 47 years park deer ate every single one of her tomato plants. Woodpeckers were at her hummingbird feeder, drinking the liquid, another first. That summer Heddie hauled huge white plastic buckets of water into the park and left them hidden under bushes. I began doing the same thing, myself, and then was surprised to find buckets of water already in the park.

She had never studied ornithology, but the Jacobsens kept a well-worn bird field guide in the kitchen near the sliding glass doors that looked out onto her multiple birdfeeder station. Heddie called early one morning, very excited, because she’d seen a woodpecker at least a foot tall with a large red hammer-shaped head in her apple tree, right in front of her kitchen window. She had never seen this bird before, not once in 50 years: “I didn’t even know there was such a thing. My God, something new.”

I put down the phone and dashed across the street. Heddie had just found a new park species for our survey, the first Pileated Woodpecker ever recorded in Warner Park, although the species could have nested in the woods decades ago. This woodpecker is the largest in the US, 16 inches long from tip of tail to crest, and the closest living relative of the extinct ivory-billed woodpecker. The new bird began hanging out in Warner’s woods where other birders started watching it and photographing it.¹⁹⁹ I am still hoping that this bird will nest in Warner’s woods.

She knew the animals and their daily struggles. However, it was hard for her to get out at night to public meetings, especially in the wintertime, so she no longer knew about the city's plans for the park or the neighborhood. She was over 80-years-old and afraid of falling down after she broke her wrist one winter on the ice.

Heddie and her husband Jake also had a profound influence on the park's wildlife and its protection through the education of their daughter, Marie Jacobsen. Marie grew up playing in the park and knew it intimately. Marie now had her own family and lived in another Madison neighborhood but she still cared deeply about the park and its wildlife. She testified at some of the very first public meetings when I began organizing to modify the 2009 Northside Neighborhood Plan. She sharply questioned city officials and the alder at public meetings and privately. She spoke with great passion about the woods' ephemeral understory plants that emerged in early spring. In 2014, Marie Jacobsen was elected as the third chair of Wild Warner.

II. Wild Warner's Accomplishments in the first five years

“Why can the powerless sometimes challenge the powerful successfully? And how can strategic resourcefulness sometimes compensate for lack of resources?”

Marshall Ganz, 2009²⁰⁰

“No other park has a group as involved as yours.”

Charles Romines, Assistant Parks Superintendent of Operations²⁰¹

Wild Warner unofficially began in my living room on August 16, 2009 with a home-baked apple pie and ten neighbors, including my husband and me. The Jacobsen family-- Heddie, Don and their daughter, Marie--were three of the attendees. We held this first meeting to strategize on how to modify the 2009 Northside Neighborhood Plan. We were preparing to testify at the upcoming parks commission meeting in September. Our immediate goal was to stop

a sidewalk through the meadow and a new parking lot two blocks away which would have eliminated a basketball court and paved some greenspace in a heavily used area of ballfields.

We continued to meet sporadically after this as a group and began referring to ourselves as “Wild Warner,” particularly when testifying at public meetings. This name came from Annie Stuart, one of the early park defenders described in the first section of this chapter. However, Wild Warner did not formally organize until 11 months after that first home meeting. On July 27, 2010, 16 people showed up for the official founding meeting at the Warner Park Community Recreation Center.

The group’s numbers grew during those first 11 months primarily because of a city proposal to kill all the Warner Park geese. Local media covered my public opposition to a geese kill at Warner. Geese-defenders immediately began to contact me to organize. Several of these geese-defenders became some of Wild Warner’s first and most ardent members. They organized their own geese sub-committee within our group.²⁰²

Marie Jacobsen, my husband Jim, and I worked together to prepare that first July founding meeting. I facilitated that meeting. Jim was elected as the group’s first chair and webmaster, an extremely important position because he controlled Wild Warner’s public messages.²⁰³ Marie Jacobsen became the group’s first secretary. I was elected as education coordinator. Wild Warner’s bylaws, approved on July 5, 2010 defined the group’s purpose as follows:

The primary purpose of the organization is to celebrate, preserve, protect, and expand the natural world in Warner Park and its surrounding ecosystems. The organization will carry out its purpose through education, research and advocacy, including but not limited to fostering volunteer efforts, monitoring status of the park, restoring and helping manage natural areas, and generating and sustaining a spirit of park stewardship among area residents through all appropriate means.²⁰⁴

A. Policy Changes

During the group's first year, at a parks commission meeting in November of 2010, Parks Commission Chair Bill Barker described Wild Warner as a "valuable partner." By the end of the group's second year in 2011, the Northside Planning Council presented Wild Warner with a "NorthStar," its public service award for our education programs. At the award banquet local county supervisor Paul Rusk said: "In just one year Wild Warner has fundamentally changed our view of Warner Park reminding us that the park's natural areas and its diverse wildlife are wild and beautiful and should be enjoyed now and for generations to come."

The park itself, the land, water and animals, has been an extremely important source of strength for the group that allowed us to make an impact quickly. We are a place-based group and our attachment to and relationship to this place, Warner Park, gives us power. We walk out of public meetings, and even if we lost that particular battle, we still walk through the park and see the trees, birds, fish, turtles and other wildlife that we are defending, as well as the neighbors and other park-users who enjoy the wildlife. The cause is not abstract; it lives and breathes all around us. Stoecker (1994) emphasizes the importance of a "localized community movement" versus national or international movements in his sociology of the Cedar-Riverside neighborhood in Minneapolis:

You can go home from a women's movement demonstration to a town or neighborhood that is perhaps sympathetic to the movement but is not often identified with it...in localized movements overall, the movement is home, and taking care of the community is also taking care of the movement. This reality has a unique influence on movement dynamics.²⁰⁵

Today the group organizes and oversees a myriad of activities including education programs, monthly nature walks, and stewardship and restoration activities for the public (tree-planting, garlic mustard pulls, bluebird trails, trash cleanups of wetland). But the group began by

organizing to defend certain areas of the park. During the group's first five years we fought and won the following political battles that have led to concrete physical changes in the park and wetland:

1. Stopped the building of a new parking lot in an area of heavily-used ballfields and in a greenspace that is the front yard for apartment residents living in an area with serious pockets of poverty;
2. Stopped the building of a pontoon concession in the shallow lagoon;
3. Stopped development of the marsh island, the nesting grounds for Canada geese, sandhill cranes, marsh wrens and many other species, into a site for wedding ceremonies and other events;
4. Stopped the creation of two more soccer fields in the park's only meadows;
5. Reduced the extension of a new paved perimeter path proposed for the park that would have paved through meadows and meant the loss of many mature trees;
6. Killed a parks department proposal to cut down part of Warner Woods to "create" another retention pond to filter runoff from the parking lot;
7. Lobbied the parks department to change its mowing regimes which led to the regaining of two wild meadows, boosting the park's biodiversity.
8. Organized citizens and built alliances with animal rights activists (Alliance for Animals) to lobby the city of Madison to shift to humane geese management instead of killing geese through roundups. The introduction of alternative humane management methods such as oiling eggs and changing habitat has successfully reduced the number of geese in Warner and other parks. This policy change also led city parks managers to plant native plants along the wetland's shoreline instead of

- mowing grass right up to the water, a huge landscape change that is benefiting many species while discouraging the geese population (geese love a mowed shoreline);
9. Lobbied the city to recognize and protect the park's largest and oldest bur oak as a "heritage tree."²⁰⁶ This tree is a bicentennial bur oak and "Champion Tree" according to dendrologist R. Bruce Allison, author of "Champion Trees of Wisconsin," who measured the tree's diameter. Persuaded the parks' department to stop using heavy mowers under this tree because the mowers were compacting the soil and damaging the trees' root system;
 10. Changed the way some parks commissioners viewed Warner Park—as more than just a venue for baseball games, fireworks shows and organized sports--through our regular attendance and testimony at parks commission meetings, and also by bringing neighborhood children and college students to testify about their findings in Warner Park. The ongoing bird survey was key to these testimonies. I made a point of reporting new findings, regularly, or having college students or kids share the information with commissioners. In our testimonies, we tried to convey a sense of excitement and discovery with each new species we found. Within the first year of our testimony, in their public discussions parks commissioners began to reconsider the importance of recreation parks like Warner with natural areas where kids could explore off-trail, something prohibited in rule-bound conservation parks. At the Parks Commission meeting in April of 2011, Commissioner Bill Barker stated:

At the Arboretum, what do we tell kids? Don't get off the trail. Don't step on the fungi. When we were kids, nobody ever said to me 'Don't get off the trail.' Hell, I didn't even know what a trail was. We have a really interesting thing happening in this park. We have a group of folks that are developing a place where it's okay to get off the trail and for kids to play.

11. Helped stop the Rhythm and Booms firework show in Warner's wetland in alliance with others. The removal of the fireworks has improved water quality, and reduced air and noise pollution. Wild Warner lobbied the city to move the fireworks launch pad out of the park's wetland by demanding pre- and post- water testing. The group also asked the Wisconsin DNR and the Army Corps of Engineers to investigate whether the city was in compliance with the Clean Water Act. The DNR and Army Corps found that the city of Madison did not have a permit to dump sand into the wetland to build the fireworks launch pad; the city had been violating the law for 21 years.²⁰⁷ The DNR and Army Corps ordered the city to restore the former launch pad. In 2014, Wild Warner members and parks employees reseeded the area with prairie seeds. The removal of the firework show from the park has also led to a change in mowing regimes which has benefited many species;
12. Watch-dogged the city's expansion and replacement of the existing bike path. Wild Warner lobbied to protect mature trees along the path, convincing planners to slightly shift the path to curve around these trees and save them;
13. Researched and stopped the Mallard baseball team's expansion of their firework shows inside the park and unauthorized firing of fireworks into the water. Reported this expansion to alders and the parks commission which forced the Mallards to return to their original footprint;
14. Stopped a parks department proposal to bury 200 truckloads of sludge containing motor oil residue and other chemical compounds under the park's Sled Hill, a popular play area for children from all over Madison (particularly in winter);

15. Stopped an annual “extreme” cycling event called “Cyclocross” during which 5,000 cyclists wanted to use the park’s meadows and woods for off-path biking;
16. Continually lobbied the Wisconsin DNR to protect the wetland and demand compliance with the September 23, 1970 easement agreement it signed with the City of Madison as co-owners of that wetland. Jack Hurst has been the main actor in this process, (see section one of this chapter). In 2015, these efforts led to the financing of a \$35,000 study for wetland restoration.
17. Lobbied to postpone a major new master planning process that would have led to greater urbanization of the park. Wild Warner did not officially oppose the alder’s push for a \$100,000 master plan process but agreed that individual members would work behind-the-scenes to discourage the plan. I was one of the main forces opposing the plan and worked hard to lobby against it. I did this because this planning process was biased towards more building and urbanization in the park. Another reason I took such a strong position against a new master plan is because Wild Warner was warned by a parks commissioner that we needed to stop this process because “the developers always win.”²⁰⁸ The first action I took was to contact Fisheries Biologist Kurt Welke of the DNR. When I asked him his opinion of the new master plan he became angry. This was the first he had heard of a new master plan; the DNR had not been invited to participate. This has been a historic pattern in the co-managing relationship of the park between the city and the DNR that I have observed at least during the past seven years: the DNR is usually not invited to planning meetings or even informed of parks department plans. Welke immediately wrote a letter to the alder demanding that the DNR have a place at the table and that the process be transparent. He wanted a

- conversation about “what is possible and what is not possible.”²⁰⁹ Mayor Soglin later withdrew the funding in the city budget for the master plan process after public questioning of the cost.
18. Opposed a city plan to experiment with the Brentwood neighborhood and cover a concrete channel leading into the wetland with a new rubber matting that had not been tested in Dane County, and proposed creek restoration, instead.²¹⁰ In the 1960s, the city channelized Castle Creek, a waterway leading into Castle Marsh which became the Warner wetland. The rubber mat experiment was part of a city engineering proposal to reconstruct and repair that old concrete channel. The city proposal would also have cut down a swath of mature trees at the entrance to Brentwood. By working with the Brentwood Neighborhood Association, Wild Warner proposed an alternative plan to turn the concrete channel into a restored Castle Creek, with rain gardens and a natural rock bed. The restored creek was rerouted to avoid cutting down mature trees.
19. Changed how Warner Park’s waters were described as a “swamp” or “lagoon” back to its historic and legal designation as a “wetland.” Jim and I purposefully began to use the term “wetland” in all testimonies and media work. We asked all Wild Warner members to do the same. Based on interviews and an analysis of press coverage of over 1000 articles in local media about Warner Park (Northside News, Wisconsin State Journal, The Capital Times, The Isthmus and the Associated Press) I found that parks officials, parks commissioners, ecologists, environmentalists, neighbors, and parks users rarely, if ever, used the term “wetland” to describe Warner until Wild Warner began using the term. As documented in Chapter 2, the history of Castle

Marsh had been buried and forgotten as the area became a suburb of Madison. After four years of using this term constantly, city officials, parks commissioners, news reporters and even firework organizers also began using this term. The shift suddenly became obvious during a large public meeting to discuss moving the fireworks to Lake Monona. Throughout this two-hour meeting, hosted by the city's Committee on the Environment, city officials and even fireworks organizers referred to Warner's "wetland" when discussing possible environmental impacts of fireworks on Monona;

20. Broadened the concept of recreation in Madison's parks system to include "nature-recreation" through our avian baseline survey and educational programming.

However, the group has not won every battle. For six years the group has asked the parks Department for a tree preservation policy. The department has cut down many large mature trees in the past few years despite public protest. The tree-cutting is a continual source of friction with the parks department. This is true citywide, not just with Warner Park. Neighbors in different parts of the city have complained loudly and publicly at meetings and in the press about how the city's urban forest is managed. I've seen people from other parts of Madison in tears while testifying at the parks commission about trees the parks department has cut down in their local park, particularly ash trees. Former Parks Superintendent Kevin Briski promised to develop a new tree management policy for Warner Park. That promise was not fulfilled. Wild Warner also tried and failed to save two older wooden bridges in the park which the city replaced with larger concrete bridges; this required the cutting down of several mature trees, including the park's largest and oldest cottonwood tree which provided shade for a large area overlooking the water. Although the group successfully lobbied the city to study and implement humane geese

management, the city still conducted as least one Canada Geese roundup in Warner Park and another in Vilas Park.²¹¹

B. Characterization of Wild Warner within the Environmental Movement

From the beginning there have been very strong philosophical differences within the group. Original members included several animal rights activists alongside an avid hunter; a dedicated cyclist and planner pushing for bike path expansion while the majority of us opposed more paved surfaces because of wetland water quality and tree-cutting; passionate restorationists who wanted to remove all the park's non-native vegetation and replace it with native vegetation alongside members (myself) who did not want the understory completely removed because of objections to Madison Parks' pesticide- and fossil-fuel-based restoration practices and the impact on shrub-nesting birds; dog park founders and defenders alongside members who wanted parts of the dog park (the wetland shore) fenced off to protect bird habitat which would have reduced the area of the dog park; members who were deeply uncomfortable with challenging public officials at meetings through our frequent testimonies, and who focused on building alliances, instead; and a passionate Warner Beach defender, beautificationist and gardener who has personally planted and maintained ornamental and native flower arrangements on the edge of the Warner Beach parking lot and around the bathhouse for years.

These differences make for lively meetings and occasional furious debates. When I gave a lecture recently to Wild Warner on the group's history and stated that our group has "never agreed on anything," a founding member jokingly yelled "That's not true!" After the lively debates we always make a point to share beer and pizza, immediately afterwards. This is what Stoecker (1994) calls "social glue" along with frequent sharing of stories and photographs of the park's wildlife, parties, Christmas caroling in the neighborhood and then singing to the animals

in the park, barbecues, planting trees and prairie plants in the park. We celebrate together, even as we fiercely debate.

The different philosophical strains within Wild Warner reflect the complexity of the contemporary environmental movement and make it difficult to place the group in any one category. In the list above of 20 policy changes, the verb “stopped” appears 10 times, signaling a strong preservationist current in the tradition of Sierra Club founder John Muir, champion of the Hetch-Hetchy Valley and passionate opponent of the Roosevelt administration’s proposal to dam that valley. In 1909 Muir wrote: “...In June and July summer is in prime, and the tide of happy, throbbing life is at its highest. August is the peaceful season of ripe nuts and berries—raspberries, blackberries, thimbleberries, gooseberries, shadberries, currants, pucker chokecherries, pine-nuts, etc., offering royal feasts to Indians, squirrels, and birds of every feather.”²¹²

This passage reminds me of some of my own writing about Warner Park, minus the Indians and thimbleberries. But Warner Park is not the pristine wilderness that Muir was defending in Hetch-Hetchy. And environmental historians argue that Hetch-Hetchy was not pristine wilderness, either, and that in fact, there is no such thing as pristine wilderness.

Wild Warner also has an environmental justice emphasis, based on the understanding that environmental justice means caring about the environment “where we live, work and play” (Alston, 1990). Warner is a very urban park surrounded by lower-income neighborhoods and hundreds of schoolchildren. Wild Warner’s defense of the park’s greenspaces (stopping a parking lot), emphasis on children’s education programs, and opposition to the dumping of toxins in Warner’s waters and on parkland fits within the environmental justice framework. This is also why the group has not just defended the park’s wild side” or “natural areas. In 2014, the group challenged a city engineering project in an area of turfgrass and sports fields. The project

to re-concretize a cunette and cover it with rubber matting would have meant cutting down at least 30 trees at the entrance to the Brentwood neighborhood. This entrance is at a major intersection on Sherman Avenue, an increasingly busy traffic corridor. Some members were deeply concerned over how the re-concretization proposal would affect the neighborhood which already has a reputation for crime. The large and beautiful cluster of trees facing three blocks of dilapidated apartments softened that entrance. The area was also going to lose over 100 trees because of the city's policy to cut down ash trees to combat Emerald Ash borer. With the support of the Brentwood Neighborhood Association, the group spent three months working on a counter-proposal to defend one of the more urbanized corners of the park.

Our group also has a strong conservationist strain, a philosophy based on the belief that humans can efficiently use and manage natural resources. Gifford Pinchot, the chief of Teddy Roosevelt's US Forest Service and one of the first leaders of the conservation movement, wrote that conservation is based on three principles: development, preservation, and the use of natural resources to benefit the greatest number of people for the longest time. Pinchot's tenure coincided with the Progressive Movement; conservationism was based on the progressive tenet that our species can solve huge problems through science. I see this tendency within Wild Warner in our group's participation in city and DNR efforts and future plans to "fix" the wetland.

Aldo Leopold's ghost is usually present at our monthly meetings. In fact, if there is any one historic influence on our group, his may be the most pervasive. Creator of the discipline of wildlife ecology, Leopold's land ethic (1949) which "...simply enlarges the boundaries of the community to include soils, water, plants, and animals, or collectively, the land..."²¹³ could be the group's ethic. Our group's protection of the wetland, and our restoration and management

activities fit within Leopold's stewardship concept. This phrase from his "Sand County Almanac" (1949) defines why our group believes Warner Park is an extremely important place: "The weeds in a city lot convey the same lesson as the redwoods."²¹⁴ Leopold also emphasized that humans should evolve from seeing ourselves as "conquerors" of the land-community to becoming "plain" members and "citizens" of that land-community.²¹⁵ I have helped to craft the group's message and am responsible for much of the language. When I have spoken publicly in defense of Warner's "furred, feathered and finned residents" and call the Great Blue Heron "our neighbor," it is because of the influence that Leopold's writings have had on me.

As I created a five-year timeline of the group's activities and analyzed chains of causality, I realized that these philosophical differences outlined above are the group's greatest strength. The diversity of views within the group also coincides with a diversity of professional backgrounds, education levels, skills, and social networks. The diversity of our social networks magnifies the group's ability to influence policy and to build alliances. This is described in detail in Chapter 8 on Rhythm and Booms.

Despite the different philosophical currents within the group, there is one unifying theme: most of us oppose further building in the park. We want to keep the greenspaces green, although we may not agree on exactly how to manage those greenspaces or what type of "green" should be in them. Perhaps we could be called "greenspace preservationists." We also all support broadening the concept of recreation to include "nature-recreation," instead of the current active vs. passive recreation dichotomy promoted by the city of Madison.

