

INSIDE | THE STATE OF WISCONSIN'S ENVIRONMENT  
A CALENDAR TO TRACK WHAT'S DONE AND WHAT'S TO DO

# WISCONSIN NATURAL RESOURCES

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## Giving ELK an Edge

Growing hope, healthy food and local jobs  
First hunts and fine hunts at Sandhill



# Chick-a dee-dee-dee!

Meet the quiet, shy member of the peppy chickadee family.

Anita Carpenter

In the solitude of the Northwoods, a light snow falls gently and silently, slowly painting each fir branch and hemlock bough with fine brushstrokes of white. As the snow-laden gray clouds drift east, the morning sky clears and the late-rising sun casts its first light. The green and white scene is fresh, frosty and quiet, with snow diamonds sparkling in the brittle cold.



The gregarious black-capped chickadee is common in Wisconsin and flocks to feeders throughout the year.

GREGORY K. SCOTT

In this tranquil land, a flash of black and white lights upon the tip of a snow-dusted branch. A clear *chick-a dee-dee-dee* rings out through the forest and a black-capped chickadee greets a new day.

The black-capped, *Parus atricapillus*, is a year-round resident across Wisconsin from west to east and north to south. Its inquisitive, spritely antics, ceaseless energy and cheerful call brightens the day for anyone despondent over a long, cold winter. The playful bird often travels in groups, but it isn't the only chickadee species found here. Deep within the boreal spruce forest of our northernmost fringe in isolated bogs where black spruce, towering white spruce and balsam fir block out the chilling winds, lives the boreal chickadee, *Parus hudsonicus*.

Boreal chickadees are the same 5 ¼ -inch size as their black-capped cousins. Both species are dressed in black bibs and gray wings, but the similarities end there. Black-capped have white flanks and black caps; the boreals have rufous — reddish

to brown — flanks and muted brown caps.

They behave differently too. The black-caps are forever curious. They almost always respond to a chickadee call, even my poor rendition, and answer back. They'll fly in and flit overhead flying back and forth, and talking to me and to each other. They seem to enjoy the interactions. Boreals lack this curiosity. They may be enticed in but seldom share their more nasal *chick-a dee* call. They seem uninterested in investigating an intruder. More likely, they will quickly and silently disappear into the dense green background. Any look at a boreal chickadee that lasts longer than a glance is truly special.

The boreal chickadee normally ranges from northern Canada coniferous forests, where they are common, coming as far south as the northernmost edge of Wisconsin. In winter, they may associate with black-caps, so take the time to check out each small flock you see. Identifying a group of chickadees is quite easy; finding a boreal in a larger group of black-caps is more of a challenge.

I searched for years to see my first boreal chickadee. Although the chase is over, I'm still thrilled each time I see one. After all, searching for boreal chickadees is an excuse, if you need one, to slow down and explore the beauty of a winter day in the Northwoods.

Anita Carpenter makes time for a close look at nature in all seasons. She writes from Oshkosh.



The northernmost counties in Wisconsin are the southern extent of the boreal chickadee's range. The bird with a brown crown and rufous flanks prefers dense forests from northern Alaska east to Labrador.

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# WISCONSIN

## NATURAL RESOURCES

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**FRONT COVER:** During the past 15 years, DNR with several wildlife partners has worked to bring back elk populations extirpated since 1886. Read our story about progress and challenges in elk restoration in the Clam Lake area.

Matt McKay, DNR Hayward Office

**BACK COVER:** Freezing fog creates a thick coating of hoarfrost at Pleasant Valley Conservancy State Natural Area in Dane County.  
**INSET:** Hoarfrost on common milkweed. For more information, or to order a guidebook to State Natural Areas, contact the State Natural Areas Program, Bureau of Endangered Resources, DNR, P.O. Box 7921, Madison, WI 53707 or visit [dnr.wi.gov/org/land/er/sna](http://dnr.wi.gov/org/land/er/sna).

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**Young  
hunters,  
new  
hunters  
and their  
mentors  
can hone  
their skills  
at Sandhill.**

# **A place for first hunts and new past**

Map and compass work is part of the orientation in a workshop for students and chaperones who sign up for a special early November hunt at DNR's Sandhill Outdoor Skills Center. Here center director Richard Thiel reviews with a student how to map and follow bearings.

ROBERT QUEEN



*“Waking at 3 a.m. on a cold November morning to sit in line for an hour; waiting for the gate to open; getting into the woods 45 minutes before opening day; and feeling very, very cold, would have sounded nuts to anyone but a hunter. I was at Sandhill for my first hunt with my Dad as my chaperone. We were sure to have a good time and hopefully get my first deer...”*

# outdoor times

*Richard P. Thiel and Britt Searles*

**T**welve-year-old Bridget Schumaker wrote these lines following her experience at Sandhill Wildlife Area. Since 1992, the Sandhill Outdoor Skills Center has sponsored a special youth deer hunt on the first full weekend in November for children aged 12 to 15 and a beginner hunt for adults 16 and older. In the intervening years, more than 2,500 students have attended a one-day workshop and earned the opportunity to pursue a wily whitetail on this special hunt on the 14-square-mile Sandhill Wildlife Area located about 20 miles west of Wisconsin Rapids. These students and their adult chaperones come from throughout Wisconsin and some from out-of-state to join this unique DNR Bureau of Wildlife Management education program.

Sandhill isn't just any old wildlife area. The site has served as a deer research facility for the Department of Natural Resources since 1963. The property was managed as Sandhill Game Farm, Inc. by pioneer wildlife biologist Wallace Grange and his wife, Hazel, at the height of the Great Depression.



At the predawn line-up during the youth hunt, hunters and chaperones review their assigned hunting locations at the check-in stations.



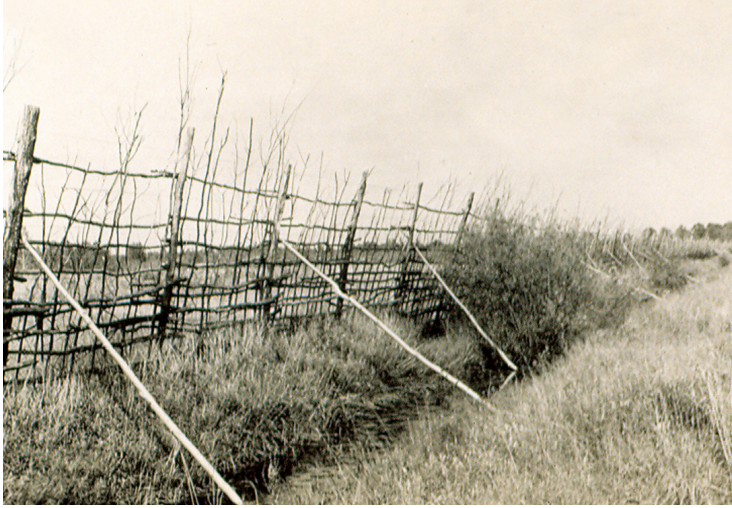
Sandhill staff asks questions of each hunting pair every day of the hunt as part of on-going research.



Each harvested deer is registered, measured, aged and tissue samples are taken for health assessment.

PHOTOS THIS PAGE COURTESY OF SANDHILL OUTDOOR SKILLS CENTER





The fence around the Sandhill Game Farm was originally handbuilt and eventually replaced with a sturdy eight-foot-high enclosure. The setting separated the captive game farm herd from wild deer populations and provided an ideal location for subsequent deer research.

COURTESY OF SANDHILL OUTDOOR SKILLS CENTER



Wallace Grange feeding his pet sandhill crane, Silver. Grange was the Wisconsin Conservation Department's first superintendent of game management in 1928 and had a distinguished career as a wildlife biologist before he and Hazel bought and restored more than 9,400 acres into the private Sandhill Game Farm that they managed for more than 25 years.

COURTESY OF SANDHILL OUTDOOR SKILLS CENTER

Over a seven-year period between 1930 and 1937, the Granges acquired nearly 9,000 acres of burned-over, played-out land, handbuilt a high deer-proof fence around it, and began the daunting task of raising wildlife for export. State conservation agencies were just beginning such wildlife restoration programs. Deer live-trapped at Sandhill Game Farm, Inc. were shipped and released in far-flung places like Florida, Mississippi and Georgia to jump-start their faltering deer herds.