C. Group Demographics

The demographic profile of Wild Warner members today is similar to the profiles of the park's first three defenders analyzed in the first section of this chapter: members are almost all

white and over 45 years-old. The majority of Wild Warner's active members are unemployed, retired, or marginally employed, and live in the neighborhoods that surround Warner Park. Most members have attended some college. Several members live or have lived in the low-income apartment buildings surrounding the park. Annual dues range from \$20.00 for a family membership to \$10.00 for students and senior citizens, reflecting the low-income base of the group. This demographic profile in terms of age and ethnicity began to shift slightly in 2014 when students from the local community college, Madison College, which is 2.5 miles from Warner Park, became involved with the group. One Madison College student who is Latino is now a member of Wild Warner's board, the group's new webmaster, and one of the park's bluebird trail managers.

Since that first July meeting in 2011, the group has met on the first Tuesday of nearly every month for the past five years in the WPCRC. The group now has an e-list of 80 people and a Facebook page. At regular monthly meetings, at least a dozen people (members and non-members) regularly attend with alders occasionally dropping in. By 2014 the group's membership included a Dane County supervisor, a former alder, a member of the Madison Board of Parks Commissioners, and a member of the city's Plan Commission.

III. How Wild Warner Built Strategic Capacity through Research-Based Advocacy

A. Research and Strategic Communications

Based on an analysis of six field notebooks on Wild Warner's meetings, my own files, the website, interviews with members and the organization's official documents (website, brochures, special reports and memoranda for public officials and the press), meeting agendas and minutes, the files of Wild Warner's first chair, Jim Carrier, testimonies to city commission

and committees, and the archives of founding member Jack Hurst, the group's central activity for the first five years has been research-based advocacy. By closely watching city politics and monitoring all city bodies that affected the park (reading their monthly agendas, reviewing minutes, attending meetings, reading supporting documents, emailing their members), we were able to organize quickly to oppose policies and research alternatives.

Wild Warner won policy battles through careful observation in the park, documentation, and then by publicizing our findings or sharing our findings through public testimony in the form of story. The most important venue for presenting our findings was the parks commission. I also observed that our testimonies had more power and impact when we shared our findings through personal stories. Ganz (2001) stresses the importance of storytelling as "performance," by which he means that it is not just the story that is important, but also the identity of the person telling that story, who the storyteller interacts with, and when and how this person chooses to tell their stories. In my case I focused on the individual birds that I was finding in the park. I began testimonies by consciously identifying myself as a graduate student studying birds in the park, and later as the director of the children's program in the park. At the very first parks commission meeting I testified at on September 9, 2009, when we first tried to modify the Northside Neighborhood Plan, I began testimony with stories about the birds I'd seen that same morning:

My name is Trish O'Kane and I am getting a doctorate in Environmental Studies at UW-Madison. I've been studying the birds of Warner Park for a year and a half. As of this morning, I've clocked 130 hours in our park and found 86 bird species. Just this morning, I crossed the meadow and surprised a young Red-tailed hawk catching a vole. Then I went to the bridge by the dog park and within 15 feet of each other, on the edge of the marsh, there was an entire wood duck family, an American Bittern, which is a very shy and solitary marsh bird, and a Great Blue Heron. Just to my right, two Sandhill Cranes grazed on the grass. And for the past three weeks, we've had an osprey flying around, carting fish in its sharp talons. Fifty years ago, this bird was nearly extinct.

Immediately after my three minutes was up, Parks Commission Chair Bill Barker

leaned forward in his seat and said loudly and incredulously: “You saw *an American Bittern*?...I’ve got that bird’s call on my cell phone.” Then he took out his cell phone and tried to play the birdcall for all present.

Four years later, at the parks commission meeting on April 10, 2013, several members of Wild Warner and I testified in opposition to holding Rhythm and Booms in Warner Park. We stressed the findings in the city’s 2012 water test regarding the high levels of perchlorates found in Warner’s waters immediately after the show. Commissioners had to vote to approve the July event that night. I began testimony by sharing that I had just found bird species #134 in the park, a beautiful duck migrating through called the Common Goldeneye. Wild Warner member Paul Noeldner followed testifying about three American Woodcocks we had just found in the meadows, performing their dawn sky dance that Aldo Leopold described in his Sand County Almanac. Paul started by playing the woodcocks’ peenting call on his cell phone for the commissioners:

This is Wild Warner Park. You might not recognize it...That's a woodcock. I'll tell you a story about it (Noeldner holds up a stuffed woodcock). We enjoy this park. The animals are in there all night long with whatever we put there, however we treat it...We got up at 5:00am in the morning. Trish and Jack [Kloppenburg] talked me into this. We sat there in the dark waiting for the magic of the woodcock's spring performance which some people think you have to run out somewhere to see. But its right in our neighborhoods...We sat there very quietly and we heard those peent calls. Then in a few minutes we hear that wonderful whistling call which they actually make when they fly straight up in the air, about 300 feet. They're so ugly they have to do something to impress the ladies, I suppose...Woodcocks have huge eyes and big brains. They are very smart. Show them some respect. It's not just trash and a landfill. This is a beautiful area. You should come...You don't have to drive to Northern Wisconsin to see them... Woodcocks can eat 22 earthworms in five minutes. The sky dance of the woodcocks is the fireworks we love. We want to support that, too. Keep chemicals out of my earthworms is what the woodcock would say.

Just before the vote on the fireworks show, Commissioner Barker stated:

One thing that friends of Wild Warner have highlighted over the last few years is the quality of habitat. I think it's kind of amazing. I know of three other places where we

have woodcocks: the Arboretum, Cherokee Marsh and Governor Nelson Park. And I'm very pleased to hear that there are woodcocks in Warner Park. That made my night. So I think these folks have done a real good job by documenting 134 and counting bird species using citizen science and middle school kids...I'm a fireworks fan but I think that fireworks over a wetland that feeds into our biggest lake in town is inappropriate. I can't support this continuation of Shock and Awe anymore. So I will be voting no. I can't stand up and play the call of an American bittern and then vote to shell their home. Those 134 birds we're all excited about. Let's stop firebombing them.

Commissioner Madelyn Leopold followed with a similar statement. Although the rest of the commission approved the July event, this was the first time in recent years that two parks commissioners had raised environmental concerns and voted against the event. This is an example of the power of stories about individual animals to eventually change environmental policy. The telling of detail-rich, sensory stories can make the invisible, visible.

I also observed and analyzed the mechanics at parks commission meeting by attending meetings for four years and studying how to influence commissioners more directly. For example, I learned that if I sent written information to the commission secretary the week before their monthly meetings, she would insert it into the print "briefing" packets that she mailed to commissioners ahead of the meeting (some commissioners are more likely to read a print document than an emailed attachment). This was an important mechanism for informing commissioners about issues before the meetings. This mechanism also worked with the city council. This discovery is the kind of "minutiae" that Flyvbjerg (2006) describes as vital to analyzing case studies. And I also discovered that often it was the minutiae within parks commission minutes or the minutes of other commissions and committees that helped to build the timelines that were key to determining causal links.

Within two years of this information work, parks employees and other city sources also began feeding us unsolicited information about the park, the parks department and city policies.

Using journalistic skills and methods, we were able to establish these inside sources who helped us. In the five-year timeline I constructed based on six reporting notebooks, and from studying transcripts and minutes of parks' commission meetings, it is also evident how commissioners attitudes began to shift over time on some key issues, particularly the firework show, Rhythm and Booms, and the importance of Warner's wild spaces for environmental education. Of course, some of these commissioners were very sympathetic to begin with.

Our organization could not have accomplished all these policy changes if not for the quiet yet steady support of a handful of key allies in powerful city positions: an alder, a county supervisor, and three parks commissioners. I also believe that my position as a graduate student helped establish these alliances. Two of the three parks commissioners in 2009 were professors at UW-Madison. A third parks commissioner was a former masters student at the Nelson Institute for Environmental Studies. However, these allies did not always vote in our favor. We often had our differences. But especially during the group's first three years, they helped us establish a strong foundation and a credible reputation. The reason we were able to establish these key alliances is because our advocacy was based on careful research. Our allies knew they could trust the information we provided in the form of testimonies, news articles, opinion columns, white papers and email memos. These officials knew that at times our information was more accurate, complete and sometimes more trustworthy than information from the Parks Department. This was not because the Parks Department was deliberately misleading the parks commission, most of the time. It was because department employees simply did not have the capacity to gather facts and produce credible reports on one park like Warner Park while managing a system of 260 municipal parks. However, the last Parks Superintendent, Kevin Briski, had an adversarial relationship with the parks commission and certain

commissioners, in particular; he did not always or fully inform parks commissioners of department activities.

Primary research provided the foundation for Wild Warner's advocacy during the organization's first four years. The group basically had two nearly full-time, free, action-researchers at its disposal, myself and my husband. The decision to conduct my doctoral research in Warner Park allowed me to dedicate an inordinate amount of time to researching and reporting while most Wild Warner members had to work regular jobs and raise families. I was exercising my academic privilege because I had the time to think and focus my research efforts on and in one small place (Calhoun, 2008).

My research efforts were more than doubled by the work of my husband, Jim Carrier, an investigative journalist with four decades of experience. While I was exercising my academic privilege, he was not. He earned no income or degree. He also served as Wild Warner's first chair and webmaster. His role as webmaster was critical. Jim is an expert in web design. He designed the Southern Poverty Law Center's "Teaching Tolerance" website which won a Webby award. His role as Wild Warner's unpaid investigative reporter, editor, web producer and web manager provided us with an immediate and credible publishing venue. We used the website to publish our own press releases and white papers. Jim created galleries for local photographers, broadening the group's base (at least two of these photographers testified at public meetings and joined the group). But most importantly, local media used our website for information about Warner Park. Jim also issued press releases for the group, sending them to key allies in the local press. This carefully targeted press work led to front-page coverage in the Wisconsin State Journal of our geese management proposal. It also led to television coverage of our opposition to the fireworks show based on environmental concerns.

In this age of social media, where open participation and constant communication is generally viewed as positive and to be encouraged, as Wild Warner's first chair, Jim decided to employ the opposite communication strategy: to maintain strict control of the group's email list and website, and not to allow open participation (the website does not have a "comments" section and Jim is the editor of all articles and blog posts). We have both found during our organizing efforts in Madison that most people are so inundated with email that they do not read them anymore. Jim only sent out well-crafted, professional, short emails that contained vital information. Members rarely received more than one email per week, if even that. This minimalist approach meant that policymakers and other very busy members knew that if they received an email from the group, they needed to read it. This strategy was effective.

Jim did this volunteer work because:

The park reminds me that there's something bigger than I am. It brings me pleasure, knowledge, a fascination and appreciation for creation. The fact that an eagle comes into our park—it's significant that they enter our lives and bring a world to us that we don't see in this house. A wild eagle is a connection. It reminded me of my own nature, of being alive, of being a species on this planet...I like to hear the sound of it [the park]. The silence. The wind making different noises in the different habitats. It muffles the airport, the roads, the leaf-blowers...I'm doing this strictly to help the critters and the sense of space that is not paved over, developed, lit up. The birds came in and said—hey, we like this place. And we say—okay, we'll do whatever we can to help you stay here.²¹⁶

B. The Role of Environmental Education

After research-based advocacy, the group's second most-important activity is public education. We are the only parks-based group in Madison with its own ongoing avian baseline survey. In the fall of 2010, I created the children's Nature Explorers program which is a continuing five-year partnership between UW-Madison, Sherman Middle School and Wild Warner (see chapters 3-7). In five years this program has worked with more than 250 local schoolchildren and 123 college students. It is the only major environmental education program

based in a Madison city park that is not a conservation park. At the parks commission meeting in March of 2015, parks commissioners stated that they wanted the parks department to study how to expand this program. According to a former parks commissioner, a former alder, a county supervisor and a DNR employee, it has led to a shift in how Warner is viewed. Here is how DNR Fisheries Manager Kurt Welke responded when he learned about the Nature Explorers program:

Warner is no crown jewel but it's THEIR place...just like the crummy old burned-out woods that surrounded my childhood home (now Owen Conservation Park on the far west side). As kids we never noticed the honeysuckle invasion or box elders or eroding drainage conduits. We saw adventure, escape and endless possibilities when we took to the woods—as did every kid in the Crestwood neighborhood. It was THE asset and got more time than any ball diamond, tennis court or basketball court. It's clear now that it was formative for myself and my neighbor kids—many of whom went into careers in natural resources and still put nature appreciation as a defining part of their lives.²¹⁷

Group members have also been leading free monthly nature walks for the past three years, introducing hundreds of Madisonians to the park's wild side. Former alder Anita Weier came on one of our first nature walks in 2011. She later told our group that “Before this I thought Warner Park was only sports fields. But after that walk, I realized it was a lot more.”

In 2015, Wild Warner Education Coordinator Paul Noeldner inaugurated the first Northside Nature Center inside the Warner Park Community Recreation Center. This same year, for the first time ever, the Parks Department began funding “nature-recreation” activities in Warner.

Chapter 9 A Case Study Within a Case Study: Fireworks in Warner Park

“The most common way people give up their power is by thinking they don’t have any.”

Alice Walker

I. Introduction: Environmental Justice and Fireworks

The research questions I attempt to answer in this case study within a case study are also “how” and “why” questions (Yin, 2009): How and why did “the largest firework show in the Midwest” called “Rhythm and Booms” get placed in Warner Park? How and why did Wild Warner decide to oppose this event? How did the event impact the wildlife, waters, land and people living around Warner Park? Why were neighbors who opposed this event silenced or ignored for nearly two decades? Is the placement of this event in the same wetland for 21 years an example of environmental injustice?

The placement of Rhythm and Booms for 21 years in a lower-income area of Madison began as an attempt to address local socioeconomic issues by spurring local businesses, donating to local charities, improving the region’s reputation, building a more positive, family-friendly “Northside” identity, and by creating a sense of community. These were some of the goals of the region’s new Northside Planning Council (NPC) which helped organize this event in 1993 in collaboration with the city of Madison and fireworks organizers. The NPC embraced the firework show as part of a package of measures to change the Northside’s reputation as a crime-ridden area, and showcase its amenities.²¹⁸

This chapter outlines how after several years, as Rhythm and Booms grew in size because it was so successful, the event no longer met some of the NPC’s original goals and began to have negative consequences for Warner Park and its immediate environs. Local police became

increasingly frustrated with the amount of time and resources they had to devote to preparing for the event months in advance, in an area with increasing gang violence. Northside police complained publicly and privately about the event's impact on the Northside at nearly every meeting they attended. Former alder Anita Weier said that for the first 16 years, local charities benefited from the event but during the last five years, the event "was in the hole."²¹⁹ "It [Rhythm and Booms] gradually got bigger and bigger turning into more of a big drunk." Local fishermen and an aquatic biologist studying Warner lagoon for 50 years also witnessed the marked decline of Warner's fishery in the 1990s, largely because of the increase in stormwater runoff. But both fishermen and the biologist also believed the fireworks were having a negative impact.

Two water studies done by the city's public health department, one in 2005 and another in 2012, both determined that the annual fireworks show had an impact on water quality. The 2005 study concluded that the fireworks resulted in "reduced water quality."²²⁰ The 2005 study just involved water sampling; there were no tests of sediment. But the water test did provide a baseline for the 2012 test. The 2012 study included testing of sediment, soil, vegetation and water at Warner Park. However, since there had been no prior baseline testing of sediment, soil and vegetation ever in Warner Park and its wetland, the 2012 study had to establish that baseline. Authors of the 2012 report concluded that "The annual Rhythm and Booms fireworks display has measurable impact on the environment. The most discernible impact is the spike in perchlorate..."²²¹ The 2012 study focused on two "contaminants": perchlorate used as rocket propellant and heavy metals used to create the colors in the pyrotechnics. The report stated:

Perchlorate is both a naturally-occurring and man-made chemical that is highly soluble, mobile in surface water and groundwater, and can be persistent in the environment. Detection of perchlorate in surface water and groundwater has recently fueled studies around the United States, and there has been particular interest in its potential threat to

drinking water. At elevated levels, perchlorate may have adverse health effects because ingestion of the chemical can interfere with iodide uptake into the thyroid gland in mammals and aquatic vertebrates, such as fish. However, the dose/response relationship has not yet been adequately assessed.²²²

The 2012 research team's first recommendation to the city of Madison was to somehow "curtail" fireworks events in Warner Park until a "replicated scientifically reviewed study could be conducted." They added that researchers could not determine whether or not aquatic organisms living in the wetland were affected by the fireworks without further study. Based on these findings, the city's Committee on the Environment unanimously made four recommendations: 1) that Warner Park be "...cleaned in its entirety following the event;" 2) that duds be disposed of properly; 3) "...that low or no-perchlorate fireworks be used; and 4) that research be completed "...regarding what the most environmentally-ideal fireworks display would be with regards to height of detonation, location, etc."²²³ With the exception of the recommendation on dud disposal, both the city and fireworks producers ignored the other three recommendations during the 2013 show.

From Social Justice to Environmental Injustice

The transformation of Rhythm and Booms from an event intended to alleviate social justice concerns to an example of environmental injustice in Madison was a gradual and complex process, and not caused by any one actor or policy, which is typical of minority communities that become sites for pollution (Stroud, 2003). Stroud (2003) studied Portland, Oregon's Columbia Slough, the city's most polluted waterway, where a very high percentage of residents in surrounding neighborhoods are African American and recent immigrants. Her research found that: "...the Columbia Slough has appeared on the cognitive map of many Portlanders as a

throw-away place, an area best suited to industry and waste. That perception, which has a multiplicity of origins, is as much a cause as an effect of the environmental disaster at the slough. Portlanders in power thought the North Portland Peninsula was a disaster, and so it was.”²²⁴ I believe that Warner Park, and particularly its wetland, like Portland’s Columbia Slough, became a “throw-away place” on Madison’s cognitive map because the city chose it as a filter to protect stormwater flowing into Lake Mendota from a 1000-acre watershed, and because it became a firework launch pad for 21 years.

The Warner Wetland case fits within the paradigm of environmental justice in three additional ways: 1) local knowledge and experiences was devalued (Fischer, 2000). For over a decade and before Wild Warner became involved, neighbors, alders, two scientists, local activists and fishermen like Jack Hurst raised questions about possible environmental and human health impacts of the event. Their questions were ridiculed or ignored; 2) There was no planning or funding for water, sediment, vegetation and wildlife testing for possible environmental impacts and bioaccumulation in aquatic organisms, and no baseline studies. Over 21 years the city of Madison spent at least one million dollars (a conservative estimate) to subsidize the fireworks and less than \$50,000 on two water studies that local alders and activists had to fight for.²²⁵ Powell and Powell (2011), who have studied the correlation between environmental racism and fish toxins in Madison, concluded that the choices policymakers and individual scientists make about which environmental health issues to fund and study, and which ones to ignore are not “deliberately ill-intentioned. Rather, they are rooted in long-standing political and sociocultural values that shape institutional priorities; the government cultures provide the range of options available to the scientists. The individual actors...work within deeper institutional structures of scientific research, with values so pervasive that they are as invisible as the

minorities and poor they make invisible.”²²⁶ Powell and Powell (2011) describe how the choices about what to study and what not to study result in data gaps that create a “chicken-egg problem: no toxin data, hence no risk, and no risk, so no need to get more data.”²²⁷

In the case of Rhythm and Booms in Warner Park, the decision not to conduct water studies led to a data gap that created this same “chicken-egg” feedback cycle. At public meetings I and other Wild Warner members attended between 2010 and 2013, city officials and fireworks organizers consistently argued that there was no data to prove environmental degradation due to fireworks, and because there was no data, there was no risk, and because there was no risk, there was no need for data. Some also argued that it would be impossible to differentiate between pollution caused by fireworks and pollution from stormwater runoff flowing into the wetland from surrounding neighborhoods in a 1000-acre watershed, particularly because there were no baseline studies; 3) Warner Park, and particularly its DNR-owned wetland gradually became a “sacrifice zone” and “dumping ground” (Bullard, 1993; 2005) for a fireworks show that Madison public health officials admitted could affect public health.