By the late 1950s, interest in stocking deer died away as state deer herds began to rebound. The Wisconsin Conservation Department's Game Management Division (the DNR Bureau of Wildlife Management's predecessor) became interested in acquiring Sandhill in response to overtures from the Granges who were seeking an owner-guardian for their beloved land who would promote the ideals of conservation through research and education. Several game managers and deer research biologists recognized this facility's value. They wanted to acquire this fenced-off property to test various management strategies in part to answer pressing questions on deer herd management. They reasoned that with some improvements, the deer-tight fence surrounding the property provided the barrier needed to prevent captive deer living within from mingling with wild deer outside the fence. This would make the task of counting Sandhill's contained deer herd much easier. The biologists were interested in answering such questions as: How do deer numbers respond to changes in forest habitat? What effect would different kinds of hunting seasons have on the age and sex ratios of the Sandhill herd? They envisioned studying the behavior of Wisconsin's deer hunters who used the site as well. Negotiations proceeded over a number of years and in 1962, Gov. Gaylord Nelson signed a purchase agreement.

During the past 40 years, the Wisconsin Department of Natural Resources has conducted some incredible studies on Sandhill's whitetails. Led by renowned (now retired) wildlife biologist John Kubisiak, studies in the 1970s and 1980s focused on such diverse questions as whether deer hunters can exterminate a herd? Do muzzleloaders create excessive losses from hunters wounding deer that go unretrieved? At what densities do deer hunters begin to feel crowded and complain of seeing "too many" other deer hunters?

Another unique charge the Granges left to the state as a condition of sale was to promote opportunities for wildlife education. This aspect of Sandhill's charter didn't really get off the ground until the Outdoor Skills Center was created in the early 1990s. As its director, Thiel leads the charge in developing numerous programs to appeal to a broad cross-section of interests ranging from learning how to hunt and trap, to learning more about wildlife ecology, honing skills to better view wild animals, learning to camp and trying other forms of recreation where wildlife is a focus. It was only natural that a special youth hunt became a central





The Sandhill Outdoor Skills Center hosts courses in recreational safety and outdoor enjoyment throughout the year.

part of our educational offerings.

Our concept of a youth hunt provides participants with a safe, educational and fun activity that includes both a workshop and a special one-time hunt. Our youth program targets 12- to 15-year-olds whether or not they have hunted in the past. Our first-time hunt program is open to anyone 16 years or older.

Our work starts each January, 10 months before the hunt, in meetings with the Sandhill Deer Management Committee composed of biologists and University of Wisconsin wildlife ecology professors. We review Sand-

hill's annual deer herd census to determine how many deer should be harvested and the number of hunter permits we will issue. We accept applications from the end of March through the end of May each year. Demand outstrips the number of permits available so we use randomized computer drawings to select participants in early June. Over the years we've been able to accommodate about 69 percent of the applicants, which translates to 123 to 195 hunters annually. Very consistently, about 25 percent of our young hunters are female.

Each student-chaperone pair is



ROBERT QUEEN

Students and mentors attend a one-day workshop in August before the special November hunt to become comfortable on the Sandhill grounds near Hancock, review special hunting rules on the property and learn about deer biology.



ROBERT QUEEN

Range time is part of many Sandhill programs including the workshop *Becoming an Outdoors-Woman*. Typically a quarter of young hunters participating in the annual youth hunts are females.





Safety and skills sessions offered on the grounds include learning how to cross fences with firearms and use tree stands.

ROBERT QUEEN

assigned to attend a one-day workshop held in early August. We hold five or six such workshops over a two-week period to accommodate all hunting pairs. In workshops we spend a few hours orienting students and chaperones to the Sandhill facility, distributing maps and practicing compass skills. After some practice, those skills are put to the test. Given just a handful of instructions, the teams maneuver through an orienteering course. Their task is to reach various posts scattered about in the woods. We also bring in a conservation warden to talk with the groups and review special deer hunting rules and regulations on the property. Then a wildlife specialist leads a session on deer biology. Each student also gets to improve their marksmanship skills on the facility's rifle range. We supply firearms for range training and can loan out guns for the supervised hunts on our grounds. All-in-all it is a long, eventful day.

In all but four of the 19 years we've run these special youth and beginning adult deer hunts, participants have received an either-sex deer permit, allow-

ing them to select a doe, fawn or buck. This gives each student the freedom to target whatever comes their way without worrying about accidentally making a mistake, as happens sometimes when antlerless permits are issued.

At their workshop, hunters learn that part of our process is doing a bit of research. Each evening before the students and chaperones leave the property following their hunt they are asked a series of questions. And if they have harvested a deer, each animal is weighed, sexed and aged. This information helps biologists assess the year-to-year changes in Sandhill's herd. Since 2002, we have also collected either brain tissue or other samples to test for chronic wasting disease. No deer at Sandhill have tested positive to date.

We're getting a bit ahead of our story. Long before daybreak on the morning of their hunt the cars are lined up at one of our four entry points. Sleepy-eyed kids are nudged awake by excited chaperones to gather up their permits at the check-in station so they can get into Sandhill and hopefully arrive at their stands before the deer do!


*"When 7 a.m. rolled around it was still cold and quiet, but sunny. Feeling chilled, I said 'yes' to the hot chocolate Dad offered me. While pouring it, Dad kidded, 'The deer will come now.' How right he was. I saw movement and two deer were staring at us from the woods. I nudged Dad. The lead deer would not come closer. It just stomped its foot to warn the other deer behind it, before trotting away. I had seen my first deer while hunting."*

So how have these 2,500 beginner hunters done? Over the course of 19 years they have harvested 951 deer; a success rate of 35 percent: not too shabby for beginner hunters! The percent of the harvest consisting of bucks (other than buck fawns) has ranged from 16 to 85 percent annually, even though we stress in our workshops that any deer taken by these youthful hunters is a deer to be proud of!

*"At 1:25 p.m. two does came running along the edge of the woods with a buck chasing them. The buck saw us, stopped and turned the other way. Well, there goes three more deer, or so I thought. Suddenly one of the does came walking back into the clearing and stopped broadside of us. I got her in my sights and started to shake like I was freezing cold. I said to myself, 'calm down.' I stopped shaking and squeezed the trigger. The deer took off, Dad's hand patted my arm, and I had shot my first deer."*

*"...I was so excited, I could not concentrate and find any blood. Very soon though, I was able to help. I thought of this part of the hunt as a puzzle. ... I spotted some blood on a sapling and pointed it out to Dad. He found another spot, and then we looked ahead and there lay my prize."*

*"I will never forget the fun I had that weekend with my Dad, and the thrill of our success. Engraved in my memory forever is November 4, 2001, 1:30, the time I shot my first deer at Sandhill."*

Schumaker's words have been repeated nearly 2,500 times at Sandhill in the past 19 years. She and others like her have learned that hunting is about sharing quality time with people you enjoy being with in truly remarkable surroundings — Wisconsin's great outdoors. 

*Richard P. Thiel directs Outdoor Skills Center programs at Sandhill Wildlife Area. Britt Searles is an educator at the facility.*



## HOW DEER REACT TO THE HUNT

**Give deer credit for figuring out that hunters pose a threat to their survival. Just because you don't see animals doesn't mean "there aren't enough deer out there" during hunting season. Whitetails are capable of learning, and those that survive can figure out how to avoid hunters.**

We tested this out during our annual two-day youth deer hunts between 1999 and 2002. Trained UW-Stevens Point students radio-collared and monitored deer positions and activity throughout the day. Students assigned to two-hour shifts at each of two telemetry radio towers recorded a radio fix per deer per hour from 5 a.m. until 5:30 p.m. This allowed us to "see" where each deer was prior to and after legal hunting hours (6:15 a.m. to 4:45 p.m.) before, during and after their interactions with hunters.