In an email I received on September 2, 2011, Madison’s Director of Environmental Health, Douglas Voegeli wrote that some of the firework compounds were insoluble, would bind to Warner’s sediment, and “...should not be a health issue, unless the sediment is disturbed.” I had written to ask if children taking water and insect samples in the lagoon could be affected by fireworks compounds. Voegeli recommended: “My recommendation would be to not come into contact with the sediment; however, if you (your class) need to contact it, then proper hand washing should be completed as soon as possible.”

Metal salts provide the source of color in fireworks; these make up five to 15 percent of fireworks’ weight (Kosanke, 1995). According to local press reports, Rhythm and Booms

exploded approximately five tons of fireworks every year in Warner's wetland.²²⁸ The metals do not disappear. This means that every year for 21 years, Rhythm and Booms deposited 165 to 750 pounds of heavy metals or a total of between 3,300 to 15,000 pounds in a 60-acre wetland.²²⁹ During this same time period, the city of Madison also ignored a basic provision of the Clean Water Act so that it could authorize the launching of fireworks from and into the wetland.

The city of Madison's violations in Warner Park may just be part of a broader historical pattern citywide.²³⁰ On September 2, 2003, the DNR threatened to fine the city of Madison for six violations of state environmental protection laws that included filling in wetlands without permits, illegally discharging stormwater, and altering "environmentally-sensitive" areas without permission even after being ordered to stop building.²³¹ The city departments involved were engineering, parks and the city's water utility. The wetland-filling violation occurred when the city dumped dirt and demolition material into a tiny wetland near Commercial Avenue, two miles south of Warner Park.

A. Sources Consulted

For this case study I used the following sources: 1127 press articles in The Capital Times and The Wisconsin State Journal on the firework show in Warner Park; letters from and to public officials; two city water tests of Warner's marsh pre- and post-fireworks (2005 and 2012); fire department records and fireworks permits; studies on fireworks' impacts on ground and surface water; studies on the impact of fireworks on wildlife; studies on "green" fireworks; documents and reports from entities regulating fireworks such as the Department of Defense; the website for Rhythm and Booms and the Madison Fireworks Foundation; websites for national fireworks manufacturers and producers; transcripts of meetings of the Board of Parks Commissioners and the city's Commission on the Environment; minutes of the Board of Parks Commissioners from

the 1950s to 2013; attendance and participation at meetings of the Parks Commission, the Committee on the Environment, the City Council, two public meetings on Rhythm and Booms organized by local alders, the Dane County Watershed Commission, Progressive Dane, the Brentwood Neighborhood Association and Wild Warner; studies on fishing and toxins done by the Midwest Environmental Justice Organization (MEJO); formal interviews and informal conversations (both on- and off-the-record) with former NPC leaders who helped organize the first major fireworks shows in Warner Park, volunteers who worked at the first several Rhythm and Booms' shows, neighbors, wildlife rehabilitators, scientists and national perchlorate experts, Disneyland public relations personnel (Disneyland has pioneered "green" fireworks), anti-fireworks activists in other states (California and Washington), and alders and fire department personnel. The land and water in Warner Park were also used as documents for this case study. In 2012, Tim Nelson (then-Wild Warner Chair) and I conducted a pre- and post-firework kayak survey of Warner Park and its waters. I also collected fireworks debris between 2010 and 2013.

Historical documents pertaining to fireworks in Madison and press articles on Rhythm and Booms in Warner Park, along with interviews, were used to construct a timeline which I analyzed for chains of causality (Yin, 1984, 2009). This chain of causality helped to reveal how and why the fireworks were moved to Warner Park, how and why Wild Warner decided to oppose this event, and how this event gradually shifted from being a community solution to a community problem.

B. Wild Warner's Decision to Fight Rhythm and Booms

When we first began organizing, our group had no intention of stopping the fireworks in Warner Park. The event seemed impossible to stop since after nearly two decades, many neighbors considered it a "tradition." There was also no consensus within the group about the

show. Several members of our new group enjoyed the fireworks every year and had never considered possible environmental impacts. For some Wild Warner members, as for many Northsiders and Madisonians, the fireworks were a cherished annual family event.

A few of us were very strongly opposed to the fireworks because we could see the direct impact on the animals: terrified deer running out of the park and into traffic; geese flattened by cars as they tried to walk out of the park and cross Woodward Drive to get to Lake Mendota (geese and cranes cannot fly in late June and early July because they are molting); rabbits hit by cars as they hopped out of the park en masse one summer (“so many dead bunnies!” one neighbor said); turtle’s nests buried by truckloads of sand heaped on the firework launch area (a turtle nesting ground) or blown up when firework installers dug down into that nesting area to cushion the mortars; and the 24- to 48-hour disappearance of most park birds.²³² Jack Hurst suspected that the fireworks were yet another factor degrading water quality, in addition to stormwater runoff. Aquatic biologist Paul DuVair, who studied Warner lagoon from 1964 to 2013, listed refuse from Rhythm and Booms, in addition to trash from storm sewers, as one of the factors filling in the lagoon and contributing to more frequent fish kills.²³³

The fireworks not only affected the wild animals. Northside veterinarians ran out of tranquilizers nearly every year, the week before Rhythm and Booms, according to the Northside Animal Hospital. I discovered this when I went to purchase tranquilizers for my own two canines. I learned then that neighbors who could afford it boarded their pets at kennels on the west side of Madison or outside the city for a few days.

During the group’s first year, in Wild Warner we agreed to disagree about the fireworks because we were divided. We avoided the subject. We had other issues to address, particularly the impending geese kill and our decision to regain the park’s meadows and change the parks

department's mowing regimes. As a group, most of us, including me, also thought: How much damage can one day of fireworks cause?

It was precisely because of our research and lobbying campaigns to regain the park's meadows and change geese management policies that we realized we had to stop the fireworks. As a group we slowly learned together and became educated about possible environmental impacts. Some of our members began regularly attending meetings of different city agencies to listen and learn about parks management. Through their findings, we discovered that this one-day annual event was determining management policies at least eight months of the year as regards mowing regimes, shoreline vegetation, and marsh burning for Warner Park. This is what sociologist Marshall Ganz (2009) calls strategic learning. By sharing information and analyzing it together, we were able to use "strategic resourcefulness" to compensate for our group's lack of resources and power vis-à-vis fireworks organizers (Ganz, 2009).

We first discovered that the fireworks were driving management nearly year-round when Wild Warner member Marie Jacobsen approached East Parks Supervisor Craig Klinke to discuss changing mowing regimes to regain our parks' meadows. Klinke informed her that that was not possible because fireworks organizers considered the meadows a "fire hazard."²³⁴ After this, Wild Warner members Marie Jacobsen and Jim Carrier began attending monthly city planning meetings for the fireworks show. They reported to Wild Warner each month on how the fireworks affected parks management. Jim Carrier attended meetings of the city's Committee on the Environment for nearly two years. Because of these members' regular attendance and careful note taking and analysis, our group began to understand how this one-day annual event was driving park and wetland management nearly year-round. Because of our information sharing sessions and group analysis at Wild Warner meetings, the opinions of members who supported

the fireworks began to change. Together we learned that the park's former wildflower and milkweed meadows had become mowed lawns because fireworks organizers, who participated in city planning meetings, were determining policy.

Martha Makhholm is an air management specialist for the Wisconsin Department of Natural Resources who conducted monarch surveys in Warner Park before Rhythm and Booms began in 1993. Makhholm informed me that before the fireworks show, the mowed grass on the wild side of the park "was all milkweed. They [the city] mowed it because of the Fourth of July. We used to count the caterpillars in here." Makhholm had been particularly disturbed to see the city mowing the meadows in mid-summer, right when they were full of monarch caterpillars.²³⁵

As I individually began to research alternative geese management strategies, I learned immediately that Canada Geese eat freshly-mowed grass, and they prefer to lead their goslings down to a stripped and mowed shoreline, free of shrubs and native plants because a clear sightline helps them protect their young from predators (Smith, Craven and Curtis, 1999). In effect, the months-long mowing preparations for Rhythm and Booms and the stripping of the wetland shoreline in Warner Park had created a gigantic geese nursery. Before the firework show began in Warner in 1993, neighbors remember few geese, if any. Warner was also a popular area for fishing, particularly for African American men.²³⁶ According to Gene Dellinger, who has owned the bait shop on the edge of Warner Park for the past 33 years, 18-20 years ago, there would be as many as 25 men fishing at the same time in Warner Park.²³⁷ Today it is rare to see even one. Dellinger talks to an average of 400 fishermen on a Saturday. He did not know why Warner's fishery had collapsed. He speculated that it was because of the huge increase in the geese population in the 1990s. He also said the whole lake system had changed in the late 1980s. Some fishermen blame the drop in Warner's fish species on the increase in the geese population.

Although most fishermen stopped fishing in Warner Park proper, fishermen of color still gather every weekend at the Warner marsh outlet that feeds into Lake Mendota. So although they have moved location, they are still consuming fish coming from Warner's fishery.

By the time I moved near the park in 2007, there were at least 132 Canada Geese in Warner Park, according to a 2007 Wisconsin DNR study. During fall migration, the geese numbers swelled into the hundreds as migrating geese flew over, looked down, and saw geese-friendly habitat. The park had become a Canada Geese magnet.

Alternative geese management entails removing the species food supply (in Warner Park, the frequently mowed grass) and restoring shorelines with shrubs and native grasses that do not provide clear sightlines (Smith, Craven and Curtis, 1999). Wild Warner realized as a group that promoting successful alternative humane geese management would also have to mean stopping Rhythm and Booms.

In the spring, the parks department often set fires on the marsh island and burned it. Since the park is surrounded by homes, the smoke filtered into neighborhoods triggering complaints from neighbors with respiratory problems. City conservation resource supervisor Russ Hefty conducts burns citywide in prairie and woodland areas to benefit native vegetation. However, in the case of Warner Park he told the Wisconsin State Journal that the burns made "Rhythm and Booms safer."²³⁸

Nearly every year, three months after the spring burning, the firework show itself started another fire on the marsh island. Since the only way to get to the island is by boat, the fire department did not try to extinguish mid-summer fires. Year after year, these fires burned sending smoke into surrounding neighborhoods. The Fire Department ignored complaints.²³⁹

After a nearly two year-long period of strategic learning (Ganz, 2009), our group decided that we had to oppose the fireworks for four reasons: First, we discovered that this one-day annual event was determining parks management policies for eight months of the year as described above. Second, we realized that the fact that the park was the launching site for “the largest firework show in the Midwest” framed how the park was viewed by many Madisonians, including environmentalists and biologists. Warner Park had become “the fireworks park” and therefore “too disturbed” to provide good habitat for wildlife. The fireworks rendered the wetland invisible and the wildlife invisible to anyone who did not live near the park. I heard this repeatedly from university professors and other birders when I first began studying birds in Warner Park. Some environmentalists who lived in other areas of Madison simply did not believe there could be so much biodiversity. Third, because of what could be called the “Rhythm and Booms effect.” On July 12, 2010, I took a walk through Warner Park with Cyclocross organizer Luke Batchelor-Clark to hear his proposal for a massive off-trail bike race. We were standing behind Sled Hill, arguing about the potential environmental impact of the bike race through the park’s meadows and woods when Batchelor-Clark commented on how Rhythm and Booms was already held in Warner Park every year. How much damage could an off-path bike race do, he asked me. Batchelor-Clark said: “I don’t want to use Rhythm and Booms as an excuse, but...” Two summers later, the Mallards baseball team tried to expand their own firework show in the summertime (at least four fireworks shows) into the parks waters without asking permission from the parks commission. The Mallards also had the parks department cut down one of the park’s only shagbark hickory trees, a large and old tree, so that they could use an unauthorized part of the park as a new firework launch pad.²⁴⁰ As I analyzed the Cyclocross

conflict and particularly, Batchelor-Clark's comments and then later discovered the Mallards' appropriation of public land without public approval, I realized that Warner Park had become the "Anything-goes-park," a default space for huge noisy and potentially destructive public events that neighbors would not tolerate in wealthier areas of Madison.

Finally, the annual show was filling in the wetland with fireworks debris, according to a 50-year aquatic biology study of Warner's lagoon. This debris disappeared from public view once it slowly sank in the water, in the hours immediately following the event. It settled there on the marsh bottom in layers. But the show also dumped a large and unknown amount of chemically-soaked non-biodegradable and very-slowly-biodegradable trash on park land that did not disappear.irate park users, and particularly dog park enthusiasts, found that trash daily for months afterwards.

C. Wild Warner's Tactics and Strategies to Fight the Fireworks

According to Ganz (2009), a successful strategy is based on three elements: targeting, tactics and timing. Wild Warner employed these three elements to end the fireworks show. First, we decided to target the issue of trash and pollution in the wetland—because it was visible--and to devote our energies to raising public consciousness not just about what the city's public health department knew about potential environmental impacts of this pollution, but even more importantly, about what the city did not know. As we conducted our own research and studied national literature on fireworks, we discovered a growing list of unanswered questions regarding the potential environmental impacts of fireworks on public health. We kept asking these questions in different public forums. The impact on the park and wetland's wildlife was also very important to us, but most policymakers did not care about the wildlife or even see it. However, it was their job to care about possible public health impacts, and to protect wetlands and observe

pollution laws. This became our main focus. Jim Carrier researched state wetland laws and asked the Wisconsin DNR and the Army Corps of Engineers to investigate the legality of filling the wetland with sand in order to build up the launch pad for the firework show. Jack Hurst had photographs of the wetland dating back a decade that showed how every year fireworks organizers trucked and dumped sand into the wetland, building up an artificial hill as a launching pad in the upland wetland area owned by the DNR. Investigators from both agencies found that the city had been filling in the wetland with sand and concrete construction debris without a permit for 20 years in violation of the Clean Water Act. The DNR and Army Corps then ordered the city of Madison to remove the sand and restore the wetland.²⁴¹

Secondly, Ganz (2009) writes that tactics should optimize use of one's own resources while limiting the value of the opponent's resources. We optimized our resources—ourselves, our time, our ability to listen and record information, and then our ability to share and analyze this information as a group—by spreading out and assigning individual members to regularly monitor certain city agencies, commissions and committees in the same way that newspapers used to assign reporters to cover a “beat.” I attended parks commission meetings (although many other members began to attend as well and criticize the fireworks). Marie Jacobsen began attending city planning meetings for Rhythm and Booms. Jim Carrier began attending Committee on the Environment meetings. Jack Hurst attended any and all meetings dealing with wetland issues (DNR, Clean Lakes Alliance, Dane County Conservation League). This tactic of spreading out and monitoring different bodies limited the value of our opponent's resources because usually the same person or persons represented Madison Fireworks at all these meetings while Wild Warner had different members attending the meetings of several different agencies. There was no one voice or face of Wild Warner. Policymakers began to hear more and more

voices criticizing the fireworks—not just one or two people who could be easily dismissed. As we began to speak out publicly and gain press coverage, neighbors and fireworks opponents who had given up and been silenced years earlier began speaking up, again. It began to appear as if Wild Warner was a much bigger and more powerful group than we really were; city officials and employees began to approach us privately to share information. Our membership began to grow.

This tactic of assigning different members to different agencies and policy-making bodies also optimized our resources because some of our members were not known as members of Wild Warner. They were members of other well-regarded community and environmental groups (neighborhood associations, conservation groups, Circle of Friends of Warner Park, senior citizen groups, Friends of Lakeview Library, animal rights groups). Nearly every one of our members had a rich network of contacts that multiplied their individual power and the group's power.

For Ganz' (2009) third element of timing, we focused on the use of the press. On the importance of timing to political strategy Ganz writes: "Opportunities occur when environmental change increases the value of one's resources...Opportunities arise not because we acquire more resources, but because resources that we already have acquire more value."²⁴² In the case of Warner Park and the fireworks, one of our most important resources—the birds and wildlife in the park—had acquired more value because of our advocacy prior to opposing the fireworks through our ongoing citizen science bird survey, our media work, our education program and our nature walks. On the Northside of Madison, at least, in the local press and at public forums, some people began talking about the wildlife in Warner Park for the first time. Lauri Lee, editor of the Northside News said in an interview that before I and other Wild Warner members began writing

nature columns, she had “no idea” that there were animals in Warner Park. Lee did not live on the Northside and did not know the park very well when she first became local editor:

The stories kept pouring in, stories about birds, fox scat. People were amused. It stuck in their brains, this awareness that there was another area to Warner. It was the land of the invisible. You take it for granted. I know that it's there, but I don't think about what lives there—the grasses, the water, the trees...I didn't realize how passionate people were about it. It was a surprise. Suddenly we had very heavy environmental coverage that grew the interest and conversations. I realized that a lot of people live on the Northside because of the greenspace.²⁴³

Ganz (2009) also emphasizes that opportunities arise at times of transition in the lives of individuals or communities. The moment when we began to publicly oppose the fireworks was also a moment of transition for the Northside community and for city officials vis-à-vis the fireworks show. In 2012 at a campaign event for an alder, Mayor Soglin personally told us he was tired of the fireworks show and wanted to move it out of Warner Park; his change in opinion was key. At the same time fireworks organizers were struggling financially. City officials no longer wanted to subsidize the event.

As journalists, Jim Carrier and I knew how to target individual journalists. We began sending them regular emails with links to scientific studies, as well as lists of unanswered questions. We provided them with transcripts and audio recordings of meetings, as well as written summaries. In effect, we began to do the work that they were not doing because of media personnel cuts. We timed the release of information to allow local reporters to prepare to write stories just before and after the fireworks show. This strategy worked with both print and television media. Reporters began raising the issue of possible environmental impacts.

It is important to stress that Wild Warner did not stop the fireworks in Warner Park; we just accelerated its demise. We appeared at the right time and optimized our resources using the strategies described above. Mayor Soglin and local alders had already decided that the event had

become too big and too costly. Alders were hearing more and more complaints from constituents. Former alder Anita Weier believes that the push to end Rhythm and Booms succeeded because of three factors: 1) Wild Warner's advocacy; 2) the recommendations of the Committee on the Environment and her advocacy on that committee and push for a water and sediment study; and 3) years of complaining by neighbors.²⁴⁴ Based on my research I would add two other factors to Weier's list: 1) the growing frustration of the Northside Police Department with the number of hours and amount of resources they devoted, almost year-round, to this event. At public meetings, planning meetings and in private conversations, community officers complained vociferously and to the mayor about Rhythm and Booms. By 2012, the neighborhood was experiencing serious problems with gang violence and officers felt overwhelmed and over-extended; and 2) the role of Maria and Jim Powell, who organized the Madison Environmental Justice Organization (MEJO). Both Northsiders, the Powells organized local Hmong, black, white and Latino fishermen to push for local fish advisories. They conducted Madison's first and only community-based surveys on fishing and consumption. Their persistent public education work raised the consciousness of both the local press and the public health department about local water quality. MEJO laid the groundwork for Wild Warner's later success in helping to remove the firework show from Warner's wetland.

II. Why the City's Largest Fireworks Show Was Moved to Warner Park

This section traces the history of the fireworks in the park since the late 1960s, and the history of the opposition to the fireworks. As I researched fireworks history first in Madison and then in Warner Park, specifically, I began to realize that there had been opposition to Rhythm and Booms almost from the very beginning. The hidden history of opposition to the fireworks

parallels the political history of opposition to park development chronicled in Chapter two. Wild Warner members were not the first Northsiders to raise questions about the fireworks; we were just the first *organized* group to do so. Alders estimate that opposition on the Northside to the fireworks was as high as 50% by 2013.²⁴⁵

In 1950, the Madison Lions Club, a major service organization that helps the blind but also supports a myriad of causes ranging from neighborhood centers and children's education programs to dance recitals and soil conservation, began hosting an annual Fourth of July fireworks show in Vilas Park, right next to the Vilas Zoo.²⁴⁶ That very same year the zoo acquired "Winkie," a large female Burmese elephant named after former zoo director Fred Winkelmann.