Obtaining a fix was relatively simple: Students in the two towers talked by portable radio, coordinated reading times and rotated boom antennas in a 360° arc until the signals were loudest. They took compass bearings of each observation and later mapped their results to plot fixes on the same deer. The intersection of lines drawn on the map from each tower pinpointed where the deer was located.

To determine whether the animal was "active" or "inactive," students listened to sense if the signal varied in volume. Deer were considered active even if they were only moving their necks. If the signal volume remained constant, the deer was definitely inactive.

In both the 1999 and 2000 seasons we followed the signals and movements of one collared buck and five collared does. Some deer were monitored both years. Their activity levels by the second day of the hunt decreased by half and they tended to be more active at dawn and dusk by the second day of the hunt. They clearly reacted to the presence of hunters. In fact, collared deer that were harvested by hunters were animals that showed the highest daily activity rates.

As for locations, the radio fixes we plotted were quite revealing. By day two, adult deer — both bucks and does — hunkered down into a swampy thicket and sat out the remainder of the season. Some managed to move to their "secure space" on day one right during the thick of the hunt!

Doe number 26 provided an excellent



Over the years about one in three young hunters taking part in the youth hunt program at Sandhill has harvested a deer.

COURTESY OF SANDHILL OUTDOOR SKILLS CENTER

example of this hunkering down behavior. Radio-collared in winter of 2000, we followed her reactions towards hunters for four years. Once when we pinpointed her location during a shift change, I slowly drove down a tractor trail that wound along the rim of the marsh looking intently for some sign of Doe 26.

A quick sudden flash — then nothing — alerted me to her presence. She had been tracking the sound of our truck. I stopped. It took another 30 seconds of intent peering through the thicket to make out the outline of two ears, a muzzle, two eyes and the body of a deer lying down. She was looking *directly* at us not 20 yards away! It took another two minutes to discern the outlines of her two fawns lying beside her, also facing us. We sat in the idling truck for perhaps five minutes and watched her through binoculars. She never blinked an eye nor wrinkled her nose knowing that any movement would give away her position. In each of the four deer seasons she retreated to this same 40-yard swath of

tag alder thicket. In two of those years we know she had fawns and they were right by her side. This mother was good at teaching her offspring how to deal with hunters. When she was finally shot a few years after our telemetry study ended, I was stunned. The chaperone to that hunt described how he and his student were walking through that same thicket and chanced upon her. She did not jump from her bed until they were less than five yards away. Doe 26 clearly showed how white-tails can stay out of harm's way to survive another day.

I imagine in the old days this behavior evolved as a good strategy to survive predation. Deer will hunker down. They don't vacate their range as some hunters believe. They merely change their habits temporarily. Over millennia deer learned to alter their behavior in response to threats, select safe times of day to move for feed, retreat to areas within their home range that offer secure cover, and lay low until danger passes. Deer, we learned, are pretty smart after all! — *Richard P. Thiel*





# Nearer the earth

## Islamorada, Fla.

The sun is coming out and it's warming up outside, wrecking an otherwise perfect autumn couch potato football day. I love my home in the Florida Keys, but this time of year, I miss the fall seasons of my youth in Wisconsin...

*Story Photos and Text by David Schneider*

I took my son Robert dove hunting yesterday and, of course, Dad came along. He wasn't physically with us in the car as we headed north to the Everglades Frog Pond, but he was there as surely as if he were in the driver's seat.

Robert called him on the cell phone to wish him well as we reached the entrance where the C111 canal crosses Highway 9936 leading to Everglades National Park.

Doves replaced deer today. It is mid-November, and if we had been up north with the rest of the family in Wisconsin, Robert and I would be entering the cold, snowy confines of a balsam fir bog, hunting for whitetails on this opening day of deer season.

But we live in the Florida Keys now, land of tarpon, bonefish and spiny lobster. While these make for very enjoyable pursuits, they are hardly a substitute this time of year for an autumn hunt with a gun in your hand, especially for a man raised in the Midwest and his son.

We're doing the next best thing down here: hunting doves, and it occurs to me as I park the car that, had I grown up here, this is what Dad and I would probably have been doing every year.

As I climb out of the car and watch

Robert go to the gun cases, a gust of humid air brushes my face. It is a cool breeze. A rare cold front passed last night, triggering the familiar wrench inside me every year, no matter how long I've been away from home. It drives me. Not just to hunt, but to feel crisp air, see the frost on burnt amber leaves, smell the woods, be warmed by the company of those I admire, respect and miss greatly this time of year.

I watch Robert take the .410 out of its case; the same shotgun Dad gave me when I was Robert's age. I remember the first time I ever shot it. Dad and his old buddy Gene Rankin took me out in the sticks with a box of clay pigeons. I broke the second one out of the thrower as I recall, then never hit another target all day.

As Robert gears up, I say a word of thanks that Dad is still on this planet with us this morning. He had a small stroke — a TI — last night at my sister's while preparing to go up to our northern Wisconsin cabin for opening day. I silently ask that he not feel too disappointed that the doctor forbade him to make the trip this year. He would have to watch my brother-in-law Lee and nephew Michael back out the driveway with all that blaze orange and anticipation in the pickup, while he stayed be-



hind with my sister. I smile at the thought of those hunters having to cook for themselves at the cabin since Dad won't be there. We never eat better than at deer camp, and Dad always goes all out for us in the cabin's tiny kitchen.

I remember the year Dad had to leave deer camp early to be with my





grandfather who, now that I think about it, had just suffered a stroke opening morning. Dad left us with a pork roast for that evening's meal in the refrigerator. Normally, he would have cut his hunting day short to return to the cabin early and to put the roast in the oven under slow heat for the other hunters to enjoy upon their

return from the woods. Well, my Uncle Lloyd, who could sniff out eight-point swamp bucks in his sleep but didn't know a meat thermometer from one of his welding torches, took it upon himself to prepare dinner that evening.

"Somebody get a saw," he commanded while pulling the frozen roast out of the icebox, and my earlier day-

dreams of an apple-roasted pork dinner turned into quickly fried pork chops — served with ketchup.

Robert and I started down the levee of the C111 canal, also known as the Aerojet canal. It's named for the company that was to build the huge rocket boosters for NASA's Apollo moon program in the 1960s. The canal had been





Robert rests on the bank of the C111 canal in the Florida Keys where the day offers a dove hunt instead of the opening of deer season back in Wisconsin.

dug out of the limestone and sawgrass in the Everglades to float the huge solid rocket segments from the nearby plant down the Intercoastal Waterway and ultimately up to Cape Canaveral. The plans were eventually scuttled; another company won the NASA contract, and the rocket plant buildings and hangars once on the cutting edge of technology and discovery sit now as rusting relics while turkey buzzards and red-tailed hawks ride the high thermal currents above.

Down here in southeast Florida the adjacent Frog Pond is a special permit area that was an old agricultural field. It was sold back to the state and is about the only public hunting spot open and accessible that attracts an abundance of birds, but on this November day it is closed to hunting, so we have to settle for the levee.

Robert and I walk the levee with guns unloaded as regulations require, looking for a flat opening devoid of tall thick sawgrass and palmetto scrub where we can step down and wait for the doves. The cool breeze whistles through the leaves of mahogany and buttonwood trees growing high on the levee. It all looks strange to a Wisconsin boy in November. We see no birds.

Still, it is a wondrous day. Wispy cirrus clouds dip and turn into puffy cumulus as they prepare to transform the patchwork blue sky above into the familiar daily Everglades Rain Machine. The Aerojet canal, straight and wide, narrows into the Glades, beckoning to where Von Braun's mighty Saturn rockets were to be built. Robert is up ahead, his trigger finger getting itchy, and I regret not being able to give him a better hunt today. Yet, as I call ahead to him, I don't see how it could get any more beautiful than this.

It is 4:30 in the afternoon now; 3:30 in Wisconsin. Up at the cabin, Lee, Mike and the others are probably settling in to their late afternoon buck stands for "happy hour," when the north Wisconsin

pine forest turns silent and light snow flurries dance amid soft dimming twilight. I am certain Dad is thinking of the same thing at this moment and I think about him. I don't know how many stories I have told Robert beginning with the words "When I was your age" and concluding with tales of Dad, Lee, Uncle Lloyd, and cousins Mike and Skeeter, and squirrels and tree stands and buck


snorts and breakfasts before sunrise.

I continue those stories on this day, even as I'm ever conscious that our new Florida traditions accompany old ones. The word "legacy" is never far from my mind.

My thoughts return to last month when Robert and I traveled home to Wisconsin for nephew Mike's wedding. I had purposely set aside an extra day so we could all grouse hunt together. It would be Robert's first hunt with his grandfather. Dad's hunting days are pretty much done now; it hurts him to merely walk some days, but he came along anyway, for moral support. I suspect he knew how important it was to me and to Robert. It

was a day like this, and I think about it as Robert and I drive home from our dove hunt. More than once, Robert asked me "Why all the smiles and sighs?" All I could say was "You'll see someday, son."

Those who love the outdoors will immediately recognize the symptoms that accompany falling leaves and a west wind veering north. The sportsman displaced by time, geography (and perhaps wanderlust?) truly feels a dilemma at this time of the year, every year. It transcends work, chores, women, all otherwise enjoyable pursuits and routines. It envelopes soul and heart as well. It is joyful to contemplate, yet somehow keeps me nearer to the earth. To quote my favorite line from the movie *The Deer Hunter*, "This is this." We all live in the now, but we appreciate that which transcends time.

The Florida Keys locals call this part of U.S. Highway 1 "The Stretch." As Robert and I drive back south towards our island home, I look over at him, pleasantly dozing in the passenger seat. The sun is setting over Florida Bay to my right and Barnes' Sound glows to my left. My eyes return to the road and again I smile. My son is with me as are my dad's lessons and love. The outdoors always whispers what matters. Hot or cold, whether in Florida or back in Wisconsin, the important things stay the same. 

*Originally from Monona and now living in the Florida Keys, David Schneider reflects on family, the sporting life and his roots in Wisconsin.*





# Feeding an idea and a community

Dane Djerrou (left) and friends dig in at the Badger School garden site.

## An urban agriculture revolution is growing.

Story and Photos by Natasha Kassulke

**T**he faces of the Future Farmers of America may be city kids like 17-year-old Dane Djerrou. Dane, a student at Madison's West High School, is learning to garden in a parking lot instead of on a rural farm plot. On the site of a once blighted, abandoned lot in the city, young farmers like Dane are using hand tools instead of tractors to forge fertile ground for fresh fruits and vegetables.

It's part of the "good food revolution," a term coined by Milwaukee visionary and Growing Power president Will Allen. A large and quiet man, Allen was recently named to *Time* magazine's annual list of the hundred "World's Most Influential" people; a distinction earned not for his former career playing professional basketball, but because this son of South Carolina sharecroppers has spawned a move-

ment of growing food close to home, even if home is in downtown Milwaukee or a south side Madison neighborhood that hugs a busy highway.

The movement has become much more, says Robert Pierce, an advocate in developing sustainable locally grown food. Growing Power has trained urban farmers from Chicago to Kenya.

Pierce has been growing food for 30 years and practicing organic farming



Robert Pierce (left) and Will Allen (right) are starting a program at a new magnet school in Madison to grow produce for local food programs and teach job skills to students.



The first garden plots in bloom last summer.





**Will Allen (left) of Growing Power** has started urban agriculture programs to raise fresh, healthy foods, job opportunities and awareness of nutrition in the heart of downtown neighborhoods.

since 1984. He started as a vendor at the South Madison Farmers' Market in 2002 and became the market manager in 2003. He became a protégé of Allen's about 10 years ago and continues to work with P.E.A.T. (Program for Entrepreneurial and Agricultural Training) that teaches teens how to grow healthy food and run their own businesses.

"People are concerned about where their food comes from and what's in it," Pierce says. "I wanted to be involved. Will told me to go find a place and so I started looking."

Pierce's search brought him to an abandoned school building near the highway; a four-acre site next to a bowling alley at 501 E. Badger Road. It also launched a partnership at the site now known as The Resilience Center at Badger School. The vision is to build a privately-run community center that incorporates a charter middle school. The magnet school would run year-round and the property would be ringed with vegetable gardens and orchards where sixth through eighth graders would get hands-on lessons in green living, growing healthy foods and growing local businesses that can provide local jobs.

"I see so much opportunity here," Pierce says over the hum of traffic on the nearby Beltline Highway. "This is the heart of urban agriculture."

### **A green design to help greens and students blossom year-round**

"There won't be an inch of bluegrass here," says Tom Dunbar, executive director of The Center for Resilient Cities, the community center that will house the school and manage the surrounding property. "Every square inch will be something to eat and this will become a neighborhood gathering place." A map of the future site is as ambitious as it is gastronomically appealing.

The master plan calls for a school and neighborhood building with green design powered by wind and solar energy. Vegetation that produces perennial edibles including fruit trees, nut trees and berry bushes will be planted along the property perimeter. There will be a hoop house for year-round growing. Fish will be raised here too. A building on-site (formerly used as a school, neighborhood intervention center and for storing security files) will be deconstructed and recycled.

The project is being carried out in phases.

"The county was interested in selling the four-acre parcel and asked us what we thought it should be," Dunbar says. The group submitted a proposal in August 2009 that was accepted by the county in September. In six weeks, the group raised the funding to pur-



Composted soils and worms are piled in long windrows that can grow and sustain excellent quality crops right on top of old paved areas.

chase the property for \$500,000 and Growing Power came on board. More recently, the local school board reviewed and accepted a proposal for a charter school on-site. The board also gave the group permission to seek a planning grant.

Joe Sensenbrenner, former Madison mayor and now chairman of the board for The Center for Resilient Cities, sees the site as "a natural invitation for people to come to plant, grow, consume, and dispose or reuse."

"This project weaves together intensive urban agriculture, a movement for healthy communities and sustainability, and food issues," he says. "This is project-based education. Energy resources are an aspect of the site and the local gas and electric utility (MGE) is a chief partner. We are looking into the highest certification standards such as LEED (Leadership in Energy and Environmental Design); a measure of green, sustainable buildings."

Three acres of city-owned detention ponds nearby could be integrated into the project. Sensenbrenner sees the potential for floating platform gardens modeled after those in Central America. The Center for Resilient Cities is also paying attention to lessons that can come from the site so other communities can learn from the Badger experience.



The Center is working with University of Wisconsin-Madison professor of environment and community sociology Michael Bell to study what changes people are willing to make to put local food on their table. Bell is asking what changes neighbors see where community gardens are planted. He's also looking at the true cost of local products such as carrots — including volunteer time, capital investment, water resources and energy expenses.

It all comes back to crediting the vision of that mountain of a man.

"Will Allen is a genius and has developed a very portable, affordable model — compost and worms — that cities across the country can use and benefit from," Sensenbrenner says. "He uses hoop houses (simple greenhouses) that are very inexpensive and the compost supplies heat so you can garden year-round even in places like Wisconsin. We can get a lot of productivity out of small areas and don't need many acres of permanent soil."

### Starting out by falling down

On-the-ground work started in April 2010 when seven trees on the site were felled and then milled and the residues chipped. Some of the longer pieces of the trunks will be milled into boards to see new life as benches in the gardens. The pines were chipped and left for mulching blueberries. Apple wood chips are being stored for smoking fish that will be raised here.

A key component of the good food revolution is that there is no waste whether you are dealing with vegetables or trees.

Sean Gere, a tree surgeon, is interested in promoting uses for the wood. Gere has worked with tree owners to see that their trees live on in many forms after they are harvested whether they are used for wood chips, lumber,

turned into wooden bowls or crafted into guitars. Some wood logs can even be inoculated to grow woodland mushrooms like shiitake.

"This feels like work," Gere says to his four-man crew as they engage in a tug-of-war battle with a 43-year-old white spruce. Small limbs are dragged to the wood chipper. The trunk and larger branches are milled on-site.

Brian Keller, from Sustainable Solutions, brought a portable lumber mill to the job site to cut dimensional lumber and shingles out of urban trees.

"When a tree is cut down in the city, a lot of people don't realize that they can reuse the wood," Keller most often cuts durable species that won't rot when used outside. The boards cut today may be used for benches and fencing.