Madisonians loved the annual firework show and the crowds grew by the year. Susie Lindau of Madison wrote: "I remember piling into the family car and driving to the Henry Vilas Zoo to watch the fireworks. People from all over Madison would search the park grounds for a patch of grass with an unobstructed view free of tree branches. As it became dark, we would anticipate the boom of a blank which would be fired off to silence the crowd and start the display. Finally one would roar overhead and explode into a myriad of blazing color. "Ooh. Ah!" the crowd would exclaim." It wasn't only the crowd that exclaimed. In their zoo cages the howler monkeys howled. Camels, bison, emus, disgruntled peacocks and lions joined the chorus of "restless and distressed animals," according to Lindau. Standing above them all, Winkie the elephant trumpeted loudly.²⁴⁷

Sixteen years later, on June 28, 1966, a 3-year-old girl crawled under the fence in front of Winkie's cage to offer the animal some popcorn. The 7,500 pound elephant suddenly pulled the child through the bars and stomped her to death while her parents watched, helplessly.²⁴⁸

Six days later the annual July fourth firework show in the zoo continued. But at the August meeting of the Board of Madison Parks Commissioners, the Commission's secretary reported receiving several written complaints from the Zoo Director and citizens about the fireworks show. Parks commissioners voted to appoint a committee to discuss the future of the fireworks.²⁴⁹

The following year, at the parks commission April meeting, Lion's Club members made a formal request to hold the fireworks again at the zoo. Commissioners unanimously denied that request. The park commission minutes did not list a reason for the vote against holding the fireworks at the zoo.²⁵⁰ One month later at the commission's May meeting, the Lion's Club asked commissioners to reconsider the matter. Commissioners decided to allow the Lions Club to hold the fireworks next to the zoo for just one more year on the condition that the Lion's Club find a future alternative location.²⁵¹

The Dane County Humane Society did not agree with this decision and sent a letter to the parks commission "encouraging the discontinuance of the fireworks display at Henry Vilas Park Zoo..."²⁵²

One year later, in 1968, at the June Parks Commission meeting, members of the commission's fireworks committee announced that the Lions Club was moving the city's firework show to Warner Park.²⁵³ A firework show would also be held at Westmoreland Park.

The new Warner Park show held on July 4, 1968 was the city's largest fireworks display, ever. Sixty thousand turned out for the event, according to the Wisconsin State Journal. The newspaper also reported that the event "was moved from Vilas Park to Warner this year because the noise had disturbed zoo animals."²⁵⁴

At that time, neither the Dane County Humane Society nor parks commissioners questioned how the fireworks would affect the animals that lived in Warner Park, according to the minutes from the parks commission meeting on August 3, 1966. From 1966 until 2013, those animals were invisible. We see the elephants and giraffes in cages and value them because they are “wild.” We do not see the painted turtle laying her eggs in a nesting area that doubles as a firework launch pad, or the sandhill crane chick hit by a car during a huge firework show, or the dozens of terrified ducks and geese hiding in a canal alongside the dog park during the fireworks, or the fish underwater rained on by wires, fuses, ignition devices, plastic, rope and chemical-soaked cardboard mortar casings.

The Lions’ Club sponsored the larger show at Warner for two years, from 1968 to 1970 (this show was nowhere near the scale of Rhythm and Booms). Neighborhood associations surrounding the park funded smaller annual displays after this. These smaller neighborhood-based firework shows in parks also took place in other parts of Madison.

As described earlier in this dissertation (see Chapter 2), in the 1980s, the Northside area of Madison was hit by a crime wave. Warner Park was affected by this crime wave as were municipal parks nationwide (Central Park is the most famous example of this phenomenon). By 1991, a group of Northside neighbors was working hard with city officials to create a first neighborhood plan. In 1993, this group set up the Northside Planning Council (NPC), a grassroots coalition of community groups that was the first of its kind in Madison. This organization aimed to create a regional identity within the city of Madison by bringing together a series of clustered neighborhoods and organizations. Northside activists who undertook this campaign spent hundreds of hours at meetings over the years. In just ten years, dozens of people working together very, very hard, turned around a major region of Madison, revitalized several

neighborhoods, created a regional identity, built a 32,000 square-foot community center, and set up community services and programs which became national models.

The decision to turn the fireworks into a much larger show was part of the Northside Planning Council's grassroots campaign to build community pride and identity.²⁵⁵ A well-known philanthropist, environmentalist and fireworks enthusiast, Terry Kelly, offered to help the NPC improve and greatly expand the small neighborhood firework show that had been held since the Lions' Club moved the city show to Warner Park in 1968. Kelly wanted to help the Northside create an event that would draw people not just from Madison, but from around the Midwest. Kelly's goal was to help Madison become another Columbus, Ohio, where hotels were booked by March for that city's annual firework show which the press reported as contributing tens of millions of dollars to the local economy.²⁵⁶ The Greater Madison Convention and Visitors Bureau estimated that year that Madison's economy could receive \$1 million from Kelly's new event.²⁵⁷ Kelly told reporters that the event was not about the money: "This is a way of bringing together the entire community. It is something to sit down and enjoy."²⁵⁸

Kelly had the energy, resources, contacts and expertise to create that community and organize a world-class event. In 1986 Kelly organized the largest event Madison had ever seen, the "Festival of the Lakes," drawing a crowd of 100,000 for four days of music, theater, dance and art. The festival was capped by a \$34,500 firework show on Lake Mendota that lasted 22 minutes. Kelly's dream was to create a similar event that was even bigger and to center it in Warner Park.²⁵⁹

In 1991, when he was looking for a pyrotechnic company to put on a special firework show for his wife's 40th birthday, Kelly discovered Sunset Ltd., the nation's third-largest firework maker in the country at that time. The St. Louis-based company produced shows for the

Rolling Stones, Disney World, Six Flags amusement parks, Universal Studios, SeaWorld, the Toronto Blue Jays and other major league baseball teams, and staged huge shows in St. Louis, Philadelphia and Columbus, Ohio.

Kelly's community-building goals and showcasing of this neglected side of the city that had made headlines just a few years earlier for shootings and stabbings meshed with the needs of the new Northside Planning Council.²⁶⁰ While Kelly organized the firework show, north side neighborhood groups organized all-day activities: two live bands--Kirby Vac and the Attachments, and then the Torpedoes, food stands, a beer garden, and a children's stage with plays and magic shows. They also asked city children to decorate their bikes and come join a special children's bike parade.²⁶¹ Brentwood leader Dave Meyer remembers that as one of his favorite activities and one that helped to build community.

"The mother of all displays" and "the greatest firework show ever in Madison" was how Madison's Capital Times described the first Rhythm and Booms, an event that could "...lure patriots and tourists each year...and pump millions of dollars into the local economy."²⁶²

Six days before the Saturday night show, Sunset employees drove two semis and a third truck carrying five tons of explosives into Warner Park on a Monday night.²⁶³ They began setting up the fireworks on a tiny peninsula jutting out into Warner's lagoon and facing the marsh island, lining up the mortars and covering them in plastic.²⁶⁴ A private security officer guarded the explosives. On DNR maps, the peninsula is marked as an upland area.

Four nights later, four F-16 fighter planes from the 115th Fighter Wing of the Wisconsin Air Guard soared over Warner Park, opening the show and thrilling the estimated crowd of 100,000 below. Each plane was worth more than \$20 million and could fly more than 1500 miles per hour.²⁶⁵ Wisconsin senator Russ Feingold helped Kelly secure the fighter planes from the

Wisconsin Air National Guard. As the national anthem played on the sound system, two huge searchlights illuminated the massive flag donated by a television company.²⁶⁶

The show's crowning moment came when the Sunset computer triggered a "dripping chrysanthemum," "the largest" firework ever detonated in the United States. Debuted in Madison's Warner Park, firework organizers had imported the 12-inch diameter shell from Japan. It was just "slightly" smaller than the gun diameter on the battleship USS Wisconsin, Terry Kelly told reporters.²⁶⁷

The new Rhythm and Booms was not only a more visually spectacular show than what Madisonians were used to, it was also a safer show, too, and "technologically improved," according to fireworks organizers. Instead of running around and lighting fuses, Sunset employees just had to pop in a digital audiocassette into a computer. The computer synchronized the explosions to the music.²⁶⁸ Kelly said that Warner Park was one of the safest places in the nation for a firework launch because most of the fireworks' remains landed in the water and disintegrated.²⁶⁹

At approximately 5:30am on the day after the first Rhythm and Booms, Gene Dellinger, 53, a fisherman and owner of a bait shop on the edge of Warner Park, saw something "puzzling." Dellinger was headed down Forster Avenue, which runs along the edge of Warner's wetland, on his way to Lake Mendota to fish, when he suddenly had to stop his car. A line of painted turtles and crayfish was heading out of the wetland and crossing Forster Avenue, heading into a suburban neighborhood that slopes up a gentle hill. In nearly five decades of fishing, Dellinger said he had never seen anything like this before.²⁷⁰ He wondered if the animals were leaving the wetland because of the vibrations from the fireworks the night before.

Some neighbors that first year wondered, too, about the debris that had fallen into their yards, gardens and swimming pools. Deborah Riese, a mother with two small children lived just a block from the park. She wanted to know what chemicals were in the debris and if they would have any effect on her garden soil.²⁷¹

III. Financial Conflicts and Environmental Concerns

It was money, not environmental concerns or complaints from neighbors that nearly killed the event the second year. From the beginning, there were conflicts between the main organizer and the city over the true cost of the event. That first year, according to Kelly, the event raised about \$10,000 for local education groups in Madison.²⁷² Wisconsin tourism officials estimated that the event generated \$2.1 million in business in Madison. They based their estimate on large fireworks shows in cities like St. Louis and Columbus where approximately 30 percent of the crowd travelled more than an hour to see the show.²⁷³

However, that second year in 1994, Mayoral aide Jane Richardson told the Wisconsin State Journal that although it was a "wonderful event," the city did not know where it could find the money to pay for it a second time. She added that the city did not know how much fireworks organizers actually spent on the event, how much money they raised for it, and what sources these funds came from.²⁷⁴ Parks Superintendent Dan Stapay also asked the parks commission in May, 1994 not to approve another Rhythm and Booms unless organizers agreed to pay for extra traffic control and cleanup. Stapay said since cleanup would be on a Sunday, the city would have to pay its workers overtime. The parks commission agreed with Stapay and did not approve the fireworks organizers' proposal.²⁷⁵

The mayor's office told Kelly he'd have to pay \$12,500 for 50 extra police officers to control traffic. The first year traffic caused gridlock on Madison's north side for miles according

to police. Emergency vehicles were unable to reach the park.²⁷⁶ This was a recurring problem over the 21 years that Rhythm and Booms was held in Warner.

Whatever economic benefits the event brought to greater Madison, and these may be considerable (no one has any real idea), within three years the honeymoon had ended on the Northside for some neighbors and former NPC leaders. In 1996, the two city councilwomen representing the districts around Warner Park asked the city council to vote against a proposed \$25,028 subsidy for the fireworks show.

"I love fireworks," Alder Roberta Kiewisow told Madison's City Council. "But we're so strapped for additional money, to pay \$25,000 for one night makes me appalled."²⁷⁷

"Had Mr. Kelly come to us in 1992 and said I want to have the fireworks but it's going to cost the city this much, we wouldn't have done it" said Alder Dorothy Borchardt.²⁷⁸

A few of the original Northside Planning Council organizers were also frustrated and angry after just a few years. The coordinator for the volunteer cleanup crews the first three years said that at first she was "charmed" by the fireworks show. But because of what they had to clean up, she became "absolutely disgusted by it."²⁷⁹ She lived on the edge of the park and was also disturbed by the debris she found the next day in her swimming pool. She recounted on the morning after the third or fourth Rhythm and Booms, cleaning up the VIP tent and finding the remains of chocolate-covered strawberries on the grass, underneath the chairs and tables. The honored guests from other areas in Madison had simply dropped their trash on the park's lawns: "It was horrible, backbreaking work. The longer it lasted, the more jaded I got. I called it 'the day from hell.' We wanted a Northside festival with local vendors, not snow cone vendors from Waunakee."

Another volunteer who participated in a clean-up crew in 1998 reported picking up dead goldfish in sandwich baggies that onlookers had dumped on the lawns. One of the fireworks concessions had given away goldfish in plastic baggies as prizes that year. The dead fish really bothered him. They also bothered middle school student Lauren Cheever, who attended the fireworks with her parents that year and later wrote a letter to the editor of the Wisconsin State Journal on July 24, 1998: "...I don't know what anybody else would call it, but I call it animal abuse. Fish are living and breathing creatures. Shouldn't they be treated with more respect?"

Several Northside activists who initially supported the fireworks eventually became seriously opposed to Rhythm and Booms both because of environmental concerns and because they felt as if the event no longer belonged to the neighborhood and had become too big. They questioned its economic and social benefits to the Northside.²⁸⁰ Two of these organizers, Jim and Maria Powell, eventually founded the Madison Environmental Justice Organization (MEJO) and began raising questions publicly about the impact of toxins from pesticides, stormwater runoff and other source on local water bodies and groundwater.

There were other complaints about public safety. In 1997, the show's fifth year, organizers promised new "aquatic shells launched in the water that will 'pop and burn.'"²⁸¹ Unfortunately, some of those shells also caused "minor" blanket fires in the park and burned a "handful" of people.²⁸² The following year, in 1998, fireworks organizer Terry Kelly warned Madisonians about possible fireworks "fallout," in an editorial published just before the event. He recommended wearing glasses for eye protection and said that 2000 pairs would be sold at cost in Warner Park. He reported that he was switching to cardboard casings for the largest shells and only using hard plastic casings for smaller fireworks. If anyone did get firework debris in

their eyes, Kelly wrote that emergency medical service units would be on hand to help wash it out.²⁸³

Despite the changes from all plastic mortar casings to some cardboard casings, in 1999—the show's seventh year--there were still several serious injuries. Three onlookers had to be hospitalized with second- and third-degree burns. One was hit in the eye. A story in the Wisconsin State Journal reported: "Many others could be seen at the show Saturday...shielding their eyes from falling embers and stamping out small fires."²⁸⁴ Lorrie Simmons, a neighbor watching the show, was one of those seriously injured. A few years later, she would become one of the first serious public opponents of Rhythm and Booms.

There were also growing complaints about the trash left behind after the event, and not just the fireworks trash. In 2000, the Wisconsin State Journal editorialized the morning after Rhythm and Booms that "Warner Park resembled the aftermath of a college fraternity party."²⁸⁵ By 2005, the paper reported that the complaint about trash from Rhythm and Booms "...is as perennial as a hosta. Last year there was some collective neighborhood outrage about trash in the area and in the lakes."²⁸⁶

However, in the beginning these complaints were few and far between, at least according to the public record; of the 1127 press articles reviewed, over 90% were extremely positive. And despite the nearly annual conflicts over costs and the city's periodic threats to cancel its annual subsidy, within just a few years, for many Madisonians the firework show had become a cherished and much-loved "family tradition."²⁸⁷ Large extended families planned their family reunions around the event. Dona Winkler told the WSJ on July 6, 1998 that 17 family members were meeting to go together, some from Illinois: "We always sit right up in front by the big tree and make sure we have enough blankets." That same year 50 members of Hope Fellowship, a

nondenominational church in Madison also came together. For years, my neighbors got up as early as 4:30am to put blankets on Sled Hill to reserve a spot. I myself looked forward to the “Rhythm and Booms” potluck that a neighbor hosted every year even though I hated the fireworks. Dave Cramer told the Wisconsin State Journal in 2008 that his family had been putting a blanket down in the same spot for over two decades, before Rhythm and Booms started. Cramer's sister, Linda Mishler told the newspaper that "Up here it looks like it's coming right at you. It looks like you're watching the biggest screen TV ever."²⁸⁸ When Mayor Soglin announced in 2013 that the fireworks would no longer be held in Warner Park, some of the neighbors and Northside community leaders who testified at a public meeting were in tears.

In 2003 Kelly stated: "Our goal has always been to make this one of the few things in the state in which all people from all walks of life--all economic capabilities, all races, colors and creeds--can come with their whole families and have a full family day of fun and not spend any money unless they want to."²⁸⁹ From the 21 years of press coverage and tearful testimonies by supporters at public meetings about Rhythm and Booms, it is clear that he achieved this.

In 2004, during the show's 12th year and seven years before Wild Warner entered the scene, neighbors and an alder raised the issue of environmental impacts on the wetland, wildlife and human neighbors; this was the first objection on environmental grounds that I could find in the public record.²⁹⁰ Lorrie Simmons, the 1999 burn victim, lowered a canoe into Warner wetland in 2004 on the morning after the fireworks and found “piles” of large plastic caps. At the firework launch site, an upland wetland area where turtles nested, she found old wire and boards with nails sticking up: “I’ve seen kids playing over here. And I’d hate to see a sandhill crane get one of these wires wrapped around its leg,” Simmons told reporters.

Alder Brian Benford, representing the 12th district, told the Wisconsin State Journal that he had heard “several complaints about the debris from residents.” “There’s no reason for this debris to be left behind. I’m concerned about contamination in the lagoon and the wildlife in the area.”²⁹¹

One month after Rhythm and Booms that year, alder Benford stated publicly that he had also raised concerns with both the police and concert promoters about the increasing use of Warner Park for big events such as Rhythm and Booms and Madison Mallard games. “The neighborhood is getting kind of pounded,” he told the Wisconsin State Journal.²⁹² He told a reporter that he wanted to “protect the neighborhood.”

Benford later asked the city’s public health department to follow up on public concerns about possible environmental contamination in Warner’s waters. Benford’s efforts led to the first pre- and post-fireworks city study of Warner’s waters in 2005.

IV. The Power of Trash: Making the Invisible, Visible

As the years passed and the event grew in attendance and firework power, it wasn't just the neighbors who noticed the firework debris. In 1964, Paul DuVair was a graduate student in aquatic biology at UW-Madison. He took a field course on Madison's lakes and was hired by his professor to collect data on Warner's waters. A passionate fisherman who claims to have caught at least 1300 Northern Pike in his lifetime, DuVair fell in love with Madison's lagoons during his graduate research. The lagoons were the breeding grounds for fish in the lake system, the fish nurseries. He describes them as "very special places, shallow and warm." The lagoons' health and welfare was also intimately tied with the health of Madison's lakes because what entered the lagoons eventually entered the lakes. The lagoons and the city’s wetlands were vital filters.

Tenney Park's lagoons were highly urbanized and in bad shape even by the 1960s. DuVair focused his research on Warner's wetland and lagoon. In 1964, he dipped his nets into the water for the first time to sample fish and aquatic insect populations. Over 50 years later, when he spoke at a Wild Warner meeting, he was still in love with these waters.²⁹³

"It's a magnificent place," he told Wild Warner. He described at least two freshwater springs in Warner's wetland just in his small study area. But in his nearly 50 years of studying Warner, he'd witnessed a gradual degradation. "You used to have trophy-sized bass in Warner Park," he said.

DuVair became a legendary biology teacher at Madison's East High School, teaching two generations of children. He designed a special summer honors aquatic biology course using Warner's lagoon as the classroom. Every June he and 23 high school students dropped nets six feet deep and 25 feet long into Warner's waters to take fish samples. Six thousand, seven hundred and thirty two Madison high school students had passed through his classroom; 1150 of them had taken his Warner-based summer course.

DuVair and his students determined that Warner was one of just two critical breeding grounds for fish in Lake Mendota; the other was Six-Mile Creek. Since fish were no longer reproducing in Madison's lakes because of urbanization, the DNR had to stock the lakes. This made breeding grounds like Warner even more important because there were so few places like it, according to DuVair. At the Wild Warner lecture in 2013, DuVair passed out a species list and explained that 18 species of fish were breeding in Warner compared to 15 species in Six-Mile Creek.

The major firework show began in 1993. Between 1992 and 2008 DuVair observed four major fishkills that killed off at least 80% of the fish; 1999 was the worst, DuVair said.

The DNR told him they thought it was because of a very harsh winter that year. The lower amount of sunlight meant lower oxygen under the ice. DuVair believed the DNR was only partly right because the fish kills continued even when winters were not so harsh. He believes that lower water levels in Warner lagoon were also exacerbating fishkills. The lagoon was filling with trash, some of it from the fireworks show.

"The real damage of trash, it's filling the basin so there is less water when the winter comes and the fish gets squeezed into a smaller area. The more trash you have, the less water you have."

In addition to counting and monitoring Warner's fish species, DuVair and his students had also been measuring this trash in Warner Lagoon every June for four weeks: "The lists every year surprised me." Here are some of the items DuVair's team found: tricycles, bicycles, complete fishing equipment, class rings, a purse loaded with IRS data, brassieres, tampon applicators, soiled diapers, women's underpants, a 1971 license plate, driver's licenses, money, rings and other jewelry, plastic and cans. Some of his students had gotten injured from the trash in the water and had to get stitches. Most of these items were pouring in from storm sewers.

DuVair's trash research in Warner lagoon shows that our relationship to water in Madison has not evolved much in a century. On January 12, 1893, the Wisconsin State Journal published a letter to the editor by "one of Madison's original park men," W.R. Bagley, an MPPDA founder, who exhorted citizens to beautify the city by building parks. He also commented on the lamentable state of the city's marshes which were trash dumps: "...These ends of streets, today the home of the oyster can and the ash heap, now useless and unsightly, with proper repair and care would be genuine pleasure resorts, attractive and enjoyable to everybody, enhancing the value of property, and beneficial to the public health..."

Nine years after Bagley's letter, in 1902, a visitor to B.B. Clarke Beach described it as "...made up of a steep bank, ashes, tin cans, stagnant water and irregular filling. It is a rallying point for all the old footwear and other refuse of that part of town. It is a breeding place for bullfrogs and disease."

Despite all the trash in Warner's waters, the fish still looked healthy, DuVair said. And Warner was also the only home of the only native jellyfish in the entire Yahara River system. DuVair and his students had found "massive colonies" of the tiny jellyfish *Pectinatella magnifica*, the Magnificent Bryozoan, during their study. Of the several thousand species of bryozoans, all but 19 are exclusively marine (Ruppert et al 2004). The Encyclopedia of Life (2015) describes Warner's jellyfish colonies as "one of those unusual freshwater bryozoans species." This species needs warm, quiet water without motors or buildings on the shore. Warner's lagoon provided the perfect habitat, according to DuVair.

Ninety-three percent of the trash DuVair and his students found in Warner was not biodegradable. "You need to do something about the trash," he told Wild Warner during his research presentation to our group. He sampled Warner's waters in June, before Rhythm and Booms, and he and his students found firework debris from the firework show, the previous year: "That's where the battle line has to be drawn. You've got to fight the trash. Take an aggressive position. The lagoon is getting shallower fast. It's filling in. What would take 1,000 years to fill through sedimentation is being done in 23 years in Warner Lagoon," he said.

Marshall's 2014 water study on Warner Park states that "Management efforts should focus on source controls (infiltration, street sweeping, etc.), managed detention or catch basins, and inflake management."²⁹⁴ The fireworks were one source of the trash that Wild Warner could

focus on and try to control. We began taking piles of it to public meetings and handing it to officials.

The trash wasn't just accumulating in the wetland. For months after the fireworks, every time I walked into the park I'd find cardboard fragments from the mortars, most of them tiny but some larger. They were a tannish color and blended in with leaves in the fall. As the months wore on and the mowing continued, the mowers chewed up the debris into tinier and tinier pieces that became even smaller and sank down deeper into the grass. When it snowed and the snow melted in the spring, the fragments reappeared, again, wet and more frayed. When I first noticed them I started picking them up, but then I realized there were thousands of these fragments in the parks' fields, wetland and woods. I could not possibly make a dent in it. I gave up picking up the firework trash.

I decided to find out what chemicals were in those fragments. I knew from the Mallards records and permits that protecting cars in the parking lot from the fireworks debris was a major priority for their fireworks shows because they believed the fireworks to be "corrosive;" they based the size of their "fallout zone" on that calculation. I obtained fire department permits for Rhythm and Booms for six years and studied them. Some of the permits were 200 pages long. There were detailed memos for launching and dealing with emergencies. There were memos on the need to mow the grass very short and to burn the marsh island, before the event. There were memos on dealing with potential gang violence at the fireworks carnival and other safety issues. Fireworks producers listed the name of every firework type and the number to be fired: "Gold Glitter," "Wave Willow 100," and "Rainbow 49 Shot Z Shaped Fan Cake." But nowhere could I find a single page listing the amount and type of chemicals used in the pyrotechnics. When I interviewed city fire inspector Rich Riphon who had signed all the permits, and asked him about

their chemical contents, he said he had no idea. He did not even know if fireworks organizers were using plastic or cardboard as containers. “Nobody keeps track of this stuff,” he said during a phone interview on July 31, 2012. In Committee on the Environment and City Council meetings, fireworks organizers later told alders who asked for the same information that the chemical content was “proprietary.”

In the summer of 2011, firework organizer Terry Kelly promised the “biggest” Rhythm and Booms, ever. That year Wild Warner Chair Tim Nelson and I decided to conduct a pre- and post- fireworks kayak survey in the wetland.

On the morning of Sunday, July 1, at 5:00am, approximately seven and a half hours after Rhythm and Booms, we slid two kayaks into Warner’s lagoon. There were no volunteers out cleaning up, yet. They usually began at 8:00am, nearly three hours later. The water looked surprisingly clean except for the odd soggy tennis ball from the dog park and thousands of tiny leaf fragments covering the lagoon. Then I realized that it was July, not October, and the leaves hadn’t fallen, yet. I leaned over as close as I could to the water’s surface to examine the thousands of leaf fragments, some now sticking to the kayak, and realized that this was the fireworks residue, the last wave of debris quickly disappearing and sinking.

We started picking up tiny pieces of paper with Chinese lettering on them and “Toxic” in English and the name of a Chinese factory where these fireworks were manufactured. In the cattails I found what appeared at first to be an empty turtle shell wedged between several stalks. It was the heavy cardboard casing of a mortar, six-inches in diameter, that did not hit the water and sink.

We pulled up to the marsh island and stepped out in the first foot of water near the shore. There we found coiled wire, fuses, rope and all the other heavy debris that must have sunk

immediately into the rest of the lagoon. We collected two large trash bags as evidence. We did not know that we were not the only ones who had decided to do this.

“The Terry Kellys [main firework organizer] of the world think that Warner Park and the Northside are their personal toilet,” Lucy Mathiak, a dog park enthusiast told Madison’s Committee on the Environment on April 2, 2013. Mathiak lived downtown on the edge of Orton Park, but she visited Warner almost daily to exercise her dog and watch birds in Warner’s wetlands, particularly the herons and cranes. Mathiak was so incensed by the fireworks trash she found every day in the dog park that for several months she stuffed it in bags and presented it to parks commissioners and alders at public meetings. In an email sent to the parks commission, alders, the local county supervisor and the mayor on 07/27/12, Mathiak attached photographs and listed the dates and the fireworks trash she collected on nine different trips to the dog park: “fuses, charred casings, and ignition devices.”²⁹⁵ She ended the email with this list of questions:

- “1. Where did planners think all of this debris was going to go?
2. Where in the Warner Park area (or any city park) would it be acceptable for this debris to go?
3. If I was caught leaving a pile of trash this size in any of our parks, would I be cited?
4. Am I correct in thinking I can put this in my trash for city pick-up? It does have quite a bit of chemical residue.

Mathiak’s questions to policy-makers, which she continued to repeat at public meetings for over a year without getting an answer, are environmental justice questions that reveal that Warner Park had become what Bullard (2005) calls a “sacrifice zone,” compared to other Madison parks.

When Mathiak charged fireworks organizers with using Warner Park and the Northside as their own personal toilet, she was not just referring to the trash. She was also referring to their exclusive access to public funds to do so. For 21 years, the city subsidized this event by spending

at least one million dollars (this is a very conservative estimate) on the fireworks and less than \$50,000 on two water studies. This meant that the public health impacts and environmental impacts of this trash and the chemicals in the fireworks were mostly unknown. When Wild Warner first began to raise questions about the fireworks and their potential impact on both environmental and human health, public health officials insisted that “there was no funding” for studies on these impacts.²⁹⁶ These same officials also insisted that the impacts could not be proven. Wild Warner fought very hard (especially WW chair Jim Carrier) to force the city to fund a study. We could not have done it without the support of then-alder Anita Weier, a former environmental journalist and long-time Northsider who was also concerned about potential impacts. When the city council finally approved her amendment to fund a study, the condition was that our group of largely unemployed and retired Northsiders still had to raise some of the funding. The city placed the burden of proof on a lower-income grassroots environmental group with often less than \$700 in the bank, to help raise money for the study.

The 2012 city study is divided into two parts: a study on possible environmental impacts on Warner’s water and a study on possible impacts on Warner’s vegetation and soil. The water study (Bemis, 2012) found that within 12 hours after the fireworks, perchlorate levels increased from 17 to 1329 times the pre-firework levels. Within 30 days concentrations decreased to 8 to 15 times pre-firework levels. Bemis (2012) hypothesized that “microbial perchlorate reduction along with dilution during the second half of July explains the attenuation of perchlorate in the Warner Park lagoon.”²⁹⁷ The water study did not detect spikes of trace metals.

The vegetation and soil study (Bennett, 2013) tested sixteen plant species and found that: “Most of the plant species showed elevated concentrations of elements associated with pyrotechnics 23 days following the Rhythm and Booms event. Perchlorate...increased the most,

followed by barium, strontium and magnesium. The launch pad showed the highest number of element increases after the event...Maximum concentrations of Al, BA, CO, FE, Mg, S, and some of the perchlorate values were considered either at critical levels or nearing toxicity levels for plants.”²⁹⁸ Barium produces the greens in fireworks, strontium produces purples, and magnesium produces whites.

Bennett found the highest concentrations of aluminum (which produces the silver colors), barium (which produces the greens), and iron (which produces sparks) in duckweed in Warner in July. Aluminum in duckweed was found at 1387 ppm, 17 times higher than the 80 ppm level for the reference plant (Bennett, 2013). Bennett writes that levels above 550 ppm are considered “very high.” Levels in Warner Park were more than double the very high mark. The maximum values that Bennett found for iron in duckweed were 23 times higher than the reference plant. Bennett writes that the critical level of iron for most plants is 50 ppm. The maximum value in Warner was 3515 ppm.

I sent the 2012 city study to environmental geochemist Richard Wilkin, a national expert on perchlorates who works for the EPA’s Ground Water and Ecosystems Restoration Research division.²⁹⁹ Wilkin authored one of the first studies on perchlorates in fireworks and impacts on a municipal lake. Wilkin could not comment on the plant study because he had never seen this phenomenon studied before. On the results of the water study he said: "The aqueous perchlorate concentration was pretty high. There was one screamer in the 3A location compared to the background. It's close to 50 parts per billion. That's an increase of 500-fold. That's pretty significant."

According to the literature on fireworks and public health, the reduction in air quality is the most immediate threat, particularly inhalation of smoke and particulates. Air quality was not measured in either the 2005 or 2012 city studies.

Warner wetland is a breeding ground and migratory stopover site for at least 19 species of ducks, geese and swans. Duckweed is an important food source for some of these species. What is the impact of high heavy metal concentrations in duckweed on these animals? How do perchlorates and heavy metals in fireworks affect the food web? I could not find any studies on these issues.

In July of 2013, 24 hours after local press reported that the city of Madison had violated the Clean Water Act in Warner's wetland for 20 years during Rhythm and Booms, Mayor Soglin announced that the fireworks show would be moved to Lake Monona. According to then-alder Anita Weier, the mayor had already decided to move the event downtown. Wild Warner's unofficial position on the fireworks show was that no fireworks should be dumped "into any of Dane County's waters." We did not support moving the event. We wanted it held over land where it could be cleaned up; we recommended the Alliant Energy Center parking lot as an alternative site, to the city's Committee on the Environment. At the same press conference where Mayor Soglin made the moving announcement, Jack Hurst immediately denounced the decision to dump fireworks in Lake Monona to television reporters. Several of us began attending meetings of the Dane County Watershed Commission and the Committee on the Environment to try and stop the move to Lake Monona.

In June of 2014, the city held the fireworks show in Lake Monona. Fireworks organizers did not use green colors in the fireworks that year because of environmental concerns over the

barium needed to create the color.³⁰⁰ This was the first time in Madison that fireworks organizers had ever taken environmental concerns into account. In June of 2015, the city will hold its new “Shake the Lake” fireworks show on Lake Monona instead of Rhythm and Booms. Fireworks organizers pledged to use a local producer to have more control over the chemical makeup of the fireworks and to limit environmental impacts.³⁰¹ However, there still has been no study of possible bioaccumulation in Monona’s fish and on the people that eat them, mainly black fishermen, many who drive from Milwaukee and can be seen lining up on the edge of Monona Terrace every summer weekend (Powell and Powell, 2011).

In the case of Warner Park I have emphasized how Rhythm and Booms made the park’s wildlife invisible. But the city’s ignoring and dismissal of Northsiders who opposed the fireworks for at least 12 years, including burn victims, proves that some of the humans living around the park had become invisible as well, and particularly the fishermen who used to fish in Warner’s lagoon. Now it is the fishermen, the fish and all the other wildlife of Lake Monona that have become invisible.

Chapter 10: Conclusion

Wild Warner's six-year struggle to change parks management fits within a national trend to promote sustainable parks management. The first section of this final chapter lists the barriers we encountered to more sustainable management. The second section outlines recommendations for policy-makers to help overcome some of these barriers.

I. The Advent of the Sustainable Park and Barriers to Urban Sustainability in Madison

In Cranz' 1982 typology of municipal parks in the US, she outlined four historical phases in municipal park development ending with the last Open Space System phase which began in the 1960s. She estimated that each urban park model lasted from 30 to 50 years. Cranz and Boland (2003, 2004) posited that since over 30 years had passed since the Open Space System phase began, the US was overdue for a new parks model. They also hypothesized that since parks have been used historically as social fixes for the societal problem of the moment, the next park model would therefore be a sustainable or ecological park to address current environmental concerns. In a content analysis to determine whether or not this new parks type was emerging, Cranz and Boland (2004) examined parks articles in five leading landscape publications from 1982 to 2002. They found that the second largest number of articles that had been published fit into a new category—23%--which they defined as “ecological” or “sustainable.” Based on this evidence, they determined that “a new park type is emerging.”³⁰² Cranz and Boland (2004) compiled a list of 125 parks that fit in this category; there are none in Wisconsin.

According to the authors, this new park type is based on three general principles:

1) self-sufficiency in the use of material resources which means designing parks that are not fossil-fuel, pesticide, and fertilizer dependent and based on public-private partnerships and more community stewardship to reduce management costs; 2) better and increased integration with surrounding neighborhoods to help solve larger urban problems such as storm water and wastewater problems through construction of wetlands, and using the new park type to improve public health through programming, environmental education, and urban farming or gardening; and 3) a new aesthetic that emphasizes and accepts evolutionary change in vegetation and species diversity over time rather than viewing a park as a fixed landscape.

Cranz and Boland (2004) predicted that this sustainable park model would be adopted by municipal park departments between 1995 and 2015. Current national trends in parks development are beyond the scope of this dissertation so I do not know if their prediction was correct or not. But after conducting this six-year action-research project I can say with certainty that this model has not been adopted in Madison. The Wild Warner project is an attempt to turn Warner Park into a park that fits within Cran­z and Boland’s new type. To some extent, we have tried to promote their three general principles of sustainability (although there are differences in the group over the third principle of aesthetics). However, as documented in this dissertation, Wild Warner’s efforts have met with serious institutional resistance. Madison is a city that regards itself as an environmental leader in many respects. I believe that the institutional, historical and cultural barriers we have encountered may be the same barriers preventing a shift to urban sustainability practices in other cities. These are the barriers to a sustainable parks management model documented during this action-research project:

- 1) **Landscape illiteracy** (Spirn, 2005; Hester, 2010) and **waterscape illiteracy**: Wild Warner found during organizing that Madison’s city planners rarely walked through

Warner Park. When questioned about potential environmental impacts of proposed projects, park planners could not answer even the most basic questions. This occurred during Wild Warner's challenging of the city's proposal to bury 200 truckloads of sludge under Warner Park's Sled Hill, and also during public discussions of Warner's parking lot redesign. A related problem is that neither planners nor policymakers view the space as an ecological whole. Madison like New Orleans, is a city of water, not of land. Despite Madison's reputation as a green city, many residents are also environmentally illiterate and there is no basic understanding of water systems or how to live with water. This is the critique of a former Katrina evacuee who did not understand the concept of sea level or what "filled-in wetland" meant until my 12-foot high home had 11.5 feet of water in it and 1,836 people were dead. Environmental literacy should be incorporated into every curriculum, starting with pre-K. As a city of water, Madison could be a leader in this type of education;

2) **Madison's conservation/recreation dichotomy which artificially segregates nature:**

Because Warner Park is categorized as a recreation park and recreation in Madison does not include nature study (at least not yet), planning processes do not include environmental impact surveys. Urban wildlife outside of conservation parks is invisible to policymakers, not valued, and thus, unprotected, even if endangered species or species of special concern are involved (for example, bats in Warner Park, the Brown Thrasher, Blanding's turtle);

3) **A fear of natural phenomena like insects and wild animals manifested as a**

landscape aesthetic that views prairies, meadows, and shrub-thickets as "messy" and prioritizes turfgrass management;

- 4) **Political egos and the use of parks as patronage** (Pesavento, 2011). This is definitely not the case with all alders who have represented the districts surrounding Warner Park. But there is a tendency documented in the literature in other city park systems of elected officials to view buildings as a legacy. Parks are on public land and it is easier for a public official to build on public land that is viewed as “free,” rather than find the funding to buy private land for a project. This puts more pressure on large parks like Warner where green space is regarded by some public officials as empty space;
- 5) **Historic attitudes in Madison towards urban wetlands as “waste”**: Despite Wisconsin’s history as a leader in wetland legislation, city policies have systematically degraded water quality in Warner’s wetland and contributed to erasing this wetland from public consciousness. Madison’s historical legacy of filling-in wetlands is still evident today in Warner Park in how the wetland was chosen to be the site of the “largest firework show in the Midwest.” The main fireworks organizer referred to Warner’s wetland as a “landfill” in local press. This historical attitude was also evident in the Madison Parks proposal to bury 200 truckloads of sludge under the park’s sledding hill. “It’s all fill, anyway” a parks commissioner said;
- 6) **A bureaucratic municipal park agency culture** that resists change, similar to the national park system culture (Sellars, 1997);
- 7) **An increasingly consumptive income-generating recreation culture** is determining policy because of the annual emphasis on shrinking municipal parks budgets. Advocates of silent sports and quiet park users--the disabled, elderly, unemployed, homeless, and children who play in outside prescribed playgrounds—are not heard during planning processes. Nature recreation activities and number of participants are not counted;

- 8) This sports culture is part of a **national turfgrass industrial complex** (Robbins, 2007) in which ever larger and more costly mowing machines drive parks management;
- 9) **Racism, fear of crime, poverty and social exclusion** in neighborhoods bordering Warner that contribute to fear-driven “clear the shrubs” management policies and result in more building and paving in the park. For a variety of reasons community activists want youth programming needs inside buildings rather than outside. Most apartment residents on Warner Park’s edges rarely attend public meetings and are fighting for economic survival—birds and trees are not high on their agenda (although I do not want to generalize. As described in Chapter 1, some of my neighbors really valued the access to the green space and the animals). And other neighbors are reluctant to challenge city “experts” because they are not “educated”;
- 10) **A bias in planning processes towards *doing something***. There is an implicit assumption underlying any urban planning process: something needs to be done to this place which implies that that place is lacking, somehow. Planning processes in Madison seem to be driven by perceived lack. No one is going to pay a planner to say—“Hey, let’s just leave that wetland alone.” There is no heart in current planning processes, no room for relationship with the land, the water and the creatures that live on it. Current planning processes deny relationship and stewardship. Planners treat land and water as a blank slate, erasing geological, hydrological, archeological, and environmental history, along with the animal residents;
- 11) This bias in planning processes leads to **a bias in parks culture towards building structures and paving (concretizing)** instead of developing programs based on relationships with the land, water, vegetation and animal residents of parks.