"By reusing the wood, you can give a tree another 50 to 60 years of outside

truckloads of worm-friendly, weed-free compost were hauled in. The first load was made from spent beer mash provided by the Ale Asylum Brewery on Madison's northeast side along with unusable produce from a grocery store and individual vegetable scrap donations. A second load of finished compost came from Growing Power reserves in Milwaukee.

Compost is a critical component in Will Allen's lesson plan. A compost pile full of working, active bacteria turns organic residues like plant trimmings, coffee grounds and brewery mash into soil. About 80 to 90 percent of the organisms in compost are bacteria, which are responsible for most of the decomposition and generate heat as they break down organic wastes. The nutrient-rich compost is a key medium for growing the vegetables and other plants to come.

"We'd like to add some flowers and maybe bring in some bees and make it look nice," Pierce says. The gardens will be mostly traditional — tomatoes, beans and such.

"The soil is very rich," Pierce says pointing to the long windrows of compost. "These will be permanent beds and we will do a mass planting."

The "we" includes many young people.

Lydia Hynson, 19, is studying cello performance at Lawrence University in Appleton. She is one of five students who came from Lawrence to help build the beds.

"We like getting dirty," she says.

Sophie Patterson, 20, also a student at Lawrence studying Environmental Studies, says this is her first Growing Power project. She is a member of SLUGs (Sustainable Lawrence University Gardens). The SLUGs just built a hoop house on campus. They raise vegetables and sell them to the campus food provider so students can have fresh produce and healthy choices. In return, the student dining facility asks students to separate uneaten vegetable wastes from their meals so the dining hall can offer an excellent source of compostable materials for SLUG, materials which otherwise are disposed of in a landfill.



Nothing goes to waste. Evergreens removed from the Badger School site were sawed into boards (below) on-site with a portable sawmill. The lumber will provide boards for benches. Smaller twigs and residues will be chipped into mulch.



life in another form," Keller says.

He can even use small, 20-inch sections from higher up the trees that most tree sales and large lumber companies will turn away. Most mills, he says, prefer the trunk to branches.

[Log on and watch a video of the tree felling and milling occurring on-site at [wnrmag.com](http://wnrmag.com)]

### Bring on the compost

Just weeks after the trees were felled,





**Cora White and other neighbors take part in forming windrows of compost that will be used as growing beds for vegetable and flowers. Food raised here will be sold at farmers' markets and provide lessons in eating nutritious locally-grown produce.**

"I enjoy seeing the young people out here working and it changes their eating habits," Pierce says. "It's great to see these kids growing vegetables and then pulling them out of the soil, washing them and eating them. It's a transformation."

On the planting day in May, Pierce gets the volunteers' attention: "Let's get these wheelbarrows loaded with compost!"

About 50 volunteers respond hoisting rakes and shovels. Pierce smiles. "What's the basis of a good garden? You've got to have soil that is rich. It's everything. Our success is in the soil."

Pierce asks the group to strive for straight rows. The rows are 24 inches high and about 18 inches apart. Wood chips are spread between the rows to create walkways. About 20 rows are formed before planting begins today.

The group waits for Will Allen's arrival. One volunteer plays the fiddle while others join in singing David Mallett's "The Garden Song." The chorus echoes: "Inch by inch, row by row, gonna make this garden grow."

Cora White lives in the neighborhood and has been a community activist and business owner for 30 years.

"I made a decision to live in this neighborhood 30 years ago. I've seen uses of this lot come and go — adults, young people and seniors. I want to be involved, work with youth groups," she says. "I have a lot of imagination

and I want to use that wherever it can be used."

And so, she rolled the first wheelbarrow load of the day.

"I'm glad I didn't do this for a living," she jokes, "because the first day I'd quit. It's hard work. But the second day I'd love it all again."

"I'm excited about the possibility of the school partnering with Growing Power," says Nan Youngerman of the Badger Rock Middle School. "We feel like we are a piece of something bigger. This is step one in a brilliant project. It's going to be dirty. This is the dream project of my life. It's not like neon lights are flashing, but we are going to get our hands dirty and the worms are crawling today."

### **A stake in the community**

Stakes and string help mark and straighten the 36-foot-long raised beds. A semitruck pulls into the parking lot at noon. It's loaded with more compost that was three years in the making and buckets of worms. The worms are key. They gobble up their weight in plant wastes each day, leaving castings that fertilize the plants.

Sarah Christman, Growing Power's farm manager and operations director, gives orders.

"Get ready," she shouts. "We're going to install these beds the Growing Power way. Pile it high and let it fly!"

Will Allen arrives shortly after in his own truck bringing lunch for the volun-

teers. "I'm here to get something started," he says addressing the volunteers. He has a lot of fans here. One volunteer refers to him as "the celebrity of the gardening world."

Liz Campbell, 20, is one of Allen's fans. She works at Troy Gardens, a public community gardening space in Madison, and is majoring in Spanish and environmental studies at the University of Wisconsin-Madison. She came ready to work, knowing what to expect. She had previously attended a workshop from Allen and got hands-on experience working with worms and creating mushroom beds.

"Will wants you to walk away and know how to build these gardens yourself," she says.

"This site will change," Allen says surveying the property. "It makes me feel good to see this." He is fresh from a Kellogg's food and community conference where he spoke.

"We will use all new soil — we can do that even in places where existing soil is contaminated."

### **Back to the basics**

"We teach business and life skills to young people," Pierce says. Food that is raised on this site will be sold locally as part of the Market Basket program and sold at farmers' markets.

"I've been inspired by all the young people who are involved and the diversity I am seeing," Allen says. "Everywhere I go people seem to be interested in what we are doing."

And so the revolution continues to gain speed rushing forward from the greenhouse to the White House. Allen's credo: "Grow. Bloom. Thrive."

Last spring Allen stood with First Lady Michelle Obama when she launched her "Let's Move!" initiative to end childhood obesity. Two months later, Obama invited Allen back to join her as a guest at a dinner at a state visit from the president of Mexico. In 2008 Allen won a genius award from the John D. and Catherine T. McArthur Foundation and was awarded a \$500,000 grant for his efforts. He speaks at workshops and universities around the world. Allen smiles and then shakes off the accolades and picks up a rake.

"I've been traveling a lot lately and speaking," he says. "It's good to be working outside in the dirt again." ■

*Natasha Kassulke is creative products manager for Wisconsin Natural Resources magazine.*



# A herd in the balance

**The future of Wisconsin's elk herd rests with its ability to withstand threats like increased predation and continued vehicle collisions. Managers hope to help tip the scales in the elk's favor.**

*Kathryn A. Kahler*

**L**ife for Wisconsin's elk project staff is a mix of hope and harsh realities. Their hopes are measured by healthy cows with a high probability of bearing strong, feisty calves with a better than average chance of surviving to adulthood. Reality is tallied in a growing number of elk killed by predators and a continued threat from some motorists who ignore warnings.

Biologists have been working to restore a breeding population of elk in Wisconsin since 25 animals were brought in from Michigan in 1995. To see more photos of elk, follow the restoration work and hear what bugling elk sound like, visit the DNR website at [dnr.wi.gov](http://dnr.wi.gov), click on "Natural Resources" in the left column, click on "Wildlife" and follow the link to "Elk in Wisconsin." The photo gallery contains a link to a bugling elk video.



Laine Stowell, DNR's head elk biologist stationed in Hayward, says staff strives to stay objective when it comes to the growth and success of Wisconsin's herd. Yet there is a tremendous measure of fulfillment when they hold a baby calf whose mother and grandmother were held in past seasons.

"We also feel the loss when we investigate mortalities," says Stowell. "At the beginning of this elk year we had about 131 elk, but in the 15 years since elk were reintroduced, we've also documented 151 deaths. If elk didn't die, we'd have over 300 elk now and would have a limited bull hunting season. Most everyone — except people who hit elk with their vehicles — would be happy. But unfortunately, elk do die, and we try to minimize those losses anywhere we can."