“Development” in the Madison parks system means building and paving; it does not mean creating education programming based on parks’ natural resources. During an examination of the Madison Park and Pleasure Drive Association and park commission minutes covering seven decades, I found more concern and discussion about the need for environmental education and “nature study” in Madison’s parks in the late 1960s and 1970s, than in recent years. And when the subject was broached in recent years, it was because I, my students or other members of Wild Warner testified about our programs;

12) The lack of coordination and policy conflicts between city and state agencies like the parks department and DNR in the case of Warner Park. The city and DNR have treated Warner and its wetland as a policy patchwork quilt rather than as an ecological whole which has led to degradation of water quality and the fishery. I suspect this is a pattern in Madison and partially responsible for the city’s urban water problems;

13) Faulty and biased park user survey systems that do not capture the many uses of our parks or value the well-documented mental and physical health benefits of open green spaces as I learned while participating in the public planning process to elaborate a new five-year Open Space plan for Madison in 2011. Appendix 1 lists 29 different uses by people of color that I have observed during 600 hours of birding fieldwork in Warner Park, while living next to the park and walking in it almost every day, and after four and half years of teaching environmental studies in the park; these uses are not reflected in current surveys. There are no doubt other undetected uses to add to this list in Appendix 1. In his 2002 study of Chicago’s Lincoln Park, the city’s oldest and most heavily-used park, Gobster found that some ethnic and cultural groups used the park for “fresh air,” and other non-visual sensory uses that parks surveys do not measure. These issues—

simplistic assumptions based on national surveys and incomplete information based on local faulty survey methods--mean that policymakers may be implementing the wrong solutions for the wrong problems. While they are trying to solve an issue of social and environmental injustice—social exclusion from park use for a variety of reasons—they may end up implementing solutions that lead to another form of social and environmental injustice: the concretization of a green space which deprives all people living around Madison's second-largest urban park, particularly lower-income children of all colors, of their only open space and the nature in it. Local natural areas are critical because many low-income families do not have the time or resources to drive to natural areas or vacation cabins in the woods. The neighborhoods surrounding Warner Park have some of the highest concentrations of lower-income children of color in the city of Madison. This concretization negatively affects the area's ecology both human and non-human. The process to develop Warner Park can help to understand how a certain demographic gets the park, and another demographic gets the parking lot. The battle over the development of Warner Park can illustrate some of the reasons how and why working class and poor communities end up living in noisier concrete white-flight corridors, with an overall poorer quality of life. Concretization means more paving and lighting which also negatively affects urban wildlife and reduces opportunities for environmental education. When urban children are denied access to the nature on their doorstep, they are also denied the opportunity to explore outdoor careers in the natural sciences;

14) Madison's Committee on the Environment (COE) has no power and is ineffective by design. Wild Warner members observed this weakness in Madison's environmental oversight mechanisms during two years of attending COE meetings on Rhythm and

Booms. We discovered during the city's decision-making process to move the fireworks out of Warner Park and into Lake Monona that there is no environmental entity in the city or county with the power to protect Madison's urban waters.

II. Six Specific Recommendations for Madison's Park System for embarking on an environmental literacy crusade based on green partnerships with neighbors and local universities (UW-Madison, Madison College and Edgewood College)

- Link every possible park, large and small, to the nearest school or schools. In an age of budget cuts, the need to kick the fossil-fuel habit, and a growing child obesity crisis, principals are looking for free, walkable field trips to give their students frequent exercise. Establish environmental education programs in these parks; there is already a demand that is not being met. While coordinating the Nature Explorers program, I received requests from three other Madison schools that wanted the program. These programs could be run by the local universities as we are currently doing in Warner Park. Teams of student interns could help run the programs and this would provide them with "green" summer jobs. These student interns would be charged with using the park to teach environmental literacy in the neighborhood so that neighbors understand how the park functions ecologically (for example how a neighbor's emerald green chem-lawn may affect the wetland down the road). Each team should also have a resident senior from the neighborhood on the team to mentor the college students (since the college students do not know the neighborhood or the park). That senior mentor could educate the college students about the park and neighborhood's human history. Depending on park size, each park could also be assigned a student to be the "resident biologist/ecologist." The first job for these young biologists would be to organize the

neighborhood children and teach them how to do a biota survey of the park. Base these biota surveys on the experience of residents in Dunn, Wisconsin (DeWitt, 1996) and Wild Warner's education programs. College students from other majors—history, anthropology, sociology, ethnic studies, social work, public health—could join the teams to survey the human history of the park and surrounding area.

- As part of the environmental education programming, establish urban park ranger programs for children. Turn the children into the stewards and guides of their park. College interns could run these urban ranger programs in the summertime. These urban ranger programs could serve the needs particularly of lower-income urban children who may live in neighborhoods with few scout troops and where teenagers are requesting paid summer jobs (my neighborhood). The new children's urban rangers programs could help planners by providing park tours led by child guides. This would help planners see the park through the eyes of that child. (In the spring of 2015, the director of the Warner Park Community Recreation Center grabbed this proposal at a public "visioning" meeting and began exploring how to create an urban ranger program for Warner and the surrounding neighborhoods).
- Respect the furred, finned, feathered and leafed residents of our parks; conduct baseline biota surveys before carrying out land- and water-scape changes. Include biota surveys in master planning processes. The animal residents and trees not only have a right to exist and thrive, they are essential participants in environmental education programs for neighborhood children. They are free teachers. Urban animals can be the source of programming and green job development.

- Expand recreational uses of Madison’s parks to include “nature recreation” and “nature study” as a recreation category. Revise the official and outdated definition of recreation which categorizes activities as either active (organized sports) or passive (walking, jogging, nature study, bird watching). According to the latest surveys done by the National Park Service, the fastest growing outdoor activity in the US today is birdwatching. There are over 48 million birdwatchers in the US, yet this is considered a “passive” form of recreation or not considered at all in parks planning. Include nature recreation and birding as “development.” Create green jobs and train and pay neighborhood leaders and children to lead bird walks in their own park.
- Partner with UW-Madison, Edgewood College and Madison College to improve current park-user survey methods to more accurately measure parks use in Madison (see Appendix 1 for undocumented uses in Warner Park). Incorporate findings of studies on how different groups use parks and why, such as studies on gender, public health, mental health, and ethnicity. Conduct ethnographic qualitative studies as well as quantitative surveys. Value parks as mental health resources. Value what cannot be counted or captured in a public survey. Maintain the conservation park system but recognize the findings of public health studies that a citizen’s most important park is the park down the street. Recognize the role of neighborhood and pocket parks, no matter how small, as green shelters from the storms of life. Consider the voices of those too sick physically and mentally to attend public meetings, yet they may be daily park users because they are unemployed, live in an apartment without a yard, or are disabled or homeless. Redesign

surveys and planning processes to include the voices of those who have been systematically excluded (children, the elderly, disabled, mentally ill, people of color, etc.).

- Use culture as a resource to desegregate Madison’s parks system. Use green resources to build bridges between cultures and ethnicities. One example: Many of Madison’s birds are long-distance migrators that winter in Latin America. A growing number of Madison’s children are from Latin America or of Latin American descent. Use the local study of bird migration to celebrate this growing diversity and to link environmental and social issues. Make this a bilingual program. Let the children design and produce public education materials (parks brochures) in English and Spanish. Animals can act as ambassadors and bridges between cultures. Use storytelling and photography contests in parks to build these cultural bridges. Recognize all cultures in our parks, not just white European culture. Indigenous people lived in the Warner area for over 10,000 years according to the archeological record. There is no recognition of that presence or culture. The only cultural symbol in Warner Park is the statue of liberty.

Some Final Words: The Local is Global

This dissertation began with Wendell Berry’s exhortation to develop hundreds of local solutions to global environmental problems. In Warner Park I discovered the truth in John Muir’s famous saying: “When one tugs at a single thing in nature, he finds it attached to the rest of the world.” Warner Park taught me that the larger global issues I had worked on before beginning this project—militarism, racism and economic injustice—were all linked somehow to Warner

Park and how this park has been used and abused. In the case of militarism, many Northside residents told me that they had never spoken out against the fireworks show because they were afraid of seeming “unpatriotic.” In the case of racism, I discovered over and over again how people’s fear of each other, and racism and a history of segregation have restricted the use of municipal parks, and possibly the use of Warner Park. Fear of crime, which too often is a fear of “the other,” has also negatively affected Warner Park’s reputation. I also found that policymakers trying to address poverty in the Warner Park area over the years repeatedly recurred to the park-as-social fix solution (Cranz), and that this was one of the main drivers of park development. Since the park is public land, if the city uses the park’s green space to build more community centers and facilities it does not have to purchase land to do this: the park becomes the cheapest and quickest solution to dire community problems.

If John Olin, Ernest Warner, and Art Johnson had not been thinking 100 years ahead, Madisonians would not have more parks and more playgrounds per capita than the largest 100 cities in the US, according to the Trust for Public Land. Policymakers today need to emulate that vision and consider climate change, and what residents of Madison will need in 50 and 100 years. If current park development trends continue in Madison, Warner Park will become more built-up and concretized with diminishing green spaces and decreasing biodiversity, while it is surrounded by half-empty ugly shopping centers that the city could use for community centers and social services. This is not an either/or situation. With a little imagination and some creative fund-raising, people living around Warner Park can have better access to social services while also enjoying the green spaces and the animals that live in them, as well as the proven public health benefits of these green spaces.

Appendix 1: Avian Biodiversity Survey in Warner Park (published as a public brochure by the Madison Parks Division)

"One of Madison's birding hotspots"



**WARNER PARK
Bird Species List: 141**

Help Madison Parks, Northsiders, UW-Madison, Madison College and Sherman Middle School students conduct this citizen-science biodiversity survey.

Record a new species. Become a citizen-scientist.

Madison Parks' categories for 141 species

- C = Conservation Concern
 B = Breeding in Warner
 M = Migrates through Warner
 W = Winters in Warner
 * = Still researching habitat use

Geese

- ___ Cackling Goose, M
 ___ Canada Goose, B

Swans

- ___ Tundra Swan, M

Ducks

- ___ American Wigeon, M
 ___ Blue-winged Teal, M
 ___ Wood Duck, B
 ___ Bufflehead, M
 ___ Mallard, B
 ___ Gadwall, M
 ___ Northern Shoveler, M
 ___ Ring-necked Duck, M
 ___ Ruddy Duck, M
 ___ Greater Scaup, M
 ___ Lesser Scaup, M
 ___ Canvasback, M
 ___ Hooded Merganser, M
 ___ Redhead, M
 ___ Common Goldeneye, M

Turkey/Quail

- ___ Wild Turkey*

Grebes

- ___ Pied-billed Grebe, M

Pelicans

- ___ American White Pelican, M

Cormorant

- ___ Double-crested Cormorant, M

Bitterns/Herons

- ___ American Bittern*
 ___ Green Heron, B
 ___ Great Blue Heron*
 ___ Great Egret, M

Vulture

- ___ Turkey Vulture

Hawks/Kite/Eagles

- ___ Sharp-shinned Hawk*
 ___ Red-tailed Hawk*
 ___ Cooper's Hawk*
 ___ Rough-legged Hawk, M
 ___ Osprey, M
 ___ Bald Eagle, M
 ___ American Kestrel*

Rails/Gallinule/Coot

____ American Coot, M
 ____ Sora*

Cranes

____ Sandhill Crane, B

Plovers

____ Semi-palmated Plover, M
 ____ Killdeer, B

Sandpipers/Phalaropes

____ Spotted Sandpiper, M
 ____ American Woodcock, M

Gulls

____ Herring Gull, M
 ____ Ring-billed Gull, M

Terns

____ Forster's Tern, M

Pigeons/Doves

____ Rock Pigeon*
 ____ Mourning Dove, B

Owls

____ Great Horned Owl, B
 ____ Barred Owl*

Goatsuckers

____ Common Nighthawk, M

Swift

____ Chimney Swift, M

Hummingbirds

____ Ruby-throated Hummingbird, B

Kingfishers

____ Belted Kingfisher, B

Woodpeckers

____ Red-headed Woodpecker, M, C
 ____ Northern Flicker*
 ____ Downy Woodpecker, B
 ____ Red-bellied Woodpecker, B
 ____ Hairy Woodpecker, B
 ____ Yellow-bellied Sapsucker*
 ____ Pileated Woodpecker*

Flycatchers

____ Eastern Kingbird, B
 ____ Eastern Phoebe, B
 ____ Eastern Wood-Pewee, B
 ____ Great Crested Flycatcher, B
 ____ Willow Flycatcher, B

Vireos

____ Yellow-throated Vireo, M
 ____ Warbling Vireo*
 ____ Red-eyed Vireo*
 ____ Philadelphia Vireo, M

Jays/Crows

____ American Crow, B
 ____ Blue Jay, B

Swallows

____ Barn Swallow, B

- _____ Tree Swallow, B
- _____ Northern Rough-winged Swallow, B
- _____ Bank Swallow*
- _____ Cliff Swallow*
- _____ Purple Martin, M

Chickadees

- _____ Black-capped Chickadee, B

Titmouse

- _____ Tufted Titmouse*

Nuthatches

- _____ White-breasted Nuthatch, B
- _____ Red-breasted Nuthatch*

Creepers

- _____ Brown Creeper, W

Wrens

- _____ House Wren, B
- _____ Marsh Wren, B
- _____ Winter Wren*

Kinglets

- _____ Ruby-crowned Kinglet, M
- _____ Golden-crowned Kinglet, M

Gnatcatcher

- _____ Blue-gray Gnatcatcher, B

Thrushes

- _____ American Robin, B
- _____ Eastern Bluebird, B
- _____ Wood Thrush, M
- _____ Swainson's Thrush, M
- _____ Hermit Thrush, M
- _____ Veery, M

Mimids

- _____ Brown Thrasher, B, C
- _____ Gray Catbird, B

Starling

- _____ European Starling

Waxwings

- _____ Cedar Waxwing, B

Warblers

- _____ Yellow Warbler, B
- _____ Wilson's Warbler, M
- _____ Blackpoll Warbler, M
- _____ Yellow-rumped Warbler, M
- _____ Nashville Warbler, M
- _____ Ovenbird, M
- _____ Common Yellowthroat, B
- _____ American Redstart, B
- _____ Black-throated Green Warbler, M
- _____ Golden-winged Warbler, M
- _____ Palm Warbler, M
- _____ Magnolia Warbler, M
- _____ Chestnut-sided Warbler, M
- _____ Canada Warbler, M
- _____ Mourning Warbler, M

- _____ Louisiana Waterthrush, M
- _____ Northern Waterthrush, M
- _____ Black-and-white Warbler, M
- _____ Pine Warbler, M

Towhees

- _____ Eastern Towhee, M

Sparrows

- _____ White-throated Sparrow, M
- _____ Song Sparrow, B
- _____ Field Sparrow*
- _____ Chipping Sparrow, B
- _____ American Tree Sparrow, W
- _____ White-crowned Sparrow, M
- _____ Fox Sparrow, M
- _____ Swamp Sparrow*
- _____ Dark-eyed Junco, W

Cardinals and Allies

- _____ Northern Cardinal, B
- _____ Rose-breasted Grosbeak, B
- _____ Indigo Bunting, B
- _____ Scarlet Tanager, M

Blackbirds

- _____ Red-winged Blackbird, B
- _____ Eastern Meadowlark, M
- _____ Common Grackle, B
- _____ Brown-headed Cowbird, B
- _____ Baltimore Oriole, B

Finches

- _____ House Finch, B
- _____ Purple Finch*
- _____ Pine Siskin, W
- _____ American Goldfinch, B
- _____ White-winged Crossbill, M

Old World Sparrows

- _____ House Sparrow, B

All 141 bird species recorded from 2008 thru 2015.

Whenever **YOU** see a new bird or find a nest, record time, date, exact location and a brief description. Take a photo or record the song. Email findings to pokane@wisc.edu. A researcher will verify your report. Verified sightings will be added to survey and posted on Wild Warner's website.

This list of 141 species is the result of a 600-hour participatory research project led by Trish O'Kane, UW-Madison and supervised by Dr. Anna Pidgeon, UW-Madison Wildlife Ecology. Wild Warner, Madison-Audubon, UW-Madison, Madison College, Sherman Middle School students, and neighbors helped compile data. For more information on Warner's wildlife, education programs, and an events calendar: www.wildwarner.org.

Appendix 2: Uses of Warner Park and Warner Beach by People of Color Observed During this Study and Generally Not Counted in Surveys or Planning Processes

1. Fishing by African Americans, Latinos and Hmong of all ages, particularly older men.
Warner's wetland used to be known as the best spawning ground for pike in this county—a legend among elderly fishermen. Fishermen of color can be found every weekend at the Warner outlet to Mendota, still a popular fishing spot;
2. Walking the dog: The most frequent use that I see every day is people of color walking their dogs. Warner Park has a very popular dog park where users must pay an annual fee; most of the people who take their dogs there are white. But I find my neighbors of color every day, sometimes twice a day, leaving their apartments and taking their four-legged wards down the paved and unpaved paths of the park outside the authorized dog park. They are not paying a dog park fee so they are not registered as park users;
3. Children playing in the two designated playgrounds;
4. Children playing in the undesignated playgrounds (natural areas): crawling around and running through the thicket, having mock swordfights with sumac branches in the thicket, musing in the meadow, playing soccer in open areas not designated as soccer fields, Frisbee, Hula-hooping, running around screaming, hiding;
5. Bike riding (especially children);
6. Walking for daily exercise (older African Americans, some of whom have been walking in the park for decades);
7. Jogging around the park by people of all colors and ages at different times of the day;
8. Mothers pushing strollers around the park;
9. Drumming on a Sunday morning;

10. Sitting on benches staring at the marsh;
11. Sitting on benches listening to music or talking;
12. Sitting on benches in couples showing affection;
13. Couples sitting on Sled Hill showing affection and looking down on the marsh;
14. Little girl with lemonade stand;
15. Feeding Wonder bread to the ducks;
16. Watching ducks and turtles;
17. Family picnics, grilling;
18. Informal football, basketball and baseball games;
19. Sitting in lawn chairs under shade trees, talking;
20. Walking to the community center;
21. Playing volleyball near the community center;
22. Blues Fest, Africa Fest, Mexican independence Day celebration and other organized festivals celebrating Madison's human diversity;
23. Children mucking around in the newly-restored Castle Creek (the cunette) feeding into the marsh, catching toads and worms;
24. Children catching baby turtles and toads taking them home;
25. Elementary school children in programs outside in the park during school hours doing activities;
26. Students from Malcolm Shabazz Alternative High School just a mile away, biking over to play tennis all summer and jog during the school year as part of a "wellness" program;
27. The view: using the park for the view and as a front yard without actually going into it: apartment residents grill outside in the summertime and sit on their stoops or in the chairs

on their lawns and face the park. They are using it for the view. What does that view mean to them? What would they lose if that swath of greenspace was replaced by a new community center? The green view is another use of the park that cannot be measured unless parks surveyors go into the surrounding neighborhoods and interview apartment residents. Some people living on the park's perimeter may not actually go into the park because of time constraints or disability, but the fact that they live next to the city's second-largest urban greenspace helps their mental health, according to public health studies. It also means that this part of the city is quieter than more built-up areas because of the green buffer. Policymakers who do not live next to the space cannot appreciate the value of that quiet. They see absence of noise, people, and activity as a waste of space;

28. People photographing birds and plants (nature photography, both amateur and professional);
29. A young black man in a rainbow t-shirt on his hands and knees searching for a four-leaf clover in the grass.

Notes

1. Each of these interviews lasted at least one hour. Most lasted two hours and some as long as three hours. I taped all of these interviews and transcribed some of them fully.
2. David M. Mickelson, "Landscapes of Dane County, Wisconsin," *Wisconsin Geological and Natural History Survey*, (Educational Series 43, 2007).
3. Timothy Beatley, *Biophilic Cities: Integrating Nature into Urban design and Planning* (Washington, DC: Island Press, 2007), 45.
4. Mary Balousek, "Cannons Added to Rhythm and Booms," *Wisconsin State Journal*, 10 June 1998.
5. The observations and data in this paragraph come from notes in 15 field books based on over 600 hours in Warner Park.
6. WDNR bat specialist John P. White conducted the survey. He suspected that Warner Park's woods, particularly dead snags, could provide one of the only known "natural," meaning non-human bat roosts in Dane County.
7. Warner Park walk and interview with Mickelson on July 8, 2014.
8. Charles E. Brown Papers, 1889-1945, Wisconsin Historical Society Archives, Madison, Wisconsin.
9. A local real estate developer built a house on top of this mound.
10. Northport-Warner-Park-Sherman Neighborhood Plan, City of Madison, Nov. 3, 2009, Legislative File ID: 15282.
11. Northport-Warner-Park-Sherman Neighborhood Plan, City of Madison, Nov. 3, 2009, Legislative File ID: 15282.
12. Dan Simmons, "Data confirm trend toward lower income," *Wisconsin State Journal*, 8 December 2011.
13. The American Public Health Association, "Improving Health and Wellness through Access to Nature," Policy Statement No. 20137, Nov. 3, 2013.
14. Conversation on September 6, 2009 on Trailsway Ave.
15. She became a close friend and later joined the parks organization we founded, Wild Warner. She became Wild Warner's meadow manager for two summers.