## Elk returned to Wisconsin

Extirpated from Wisconsin in the late 1880s, elk had for decades been considered for reintroduction to the north woods. An attempt to bring them back in the early 1900s was thwarted by poaching. After a favorable study in the early 1990s, and with political and popular support, elk's return became reality in 1995 with the release of 25 wild Michigan elk in a remote area of the Chequamegon/Nicolet National Forest near Clam Lake. They've since been some of the most studied animals in the history of Wisconsin wildlife management.

The first four years of research on the experimental herd were headed up by the late Dr. Ray Anderson, then a professor at UW-Stevens Point. Anderson and his students oversaw the careful research and methodologies that would form the routines followed by today's DNR elk project team. Those first few years, with enthusiastic support from thousands of volunteers and benefactors, saw such success that Anderson, in a 1998 research report predicted that "at the current rate of growth, the herd could number approximately 500 in 11 years."

That optimism has been tempered by a kind of “one step forward, two steps back” reality. Prior to calving, the herd in the spring of 2010 was 131 animals, a far cry from Anderson’s prediction. Even so, there is reason for optimism amid elk enthusiasts of all ilks, some of whom look forward to a year

when the population reaches a target goal of 200 animals that might allow a limited bull hunting season.

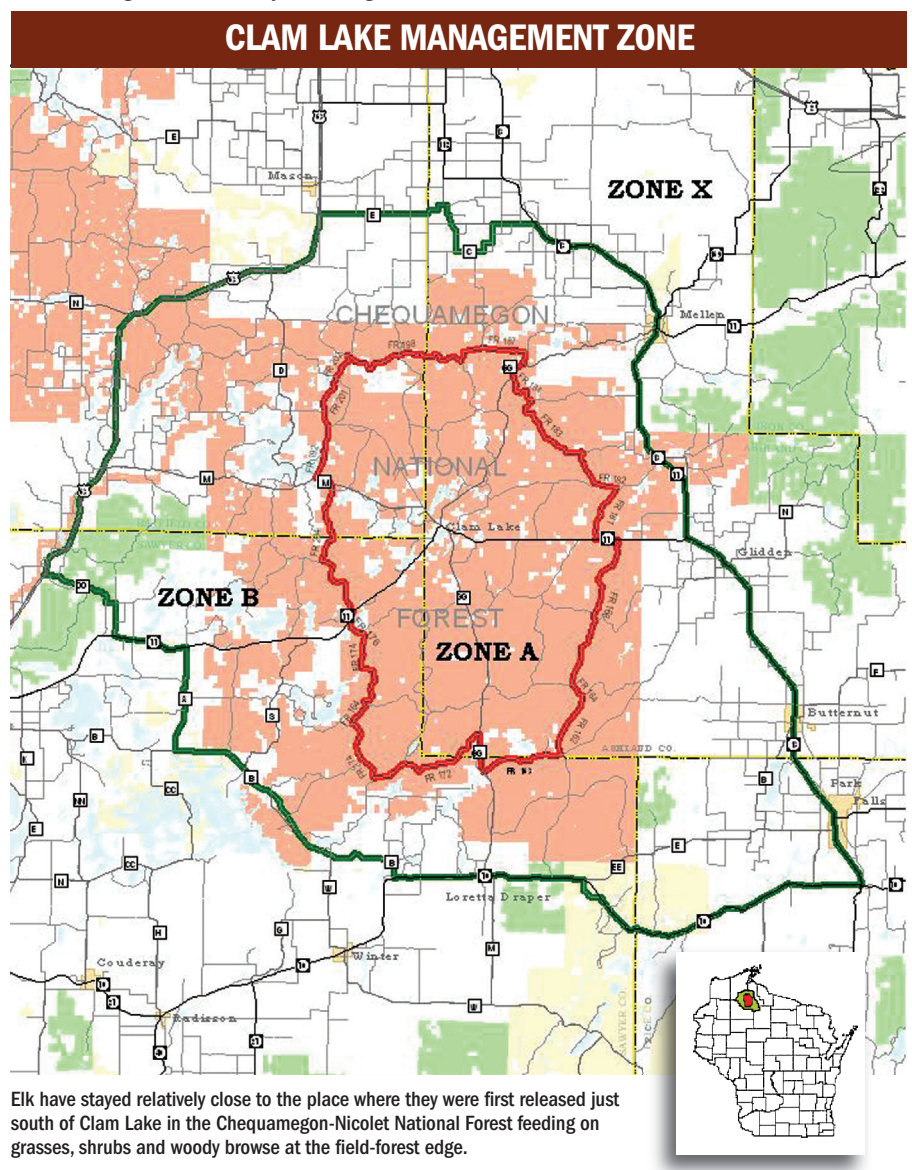
"We are at least a couple of years away from that," says Stowell. "Once we get closer we'll need to establish a hunting education program for successful applicants. An elk that weighs several hundred pounds is much harder to kill than its smaller deer cousin, so we'll need to educate hunters about elk biology and caution them against shooting at multiple targets if they think the first one didn't go down."

Until then Stowell and his crew will continue with the seasonal routines that make up their “elk year” — spring calf-searching, summer habitat improvement, fall bugling observation, winter trapping and year-round telemetry monitoring and mortality tracking.

## A new elk year

As an indication of just how important healthy calves are to the herd, elk biologists mark their new year by the day the first new calf arrives. So when hundreds of searchers take to the woods in mid-May to early-June and discover the season's first calf, a new elk year is declared.

Calving season can be a morale-boosting, upbeat time of year for project staff, but how it plays out depends on many factors and can sometimes be frustrating. Typically, around mid-May pregnant cows leave the herd to scout out a calving area. Once they've found a suitable site, they go back to the herd. Several days later, they return to the calving area, become inactive and give birth almost immediately. It's that inac-







MATT MCKAY

Each “elk year” begins in mid-May to mid-June when the first calves are born. If the calves are found, biologists measure, weigh and equip them with expandable collars to track their movements for a few years. Tracking keeps tabs on the herd’s range, growth and survival.

tivity — indicated by radio signals from the cow’s collar — that triggers the calf searches. Most years the calving season is over by mid-June.

When calves are found, biologists weigh and measure them, assign identification numbers, then fit the calves with expandable collars or break-away collars for bull calves that will fall off when they reach about 1½ to 2 years. These collars allow project staff to track the calves’ whereabouts and help determine calf survival.

The spring of 2008 was an especially frustrating calving season with unusually cool temperatures and freezes through Memorial Day that delayed calving by two weeks. Cows that gave birth early never became inactive and cows that birthed later became inactive, only to be searched and found still pregnant. Calves born early in the season were smaller and two were found stillborn, a rarity in the 12 previous seasons. One positive thing about the long drawn-out season was that only two

elk were preyed upon by bears (out of 19 calves found), compared to six out of 23 the previous year.

Observations and statistics kept on calving seasons show that the timing of spring green-up is very important to fetus development and health. Elk calves born early in the spring of 2008, for example, averaged 32 pounds — five pounds lighter than calves born later in the season when more abundant forage was available. Calving statistics also allow project staff to establish pregnancy rates, male to female ratios, cow to calf ratios and calf survivorship, all important to assessing the health of the herd.

The early spring and lush green-up of the spring of 2010 produced excellent conditions and an estimated 38 calves were born this year with one of the best male-to-female ratios in the past 10 years. Stowell and his staff were optimistic about calf survival after observing no bear predation by the end of June.

## 2010 CALVING SEASON

**The 2010 calving season showed promise. The 2010-11 elk year dawned early with the first calf born May 13. Elk project staff monitored 39 radio-collared cows from mid-May to mid-June. Here are some of the promising statistics:**

- Searchers found 23 calves. From that number, staff estimates 38 calves were born.
- No bear predation was observed, compared with 20 to 25 percent in a normal year.
- April 14th green-up was the earliest on record, resulting in excellent calf development and cow health.
- Births were evenly distributed throughout the month-long season.
- The estimated sex ratio for the 23 calves found was 12 males to 10 females, one of the best in 10 years. These new calves raised the estimated herd population to 164 at the end of June. There are currently 86 elk with radio collars in the herd.



## Providing conditions for optimal growth

Much of the time from spring green-up to snowfall is spent improving elk habitat. Elk prefer to graze on a wide variety of grasses and forbs found in natural meadows and forest openings. DNR and its partners establish new openings by clear-cutting; removing stumps; disk-ing and planting small one- to three-acre sites; and treating plots with lime, nitrogen or potash to study plant composition and differences in forage quality. Researchers also place forage exclusion cages on treatment and control areas to measure normal plant growth rates and the impact of grazing elk. Such efforts help managers determine where to focus future activities and funding.

The study area consists of a core and buffer range centered where Bayfield, Sawyer, Ashland and Price counties converge. Much of the 288-square-mile core area is federal forest land in the Great Divide District of the Chequamegon National Forest. The surrounding 824-square-mile buffer zone is a mix of national, state and county forest and private land. Within the core range is an X-shaped area of grasses, sedges and forbs kept free of trees and shrubs that until the fall of 2004 was part of the U.S. Department of Navy's Extremely Low Frequency (ELF) Communication System.

These long, narrow strips — each 18 miles long and 33 yards wide — were part of the reason the area was chosen for the elk study. The Navy maintained a large antenna of electrical cables atop utility poles as part of a means of communicating with its underwater submarines around the world. The open area underneath the lines provided almost 500 acres of grazing for the growing elk herd. Once the system was disbanded in 2004, the task of maintaining open space under the ELF lines was left to the U.S. Forest Service and its partners. The U.S. Forest Service mows sections of the ELF corridor on a four-year rotation with a grant for about half of the expenses from the Rocky Mountain Elk Foundation.

The U.S. Forest Service also maintains about 200 acres in about 64 small grassy openings within a quarter-mile of the ELF lines, and several hundred additional acres of small aspen clear-cuts within a 10-mile radius of Clam Lake. The Forest Service helps protect calving and wintering



To help the elk herd stave off losses from wolf and bear predation, biologists are considering "assisted dispersal" where a smaller number of elk would be trapped and trucked farther north in the Clam Lake elk range, farther away from wolf packs that have become adept at hunting elk. Hopefully that would buy time allowing more cows to have more young and more elk will reach maturity when they can better fend for themselves.

MATT MEYER



areas frequented by elk by closing several trails to motorized traffic within the study area.

### Fall bugling and mating observations

As summer wanes, daylight dwindles and nighttime temperatures start to dip, Clam Lake residents are treated to the echoing bugles of bull elk beginning the annual rut. In both 2008 and 2009, the first bugles were reported on August 25.

Bull elk spend the summer in small bachelor groups that break up when the rut begins. During the rut, which usually runs through early October, bulls polish antlers they've grown during the summer and bugle to challenge other bulls, maintain their harems and identify their territory. Generally, it's the older bulls (five to 16 years old) that establish harems and breed most of the cows.

The 2008 season featured an above average level of bugling and biologists estimated there were about 10 herd bulls with harems — a sign of healthy competition; even greater in 2009 with 12 to 14 harems and an increased number of satellite and sub-adult bulls.

Monitoring the timing, season temperatures and intensity of the mating season gives clues on what the following calving season will look like. If September is hot, with several days in the 90's mid-month, the following calving season will be drawn out with more calves born in late June and early July. If cool, breeding occurs quickly and the following calving season will be early and shorter, most cows giving birth by the first week in June.

The mating season is the period when elk watchers focus on the Clam Lake area. Many visitors come to listen and look for the elk. Dawn is the best time to hear them and most elk focus their activity along State Highway 77 west of Clam Lake.

### Winter trapping

Winter trapping allows project staff to collar elk that were either never collared (because they weren't found at birth) or that need replacement collars. Over the nine winters they have conducted trapping, project staff have captured or recaptured 403 elk. Data collected during winter trapping provides another independent measurement of population demographics and provides researchers with a greater degree

of confidence in their numbers.

It can also rekindle old acquaintances. In the 2007-08 trapping season, researchers recaptured Cow 26, the first elk calf ever captured and collared during the 1996 calving season. She had not been heard from for 10 years since her breakaway collar was shed and researchers were not sure she was even still alive. That same season, trappers captured two of the original released cows — Cows 2 and 18 — whose collars had gone dead two years before. Replacing collars on these matrons helps researchers track their complete life history and build a better population model for the herd.

The following season saw a similar capture that humbled the elk biologists. "On February 22 we captured a cow and calf just a mile and a half west of Butternut," reported wildlife biologist Matt McKay. "We had been frustrated by this group of four cows and one calf for three weeks and finally closed the trap door on four of the five only to have two escape. The remaining prize was a surprise. We had an uncollared calf and Cow 13 — one of the originals. Her collar had been off the air since

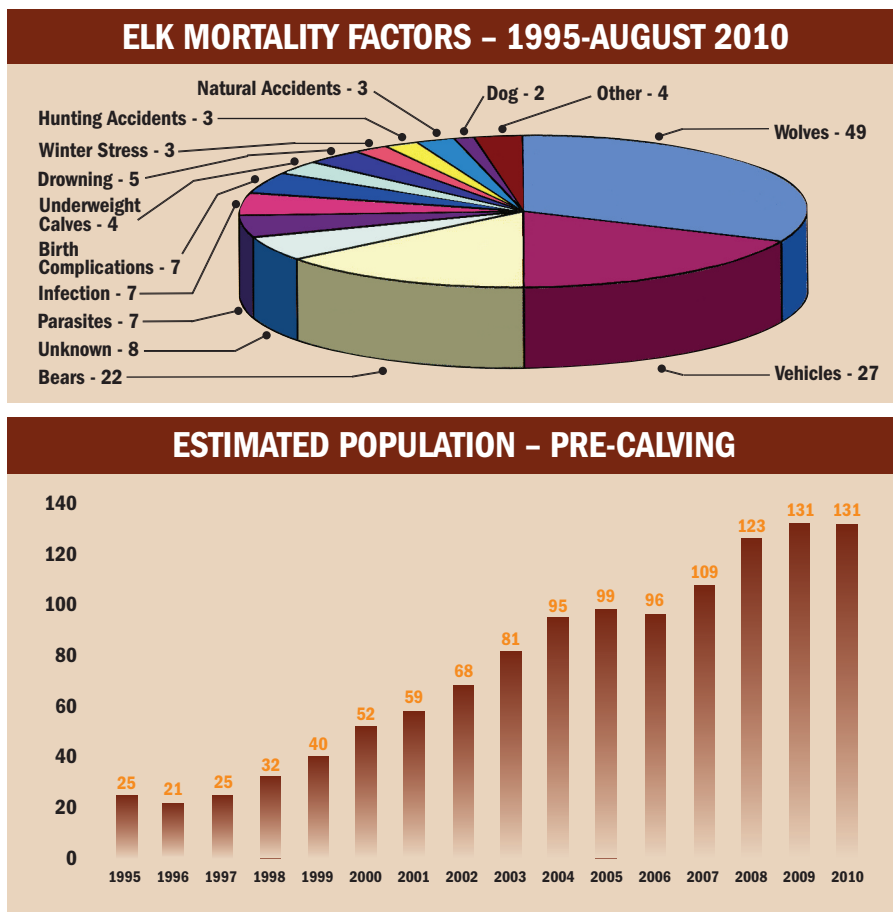
2005. For a 15-year-old cow she was in very good shape, jumping the 7 ½-foot high transfer tub door with ease. She was sleek and healthy."

### Tracking mortalities

When the signal from an elk's radio collar changes from one beat per second to two beats per second it is believed to be dead and a search begins. As in all other aspects of herd monitoring, biologists keep detailed data on each elk carcass they find. They categorize each cause of death — predation (wolf, bear, other canine or unknown), parasite, vehicle collision, accident, hunter — determine the sex and age of the animal, pinpoint where it was found, estimate the date it died, and record any other relevant information.

Stowell notes some interesting trends over the decade or so of record-keeping.

"One would assume that bear predation would shift up or down depending on the bear population," said Stowell. "Currently the bear population is quite high in the Clam Lake area with about 1.1 bear per square mile of suitable bear range. But bear predation





Portions of the Wisconsin elk herd are trapped in winter to replace defunct radio collars and put collars on animals that were not captured when they were first born. Tracking the elk's movements gives researchers information about the animals' habits and range.



on elk calves has been relatively constant at about 20 to 25 percent of the annual mortality of newborn calves.