16. Details in this section on Sandy came from this conversation, two long interviews and many conversations over a five-year period. She did not share all these details on the first day that I met her.

17. Interview in Madison, Wisconsin on July 23, 2014.

18. Based on interviews and frequent conversations between 2011 and 2013.

19. Jan died on January 1, 2014 in bed in his apartment, right next to Warner Park. He is missed by me, by the birds and by other park-lovers who saw him every day sitting in the picnic shelter, talking to the Eastern Phoebe he had befriended.

20. Only one man complained about the park that summer; he said the trees and bushes were blocking his view. He wanted it all mowed and cut down so that he could see the lake from his apartment.

21. Jane Jacobs, *The Death and Life of Great American Cities* (New York: Random House, 2011), 117.

22. Interviewed on July 10, 2013.

23. Timothy Beatley. *Biophilic Cities: Integrating Nature into Urban design and Planning* (Washington, DC: Island Press, 2011), 3.

24. Craig Calhoun, "Foreword," in *Engaging Contradictions: Theory, Politics, and Methods of Activist Scholarship*, ed. Charles R. Hale (Berkeley and Los Angeles, California: University of California Press, 2008), xvii.

25. Davydd J. Greenwood, "Theoretical Research, Applied Research, and Action Research: The Deinstitutionalization of Activist Research," in *Engaging Contradictions: Theory, Politics, and Methods of Activist Scholarship*, ed. Charles R. Hale (Berkeley and Los Angeles, California: University of California Press, 2008), 330.

26. Liberation theology is the post-Vatican II Catholic doctrine that grew out of clergy's experiences working and living with poor people. This doctrine holds that the poor should be able to enjoy justice here on Earth, rather than waiting to die and go to heaven. It is a critique of societies, ideologies, economic systems and religions that create poverty. These priests ran a series of progressive think tanks throughout Central America, and also worked in university administration. In 1989, six of these priests were murdered by the Salvadoran military in El Salvador, along with their housekeeper and her daughter.

27. In early June of 2015, it took the female Black-capped Chickadee building a moss nest in the house at my front door just 20 minutes to find a clump of my dog's black fur and use it to build a soft top layer.

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28. Anne Whiston Spirn, "Restoring Mill Creek: Landscape Literacy, Environmental Justice and City Planning and Design." *Landscape Research* 39, no. 3 (2005):410.
29. Spirn, 410.
30. Robert Yin, *Case Study Research: Design and Methods*. Applied Social Research Method Series Vol. 5, (Newbury Park: SAGE, 1984), 23.
31. William W. Ellis, *White Ethics and Black Power: The Emergence of the West Side Organization*, (Chicago: Aldine Publishing, 1969).
32. Ellis, pg. xiii.
33. Ellis, pg. 22.
34. Ellis, pg. 20.
35. Based on conversations at public and private meetings.
36. Marshall Ganz. *Why David Sometimes Wins: Leadership, Organization, and Strategy In the California Farm Worker Movement* (New York: Oxford University Press, 2009), ix.
37. Paolo Freire, *Pedagogy of the Oppressed*, (New York: Continuum, 1970), 87.
38. Warner Park Notebook #1, November 15, 2009.
39. Warner Park Notebook #2, April 19, 2010.
40. Cal Dewitt, "Community Mobilization: A Case Study of the Town of Dunn," downloaded from <http://town.dunn.wi.us/resources/communitymobilization1.pdf>, 1996.
41. Although Rosenzweig and Blackmar point out there were divisions among New York's elite about what this new park should look like based on their cultural backgrounds. Some wealthy residents wanted a more formal European-style park. Ultimately it was Olmsted and Vaux who pushed the "naturalistic" park design. The authors also emphasize that Central Park emerged "out of a complex mix of motivations..." Most of these motivations favored the rich and commercial interests but goals included uplifting the poor, improving public health and providing jobs, even if these were trickledown afterthoughts. So Central Park was mostly for the rich, but not entirely.
42. But as Rosenzweig and Blackmar documented, compensation could not replace the community and networks that were lost, particularly for the black community.

43. Roy Rosenzweig and Elizabeth Blackmar, *The Park and the People: A History of Central Park* (Ithaca: Cornell University Press, 1992), 239.

44. Based on a reading of Olmsted's writings compiled in Volumes I and III of *The papers of Frederick Law Olmsted*. (Baltimore: Johns Hopkins University Press, 1977).

45. The first lines are Tenney's own words. The quoted passage is by poet George Gordon ("Lord") Byron.

46. The Madison Park and Pleasure Drive Association (Wisconsin Historical Society, April 15, 1901), 16.

47. A tree-hugger seven decades before Earth Day, Olin started a nursery on his own land to cultivate trees to put in parks, planted some of those trees himself and hired others to plant them: "...the trees we possess have been injured and abused not only by ignorant trimming or lack of trimming by the owners, but through lawless mutilation by telephone and telegraph companies. Any lover of trees needs to pass along some of our streets with his eyes to the ground, or be made sick at heart at the sight of such mutilation." See MPPDA Annual Report, April 25, 1910, pg. 37, for Olin's views on trees and other quotes such as this one.

48. Henry A. Behnrd, "A History of the Parks of Madison, Wisconsin," (Madison Parks Division, 1989).

49. The Madison Parks and Pleasure Drive Association Eighth Annual Report, (Madison: Wisconsin Historical Society, April 15, 1902), 57.

50. David Mollenhoff, *Madison: A History of the Formative Years* (Madison: University of Wisconsin Press, 2003), 318.

51. Mollenhoff, pg. 323.

52. Mollenhoff, pg. 339.

53. Madison and Wisconsin Foundation, "Madison's Parks," press release on May 4, 1951. The press release also lists Warner Park but only describes "2,200 feet of sandy beach that is unexcelled." It does not mention any malodorous marshes.

54. Mollenhoff, pg. 370-371.

55. Mollenhoff, pg. 372.

56. Conversation with Madison Parks landscape architect Tom Maglio in August, 2009.

57. Fanny Warner and Elizabeth Risser, "Ernest Noble Warner and His Family," Madison, WI, 1950, in Frederic E. Risser Papers, 1925-1971, Wisconsin Historical Society, Library-Archives Division.

58. Warner, pg. 6.

59. Warner, pg. 8.

60. In Charles Buell's eulogy he called Warner "the father of the civil service in Wisconsin," in Warner, Fanny, pg. 18.

61. Ernest Warner, "Statement by Ernest N. Warner Independent Candidate for Congress," *Capital Times*, 30 October 1918.

62. No byline. *Wisconsin State Journal*, 17 October 1904.

63. I have often thought of Warner when I've complained at parks commission meetings about how trees are treated in Warner Park. Like John Olin, Warner loved trees and became very angry when trees were damaged or cut down. Shortly after he became president, electric transmission line builders cut down several large trees along Farwell Drive without notifying the MPPDA. The organization demanded that the electric company pay for the trees. The MPPDA fined them \$160.00. But Warner stated: "The payment of the money does not restore the trees. The damage cannot be measured in dollars."

64. Madison Park and Pleasure Drive Association Annual Report (Madison: Wisconsin Historical Society, April 10, 1923), 14. In this same address Warner also said: "The park areas cannot be assigned for league games purposes." It is ironic that the park named after Warner became the site of Mallard Stadium.

65. "Warner Park History," Madison Parks Division website:
<http://cityofmadison.com/parks/major/warnerhistory.html>.

66. Ibid.

67. Bell mailed me this handwritten document in 2007. He died before I could interview him. I am very grateful for his careful work as a local historian.

68. Ann Vileisis. *Discovering the Unknown Landscape: A History of America's Wetlands*. (Washington, D.C.: Island Press, 1997), 205.

69. US Census Data.

70. "Sought For Park: Warner Beach Area Negotiations Open," *Wisconsin State Journal*, 1953? I do not have an exact date or year for this article because it was given to me by Ann

Waidelich, a local historian. Waidelich generously shared her Warner Park file with me and it contained many old clippings such as this one but the photocopy simply said "1953?"

71. Ingvald Hovde, "Inky's Memoirs" Wisconsin Historical Society, Madison, WI, 1972/1973. Ingvald Hovde's account of the wildlife concurs with Jack Bell's history on Castle Marsh.

72. Bell, Jack. "The Castle Marsh Story." From the files of the Yahara Fishermen's Club, Madison, WI, 2007.

73. "Easement to City of Madison on WCD Castle Marsh Property-Dane County." Wisconsin Conservation Department Intra-Department Memorandum from L.P. Voigt to Edward Schneberger April 11, 1961.

74. Vileisis, pg. 202.

75. Vileisis, pg. 210.

76. "City Takes First Step to Create Warner Park," *Wisconsin State Journal*, 10 August 1958.

77. E. E. Owen, "Fish Refuge posting on Castle Marsh (Dane County)," Wisconsin Conservation Commission Memorandum from Conservation Officer E.E. Owen to E.F. Herman, Madison, WI, on March 28, 1958.

78. From Wisconsin DNR's "Castle Marsh" file, Madison, WI, 2009.

79. I am speculating that they did not anticipate it based on my readings of the memos and also based on an interview with Wisconsin DNR officer Kurt Welke in 2009. Ed Owen is dead.

80. Based on several interviews with Jack Hurst in Madison, Wisconsin. See Chapter 8 on Wild Warner for a profile on Hurst.

81. Carol Falk, "Plans for Warner Park: To be City's Largest in 5-10 Years," *Wisconsin State Journal*, 4 September 1962.

82. Parks Superintendent Marsh described Warner Woods in 1962 as 12 acres of oak and elm.

83. Interview on November 14, 2007.

84. Interview on November 12, 2007.

85. Carol Falk, "Plans for Warner Park: To be City's Largest in 5-10 Years," *Wisconsin State Journal*, 4 September 1962.

86. "Madison Conservation Parks" (Public brochure by the Madison Park Commission, 1977).

87. According to former parks Planning and Development Manager Si Widstrand, these were intended to be "all-purpose" parks that included "nature areas." In the case of Warner Park, at least, these "nature areas" were forgotten or ignored by recent parks planners and policymakers.

88. US Census data.

89. "Obituary for Arthur Johnson" (Ryan & Joyce-Ryan Funeral Homes, Madison, WI, 2010).

90. "Obituary for Arthur Johnson" (Ryan & Joyce-Ryan Funeral Homes, Madison, WI, 2010).

91. Samara Derby, "Park Planner Arthur 'Art' Johnson Dies at 82; Left Indelible Mark on Madison's Green Spaces," *Wisconsin State Journal*, 5 January 2010.

92. Johnson, Art. "The expansion and improvement of the City of Madison park system." Master of Science Thesis, University of Wisconsin-Madison, 1957), 8.

93. Johnson, pg. 4.

94. Minutes of the Madison Board of Parks Commissioners on microfiche, Reel 1, Wisconsin Historical Society, Madison, WI.

95. Just because there is nothing in the minutes does not mean there were no environmental concerns. Minutes are very sparse and contain no details from testimonies. I know from interviewing elderly neighbors that there were concerns about the dredging and grading on Castle Marsh and the park's wildlife (see Chapter 8).

96. "Obituary for Arthur Johnson" (Ryan & Joyce-Ryan Funeral Homes, Madison, WI, 2010).

97. Johnson, pg. 6.

98. This is ironic because elderly neighbors report that there were yellow-headed blackbirds in Warner's marsh before the city began dredging and seeding the area.

99. Johnson recommended that these facilities be built 1 to 1.5 miles from the Capitol Square. He recommended an auditorium on Turville point which is a conservation park today and putting a football and baseball stadium in this area. This is an unanswered question I have about the decision to put the baseball stadium at Warner Park. If I could do this dissertation over again, I would examine how certain parks became conservation parks and look at proposals that were cancelled or opposed by neighbors. Who had the power to determine whether their neighborhood park would become a conservation park or the site of a major stadium?

100. Interview on July 10, 2013.

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101. Vileisis, pg. 5.
102. Interview with Widstrand on March 29, 2011 and email communications.
103. From the minutes of the Madison Board of Parks Commissioners on microfiche, Reel 2, Wisconsin Historical Society, Madison, WI.
104. Plan Commission meeting on November, 2009.
105. William Cronon, "The Trouble with Wilderness; or, Getting Back to the Wrong Nature," in *Uncommon Ground: Toward Reinventing Nature*, ed. William Cronon (New York: W.W. Norton & Company, 1995), 81.
106. Cronon, Pg. 87.
107. Phone interview on September 16, 2008.
108. Northside activist Lydia Maurer made this critique during the first public meeting on January 25, 2011.
109. By 2015, this bias had changed somewhat within the parks department because of Wild Warner's advocacy and public pressure from other parks' friends groups and activists. In 2015, the parks division began a new "visioning" process to plan the future of Warner Park. Wild Warner and other community groups were invited to participate as "stakeholders." It took four years of pushing to expand the definition of a stakeholder.
110. In an interview with former city planner Kenneth Clarke on July 10, 2013, Clarke, who helped institutionalize city planning in Madison said that the more public involvement, the more stressful the job becomes. I can certainly sympathize with this viewpoint given the number of nights I have spent at parks commission meetings that lasted until very late.
111. There is at least one landlord in my neighborhood who does not fix broken toilets or leaky ceilings. According to the Northside Police, his buildings two blocks away on Trailsway Ave. generate more service calls to their department than any other address on Madison's Northside.
112. I asked this question. Bassler said the splash pad would cost at least \$500,000, probably more, and that the community would have to raise some of the money. I and one other person at the meeting (a total of eight attended), thought that instead of a splash pad, the money should be spent on lifeguards, swimming teachers, and nature-mentors to encourage neighborhood children to develop a relationship with the waters of Lake Mendota on Warner Beach, just a short walk from the park and neighborhood.
113. From a lecture Lanham gave on African Americans and the environment at the University of Wisconsin-Madison, October, 2011.

114. Low, Setha, Dana Taplin, and Suzanne Scheld, *Rethinking Urban Parks: Public Space and Cultural Diversity* (Austin: University of Texas Press, 2005), 62.

115. Interview on July 22, 2013. Mr. J. had heard of Wild Warner. He had been very upset when the parks department started mowing the meadows all summer to prepare for Rhythm and Booms (described in Chapter 9). He thanked me for our advocacy work to protect the wild side of the park.

116. I know that this story falls in the category of “anecdote.” I also know from conducting hate crimes research that stories and anecdotes can become data. Hate crimes research depends to a certain extent on qualitative interviews and gathering stories like Mr. J.’s because victims of trauma, including hate crime victims, rarely share their stories in anonymous public surveys. Between 2000 and 2001, I worked for the Center for Democratic Renewal collecting hate crime data in Alabama, a state that reported zero hate crimes at that time. Through qualitative interviews and outreach, I documented over 60 hate crimes committed between 1995 and 2001.

117. According to an interview with County Board Supervisor Paul Rusk on June 5, 2013, Karen Jaster’s murder sparked the process to build the community center.

118. Interview with Widstrand on July 18, 2013.

119. Interview on July 1, 2015.

120. Rusk fought the rules and tried to open up the center to more people. He was “replaced” on the board.

121. Low, Taplin and Scheld, pg. X and 4.

122. In off-the-record conversations, community activists involved in the job search process told me that they were not happy with how the parks department conducted the search. They wanted to see more of a concerted effort to find a person of color to manage the center.

123. Phone interview on April 25, 2012.

124. Jane E. Brody, “Head Out for a Daily Dose of Green Space,” *New York Times*, 29 November 2010.

125. Tanner, Thomas, “On the Origins of SLE Research, Questions Outstanding and Other Research Traditions,” *Environmental Education Research*, 4(4) (1998): 420.

126. Thank you to the Gaylord Nelson Institute for Environmental Studies and the UW-Madison Morgridge Center for funding this course and my teaching assistantship.

127. Final assessment interview on March 6, 2015.

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128. Interview by UW-Madison undergraduate May Erouart in April, 2013.
129. Rosenzweig and Blackmar, pgs. 480-481.
130. Louv, Richard, *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder* (Chapel Hill: Algonquin Books, 2008), 28.
131. "North District 5-Year Incident Data" North District Blotter, Madison Police Department, March 6, 2015.
132. "The Northside Story: From troubled neighborhood to national neighborhood of the year," in *Northside Planning Council: 15 Years of Building Community*, Fall 2008: 3.
133. City of Madison, "Warner Park History," <http://www.cityofmadison.com/parks/parks/history.cfm?id=1368>.
134. Joel Broadway, "Warner Park to Get Shelter; Designed to Thwart Vandals," *Wisconsin State Journal*, 28 June 1994, p. 18.
135. Conversations with Brentwood leader Dave Meyer and Sherman neighborhood resident and dog park organizer, Dolores Kester.
136. "The Northside Story: From troubled neighborhood to national neighborhood of the year," in *Northside Planning Council: 15 Years of Building Community*, Fall 2008: 3.
137. Interview with Rusk on June 5, 2013.
138. Samara Derby, "The community center the city built: Warner Park site turns 10," *Capital Times*, 25 August 25 2009.
139. *Wisconsin State Journal*, 29 August 2003.
140. Conversations with Sandy Reznavi and Gina Bertollini.
141. In 2013, a drowned man who was African American was found floating in the Warner marsh in a deep area. Almost nothing was published about this. Reports described it as a "drowning." I still do not know what happened.
142. Conversation with former WPCRC director in 2013.
143. Jacobs, pg. 124-125.
144. According to Brentwood community leader Dave Meyer on July 23, 2015.

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145. This happened in May, 2012.
146. “Brentwood comes together to provide activities for area children,” *Northside News* June/July 2013.
147. Conversation with two boys named Otto and Peter on October 17, 2009. I do not know their last names. They were tossing a football back and forth in the green corridor on the edge of the Monterey Street playground.
148. Alder Satya Rhodes-Conway at Parks Commission meeting in October, 2009.
149. Susan Troller, “Beating the odds: Three schools find success in helping children” *Capital Times*, 9 February 2011.
150. After the neighborhood meeting, I met with Hernandez several times to design the program. The information in this section comes from my notes on those conversations, from weekly conversations with the school’s social worker and counselor, and from conversations with the children.
151. Interview by May Erouart in April, 2013.
152. Special interest clubs do not include sports programs.
153. Interview with Sherman MSCR Coordinator Betsy Peterson on May 2, 2013.
154. Marshall Ganz, “Telling Your Public Story: Self, Us, Now,” 2007, www.wholecommunities.org.
155. Anna Botsford Comstock, *Handbook of Nature-study* (Oxford: Benediction Classics, 2009), 5.
156. Off-the-record conversation with a Northside grassroots leader in the summer of 2013.
157. Interview with Principal Michael Hernandez, March 6, 2015.
158. Interview by May Eouart in April 2013.
159. Comstock, pg. 3-4.
160. May Erouart, the student enrolled in a public health course, was the one exception to this rule. I used her in-depth and excellent interviews with Sherman staff to cross-check my own interviews.
161. Based on nearly weekly conversations with Sherman Middle School counselors Julie Wilke and Bert Zipperer.

162. As a graduate student paid to teach just one class, I could not expand the program to meet these community needs.

163. Comstock, pg. 22-23.

164. Nico Savidge, "Johnson Bridges Divides, Keeps City from Overheating," *Wisconsin State Journal*, 11 March 2015.

165. Jeffrey Lewis, Kim, E., Gullón-Rivera, A., & Woods, L., "Solidarity in Community: Encouraging positive social and academic behaviors in urban African American children," *WCER Working Paper No. 2007-6*, (2007).

166. Interview by May Erouart, April 2013.

167. Many thanks to Boaz and Hayden Fink.

168. Susan Troller, "Chalkboard: Students map the wild treasures of Warner Park," *Capital Times*, 22 April 2011.

169. Conversations with Sherman social worker Julie Wilke.

170. School staff worked hard to change school culture and put an end to bullying and teasing through workshops and school assemblies.

171. UW mentor Sydney Zettler taught Emily how to recognize Trout Lilies and Bloodroot.

172. Conversation on Dog Park Bridge during first nature walk, May, 2010.

173. Fiona O'Connell-Gates, 11/30/12.

174. Louv, pg. 28.

175. Louv, pg. 16.

176. Interview by student May Erouart.

177. From conversations with his mother when she picked him up at Sherman Middle School, after the club. The mother of another girl with similar problems reported the same: her daughter had difficulties participating during the school day. She had not been accepted into any other extracurricular activity. I assigned three college students to work with her daughter. The girl loved her mentors and they loved her.

178. Erouart interview Julie Wilke, April, 2013.

179. At registration for Nature Explorers in August, 2014, an African American boy approached our table. “How much does it [the club] cost?” he asked. I told him the club was free. He was interested but he said that it costs \$5.00 to go to Warner Park and his family could not pay that. I explained that Warner Park was a public park and that it costs nothing to go and play and walk in the park. He looked skeptical. Then I realized he was talking about the “Family Fun Nights” organized by the Warner Park Community Recreation Center (WPCRC) every Friday night that cost just \$5.00 for the entire family.

180. Sasha Debevec-McKenney, “Yes, Madison is a racist city,” *Isthmus*, 17 April 2014.

181. Class discussion on November 12, 2014.

182. Drew Lanham, “Hope and Feathers: A crisis in birder identification,” *Orion Magazine*, January/February 2011.

183. David George Haskell, *The Forest Unseen: A Year's Watch in Nature* (New York, NY: Penguin Books, 2012), 244.

184. From letter to Superintendent James Marshall dated April 7, 1965, found in the files of the Brentwood Neighborhood Association by Brentwood historian Mary Lacy.

185. Based on a review of the minutes of the Madison Board of Parks Commissioners covering the 1960s and 1970s, and an interview with former alder Brian Benford on July 1, 2015.

186. Thank you to Brentwood neighborhood historian Mary Lacy who helped with this research by digging up these documents.

187. Interview with Jack Hurst on November 30, 2009.

188. Parks commission minutes from January 12, 1977 simply state that the “request” was denied. The DNR shared the parks commission opinion according to these minutes. The minutes do not report who made this request.

189. Brentwood Village Association meeting minutes for May 6, 1977, written by Catherine Murray.

190. Interviews with city conservation officer Russ Hefty and DNR Fisheries Biologist Kurt Welke.

191. Calhoun, pg. xxii.

192. Interview on March 8, 2013.

193. According to the Mallard’s website.

194. Complaints about holding large concerts at Warner Park date back to 1973 in the parks commission minutes. The city has ignored complaints from neighbors like Jack Hurst for four decades.

195. According to Wild Warner Education Coordinator Paul Noeldner, as of spring 2014, there were 65 nests, a major colony of Cliff Swallows. The parks department removed all the nests that year after nesting season. They told Wild Warner that there were complaints about bird poop. These nests had been there at least seven years and possibly longer.

196. Until April 24, 2015, when I and another Wild Warner member, Jonathan Santanna found one calling in the park's lower meadow adjacent to the dog park. Days later, there were two Eastern Meadowlarks, calling and flying in the meadow. The Eastern Meadowlark is species #140 in Warner Park. These birds will not be able to nest in the park because they are ground-nesters and people let their dogs run through the entire park. But the sight and sound of meadowlarks, after at least two decades of absence, thrilled older park users who remembered these birds from their childhood. The meadow the meadowlarks were found in is there because of a two-year successful battle with the parks department to change mowing regimes. We won this battle three years ago.

197. Anonymous source in Brentwood interviewed on November 20, 2009.

198. This section is based on two long formal interviews on November 19, 2013 and July 22, 2014 as well as innumerable backyard, front yard, and kitchen conversations.

199. It turns out that Jacobsen may have unwittingly discovered much more than a new species of woodpecker in Warner Park. In 2013, the city of Madison announced that Warner Park was "ground zero" for the emerald ash-borer, which had arrived in Wisconsin after decimating ash tree forests in other states. According to Madison city forester Marla Eddy, in several places, the ash-borer's arrival was followed by the arrival of Pileated Woodpeckers that eat the insect.

200. Marshall Ganz, *Why David Sometimes Wins: Leadership, Organization, and Strategy in the California Farm Worker Movement*. (New York, NY: Oxford University Press, 2009), vii.

201. Wild Warner meeting, August 2, 2011.

202. Three of the four original geese defenders dropped out of Wild Warner when we stopped working full-time on this issue. They did not agree with our support for egg addling. They did not trust city officials at all. Two of them did not agree with our group's decision to begin collaborating with the city on geese management. However, when these activists first joined Wild Warner, their energy and passion gave the just-formed group a much-needed boost.

203. Neither Jim nor I planned on working as the group's first leader. I called and lobbied others to run for election as the first chair, right up until the founding meeting. No one else

wanted to do it. We knew we needed a really strong first chair to establish the group. This is why Jim agreed to do it. As a journalist, he had the communication skills we needed to try to change how the public and city viewed the park and its wildlife.

204. Wild Warner Bylaws, Article II, "Purpose," July 5, 2011. The group debated this mission statement for hours during various meetings. There has been a tension from the beginning within the group between members who want to emphasize education and other members believe in our public education effort but do not view it as central. I also did not agree with the use of the verb "expand" in the mission statement because I believe that this sends the wrong signal to park users who love and use the park's developed side. When Wild Warner opposed the city's hosting of the fireworks show in the park, for example, some comments on newspaper websites and Northside blogs charged that next Wild Warner would be trying to remove the baseball stadium. This has never even been discussed by the group. The group has partnered with the Mallards baseball team on educational programming and is interested in building a strong alliance with the Mallards. Board members still insisted on including the word "expand" because the wild side of the park had lost acreage and we wanted to regain it.

205. Randy Stoecker, *Defending Community: The Struggle for Alternative Redevelopment in Cedar-Riverside* (Philadelphia: Temple University Press, 1994), 225.

206. This tree is one of the park's most beloved landmarks. The children's Nature Explorers program holds its weekly "Sharing Circle" around this tree.

207. Pat Schneider, "Controversial Rhythm and Booms fireworks show violated wetlands law, state DNR says," *Capital Times*, 17 July 2013.

208. Parks Commissioner Betty Chewning at the Parks Commission meeting on April 12, 2011.

209. Email exchange with WDNR's Kurt Welke on November 9, 2011.

210. At a meeting of the Brentwood Neighborhood Association (BNA) in the spring of 2014, alder Larry Palm defended the city's project, describing the new use of the rubber matting as "an opportunity" when he tried to persuade the association to accept the proposal. A neighbor asked Palm if he thought it was right to "experiment" on a lower-income neighborhood that already had serious problems. Along with Wild Warner, BNA leaders were concerned that the loss of trees at the neighborhood's entrance and rubber matting lining a concrete channel would make that side of Warner Park, which faces Brentwood look uglier. The association wanted to keep the trees and green entrance. The BNA voted to support Wild Warner's alternative proposal.

211. For evidence of how Wild Warner has influenced geese management in Madison, see George Hesselberg, "Catching Up: Madison Geese Learn to Respect the Goosinator, Making its Spring Return," *Wisconsin State Journal*, 12 May 2014.

212. John Muir, "John Muir on Saving Hetch Hetchy" in *American Environmental History*, ed. by Louis S. Warren (Malden, MA: Blackwell Publishing, 2003), 238.

213. Aldo Leopold, *A Sand County Almanac With Other Essays on Conservation from Round River* (New York: Oxford University Press, 1966), 239.

214. Leopold, pg. 292.

215. Leopold, pg. 240.

216. Interview on November 11, 2013.

217. Email correspondence on January 25, 2013. The capitalization of "THEIRS" was in the original email.

218. Based on interviews with former NPC leaders, articles from the Northside News, and documents from the Northside Planning Council.

219. Interview on August 9, 2013.

220. "Warner Park Fireworks Pollution Study Summary," by Dane County Public Health Department, September 29, 2005, pg. 3.

221. "Warner Park: Fireworks Environmental Impact Baseline Study, 2012: Water, sediment, soil, & plant analysis: Reports & Recommendations," Madison Committee on the Environment, City Engineering Division, March 26, 2013, Pg. 4.

222. "Warner Park: Fireworks Environmental Impact Baseline Study, 2012: Water, sediment, soil, & plant analysis: Reports & Recommendations," Madison Committee on the Environment, City Engineering Division, March 26, 2013, Pg. 5.

223. "Warner Park: Fireworks Environmental Impact Baseline Study, 2012: Water, sediment, soil, & plant analysis: Reports & Recommendations," Madison Committee on the Environment, City Engineering Division, March 26, 2013, Pg. 2.

224. Stroud, pg. 302.

225. The \$1 million figure and the \$50,000 approximation come from a review of 1127 press articles in a Lexis-Nexis search. I added the numbers, year after year. The number is an estimate because some years, city officials told reporters that they did not know what the event really cost the city.

226. Maria Powell, Jim Powell, Ly V. Xiong, Kazoua Moua, Jody Schmitz, Benito Juarez Olivas, and Vammeej Yang, "Invisible People, Invisible Risks: How Scientific Assessments of Environmental Health Risks Overlook Minorities—and How Community Participation Can

Make Them Visible," in *Technoscience and Environmental Justice Expert Cultures in a Grassroots Movement*, ed. by Gwen Ottinger and Benjamin Cohen (Cambridge, MA: MIT Press, 2011), 165.

227. Powell and Powell, pg. 166.

228. "Creating a Spectacle," *Wisconsin State Journal*, 2 July 1993.

229. Estimate calculated by Jim Carrier and presented to the Committee on the Environment. Carrier interviewed Kosanke by phone in September, 2013. Chemist Michael Hiskey of the Los Alamos National Laboratory confirmed that this ballpark figure was accurate in an email correspondence on June 9, 2015. Hiskey also pointed out that the average coal plant emits more heavy metals, including radioactive metals, in one day that the "typical" fireworks display.

230. This is beyond the scope of this particular case study. However, environmental researchers and advocates Maria Powell and Jim Powell of the Midwest Environmental Justice Organization are researching this topic. They have discovered multiple violations on the east side of Madison.

231. Matt Hagengruber, "DNR Says Madison Broke Laws; The State Says It Could Fine the City, Citing Six Environmental Violations," *Wisconsin State Journal*, 9 September 2003.

232. I personally observed the deer running out of the park. Horrified onlookers watched drivers purposefully run over geese fleeing the park and posted their comments online. I later photographed two of the dead geese on Woodward Drive. The rabbit report came from a neighbor and fireworks enthusiast who was gleeful about it and surprised at my sadness. "They're just *rabbits*," she said. Jim Carrier and I personally watched and documented the demise of the turtle's nest. The temporary disappearance of most of the birds happened every year that I observed the birds between 2010 and 2013.

233. DuVair, Paul, "The Warner Lagoon: From 1983 to 2012," Madison, October, 2013.

234. The Fire Department's instructions to the parks department to heavily mow the park are also written in memos attached to fireworks permits that I reviewed covering a six-year period.

235. Conversation in Warner Park lower Dog Park meadow on July 16, 2014.

236. Conversation with two African American fishermen on July 31, 2010. Also based on interviews with Jack Hurst, an interview with local bait shop owner, Gene Dellinger, and an interview with aquatic biologist Paul DuVair.

237. Interview on August 1, 2013.

238. Lisa Schuetz, "Controlled Burns Spread Smoke Over City," *Wisconsin State Journal*, 9 April 2005.

239. The fire during the worst drought year of 2012 was particularly bad. You could smell smoke in neighborhoods surrounding the park and several blocks from the park. I called the Fire Department to complain and was told that it was “not a problem.” For anyone with asthma, smoke is a problem. I know two older men in the neighborhood who had to stop going outside after Rhythm and Booms because the smoke from the fires exacerbated their respiratory problems.

240. This was just one of at least three large trees cut down for the Mallards, without any public input. At the September 12, 2012 Parks Commission meeting, commissioner Bill Barker said he was “very unhappy” about the shagbark being cut down and asked parks staff to research this.

241. Pat Schneider, “Controversial Rhythm and Booms fireworks show violated wetlands law, state DNR says,” *Capital Times*, 17 July 2013.

242. Ganz, pg. 9.

243. Interview on November 14, 2013.

244. Interview on August 9, 2013.

245. Interview with alder Anita Weier on Aug. 9, 2013.

246. "Madison Central Lions Club History: 1922-2005," <http://www.madison-central-lions.org/information/history.html>, downloaded on February 14, 2012.

247. SUSIE LINDAU’S WILD RIDE WEBSITE:
<HTTP://SUSIELINDAU.COM/2011/07/08/IN-CASE-YOU-MISSED-IT-PHOTO-AND-VIDEO-ESSAY>, JULY 8, 2011 · 3:50 PM, In Case You Missed It!

248. Roger Gribble, “Zoo Elephant Winkie Grabs, Kills Girl, 3” *Wisconsin State Journal*, 29 June 1966.

249. Minutes of the Madison Board of Parks Commissioners, August 3, 1966, reel 1, microfiche in Wisconsin Historical Society.

250. Minutes of the Madison Board of Parks Commissioners, April 11, 1967, reel 1, microfiche in Wisconsin Historical Society.

251. Minutes of the Madison Board of Parks Commissioners, April 11, 1967, reel 1, microfiche in Wisconsin Historical Society.

252. Minutes of the Madison Board of Parks Commissioners, April 11, 1967, reel 1, microfiche in Wisconsin Historical Society.

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253. Minutes of the Madison Board of Parks Commissioners, April 11, 1967, reel 1, microfiche in Wisconsin Historical Society.
254. William Luellen, "60,000 See Fireworks at a New Site," *Wisconsin State Journal*, 5 July 1968.
255. Off-the-record interview with former NPC organizer on February 25, 2012.
256. "Creating a Spectacle," *Wisconsin State Journal*, 2 July 1993.
257. Ibid.
258. Ibid.
259. Jonathan D. Silver, Untitled front-page editorial, *Capital Times*, 18 May 1993.
260. Anonymous Interview with activist on July 19, 2013.
261. Jonathan D. Silver, Untitled front-page editorial, *Capital Times*, 18 May 1993.
262. Jonathan D. Silver, Untitled front-page editorial, *Capital Times*, 18 May 1993, and Graeme Zielinski, "All Systems Glow for Fireworks Show," *Capital Times*, 2 July 1993.
263. "Creating a Spectacle," *Wisconsin State Journal*, 2 July 1993.
264. Graeme Zielinski, "All Systems Glow for Fireworks Show," *Capital Times*, 2 July 1993.
265. Natasha Kassulke, "More Rhythm, Bigger Booms," *Wisconsin State Journal*, 28 June 2001.
266. "Creating a Spectacle," *Wisconsin State Journal*, 2 July 1993.
267. "Creating a Spectacle," *Wisconsin State Journal*, 2 July 1993.
268. "Creating a Spectacle," *Wisconsin State Journal*, 2 July 1993.
269. Kelly's testimony at the Committee on the Environment meeting on March 18, 2013.
270. Interviewed on August 1, 2013.
271. Informal conversation with Riese, who became a personal friend and also a member of Wild Warner.

272. Joel Broadway, "The Show Will Go On' July 2; Fireworks Organizer, City Cooperate," *Wisconsin State Journal*, 19 May 1994.

273. Bill Geist, Director of the Greater Madison Convention and Visitors Bureau quoted in "Fireworks Show May Fizzle," *Wisconsin State Journal*, 18 May 1994.

274. Joel Broadway, "Fireworks Show May Fizzle," *Wisconsin State Journal*, 18 May 1994.

275. Joel Broadway, "Fireworks Show May Fizzle," *Wisconsin State Journal*, 18 May 1994.

276. Joel Broadway, "The Show Will Go On' July 2; Fireworks Organizer, City Cooperate," *Wisconsin State Journal*, 19 May 1994.

277. Jonnel Licari, "City Costs Threaten Fireworks; The City Council Must Vote on Paying Increased Expenses for Rhythm and Booms," *Wisconsin State Journal*, 4 June 1996.

278. Jonnel Licari, "City Costs Threaten Fireworks; The City Council Must Vote on Paying Increased Expenses for Rhythm and Booms," *Wisconsin State Journal*, 4 June 1996.

279. Off-the-record interview.

280. From off-the-record interviews with two different Northside organizers who were initially very enthusiastic about the firework show (different from the first anonymous source cited in endnote 279).

281. John Welsh, "Rhythm and Booms July 5 Show Will be Bigger Than Ever" *Wisconsin State Journal*, 10 June 1997.

282. Vincent Filak, Editorial, *Wisconsin State Journal*, 4 July 1998.

283. Terry Kelly, Editorial, *Wisconsin State Journal*, 1 July 1998.

284. Phil Brinkman, "Several Firework Watchers burned; three treated at hospital after Rhythm and Booms," *Wisconsin State Journal*, 6 July 1999.

285. "Next Year, Let's All pick up the Trash," Editorial, *Wisconsin State Journal*, 5 July 2000.

286. George Hesselberg, "This Year's Fourth Events Had Their Booms and Their Busts," *Wisconsin State Journal*, 9 July 2005.

287. During the public meeting at the WPCRC on July 18, 2013, immediately following the mayor's announcement that firework show would no longer be held in Warner Park, several prominent Northsiders gave tearful and angry testimonies describing what the fireworks meant to them and their deep sense of loss over the mayor's decision.

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288. Chris Rickert, "Earliest Birds Get a Pyro-Rush," *Wisconsin State Journal*, 29 June 2008.
289. Katie Zimmerman, "Rhythm and Booms; Tribute to US Troops Part of Pre-Fireworks Festivities," *Wisconsin State Journal*, 26 June 2003.
290. Lesley Rogers Barrett, "Resident Demands Fireworks Cleanup; Although Cleanup Crews Canvassed Warner Park After the Show, A Lot of Debris Was Left Behind," *Wisconsin State Journal*, 16 July 2004.
291. Lesley Rogers Barrett, "Resident Demands Fireworks Cleanup; Although Cleanup Crews Canvassed Warner Park After the Show, A Lot of Debris Was Left Behind," *Wisconsin State Journal*, 16 July 2004.
292. Dean Mosiman, "Didn't Force Civic Gift, Alderman Declares," *Wisconsin State Journal*, 7 August 2004.
293. Interview on February 17, 2013.
294. David Marshall, "Water Resources Assessment of Warner Park Lagoon with Preliminary Management Alternatives: Prepared for Warner Park Lagoon Partners (Wisconsin DNR, Yahara Fishing Club and Wild Warner)," Underwater Habitat Investigations LLC, Madison, WI, October 2014.
295. Mathiak forwarded me this email after she heard me testify at the same parks commission meeting. She joined Wild Warner later that summer and became one of our most passionate park defenders. I include her entire email because the questions she raises are environmental justice questions. She was also a very powerful ally as a dean at UW-Madison. I believe that the fact that she did not live near Warner Park also gave her more influence in public debate. Wild Warner and other neighbors who complained about the fireworks were publicly accused of being "NIMBYs." Mathiak lived in an affluent neighborhood miles from Warner. Warner Park was not her backyard. No one could call her a NIMBY.
296. The struggle to attain funding for the study is described in the "Overview" of the "Warner Park: Fireworks Environmental Impact Baseline Study, 2012: Water, sediment, soil, & plant analysis: Reports & Recommendations," Madison Committee on the Environment, City Engineering Division, March 26, 2013, Pg. 1.
297. "Warner Park: Fireworks Environmental Impact Baseline Study," pg. 8.
298. "Warner Park: Fireworks Environmental Impact Baseline Study," pg. 22.
299. Phone interview on March 15, 2013.

300. Ed Treleven, "No Green for Rhythm and Booms 2014," *Wisconsin State Journal*, 25 July 2013.

301. Dean Mosiman, "Groups save Downtown fireworks show," *Wisconsin State Journal*, 2 April 2015.

302. Galen Cranz and Boland, Michael, "Defining the Sustainable Park: A Fifth Model for Urban Parks," *Landscape Journal* 23:2-04, (2004): 105.

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