"Wolf predation, on the other hand, has increased significantly. During the first eight years elk were present in the Clam Lake area, we only had three verified wolf predation cases. During the last six to seven years we've lost 46 elk to wolves."

Stowell says they have also seen a shift in how wolves are targeting elk. From 2003 to 2008, elk mortality from wolves was 80 percent male and 20 percent female elk, and the males were mostly older calves or young bulls. "Now it seems the wolves have developed skills in testing and picking out vulnerable calves and cows and are apparently leaving the bulls alone," said Stowell. He reports that during the past two years, 10 of the 19 elk killed by wolves have been female and six of those were of breeding age.

In May of 2009, for example, three cows were killed by wolves, all with a 92 percent likelihood of being pregnant. That summer three calves — all one to two months old — and two yearlings and a 16- to 17-year-old cow were killed by wolves. The trend is especially troubling for biologists who value cows based on their potential for producing calves and increasing the herd.



Wolf packs near the Clam Lake elk range are shifting their strategies in preying on elk. The wolves are becoming more adept at testing and targeting vulnerable calves and cows, which threatens the growth of the elk breeding population.

The second most common cause of elk death is vehicle collision, with 27 verified deaths since 1995. Four years ago, DNR elk biologists launched a three-pronged effort to prevent elk-vehicle collisions. First, they began using a reflective, blaze orange radio collar on cows to increase their visibility during the dark and dusk periods when most vehicle collisions occur. Second, they moved their winter trapping efforts farther away from state and county highways, drawing elk away from roads during the higher risk period of winter. The third and most visible step was accomplished with the help of volunteers and \$21,000 in grants from the Rocky Mountain Elk Foundation.

"In December 2006 we installed an elk crossing warning system in three

zones at the center of the Clam Lake elk activity area," said Stowell. "Each zone is one-half mile wide and two miles long along portions of State Highway 77 where most elk vehicle collisions had been observed. A flashing light on each of the cautionary highway signs is triggered by the elk's own radio collars when they come within a mile of a receiving station. There are three adjoining receiving station zones spread over six miles of highway where both elk collisions and telemetry have identified high risk areas."

Before the warning system was installed, Stowell said, elk-vehicle collisions had been observed at about three collisions per 100 elk. Two years later that was reduced by half. Despite that progress, project staff have been frus-

DNR PHOTO

HERB LANGE



trated by a few motorists who are not as responsible as most others. Since the system was installed, 10 elk have been killed by vehicles within a quarter-mile of flashing warning lights. Four of these have been young cows, one with a blaze orange radio collar, which throughout their lives might have produced up to 48 calves.

Parasites and other wildlife diseases have had an effect on herd health in the past. Collectively, they've resulted in 19 deaths — or 13 percent — of the 151 observed to date, said Stowell. When radio telemetry leads biologists to a dead elk that hasn't been consumed by predators or extensively scavenged, a field necropsy is done and samples sent to wildlife pathologists in Madison. They are tested for chronic wasting disease (CWD), tuberculosis (TB), and brainworm if warranted. No cases of CWD or TB have been found in Wisconsin's elk herd to date. Wisconsin's elk came from the lower peninsula of Michigan where they had coexisted with white-tailed deer and the land snails and slugs that are necessary to the life cycle of the brainworm parasite.

Giant liver fluke (*Fascioloides magna*) has had a greater impact on Wisconsin's elk herd, although it isn't currently considered a significant problem, due in large part to public education efforts that put a stop to recreational feeding of elk. Feeding created a high concentration of elk in an area that was also frequented by aquatic snails, host species to the fluke. Elk biologists launched a concentrated effort to show the locals the effects of recreational feeding and it didn't take long before their efforts met with success.

"The Clam Lake area residents love their elk," said Stowell. "Upon seeing photos of livers destroyed by flukes, they voluntarily ceased feeding the elk."

Continued monitoring since 2006 confirm reduced incidence of liver fluke, and a 2008 master's thesis by Trina Weiland of UW-Stevens Point appears to corroborate the DNR observations. Weiland concluded neither brainworm nor liver flukes in Wisconsin's elk herd are currently a significant problem. She recommended continued periodic monitoring.

## Elk's future in Wisconsin

So what's in store for Wisconsin's elk

herd? According to Stowell, options are limited to reduce wolf predation on the herd. One method would involve "assisted dispersal" of elk around the 1,112-square-mile elk range, a proposal that was approved by DNR's wildlife policy team in August. Currently elk occupy only 10 percent of the designated range, but the area elk currently inhabit is surrounded by wolf packs that have developed elk hunting skills.

"Probably our best means of circumventing these losses is to help move elk to areas between wolf packs, to areas with smaller size wolf packs, and to areas where the wolves have not yet learned the skills to kill elk. Wolves were present in the Clam Lake area before the elk arrived and it took eight years for them to become expert elk-killers," said Stowell.

"Using information from DNR staff who monitor the wolves, we hope to identify areas with marginal wolf activity. Then we'll designate perhaps 12-15 of the yearling and two-year-old bulls and cows we trap each winter to relocate them within the current range not yet occupied by elk."

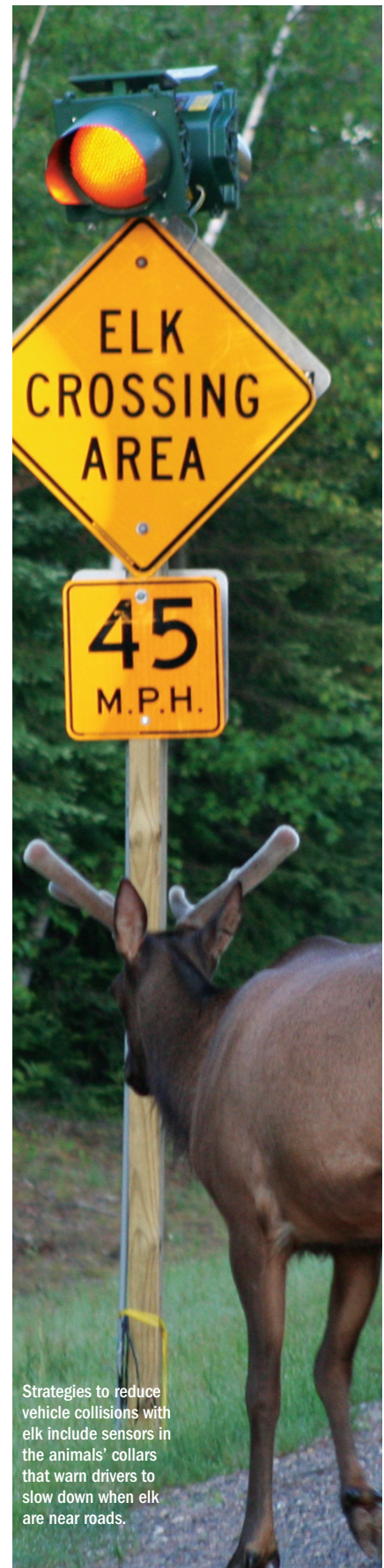
Managers hope these inexperienced young elk will be less likely to lead the group back to the current elk range. After they are trapped and collared, managers will hold and feed the elk in an acclimation pen for a minimum of six weeks and release them into the new areas after green-up.

"After five years we would expect to see drastic improvements in distribution and numbers," said Stowell. "Since these animals would have radio collars, we should see within a few years whether or not this technique is successful."

The population goal for the current 1,112 square miles of range is 1,400 elk. That would mean two elk per square mile — or 600 elk — in the core range, and one elk per square mile — an additional 800 elk — in the surrounding buffer range.

"Ultimately our goal is a sustainable elk population," said Stowell. "I don't think we're close to that yet, but we'll continue to strive for that goal. I do not expect that we'll reach 1,400 elk in my lifetime, but I hope the elk prove me wrong."

Kathryn A. Kahler writes for Wisconsin Natural Resources magazine in Madison.



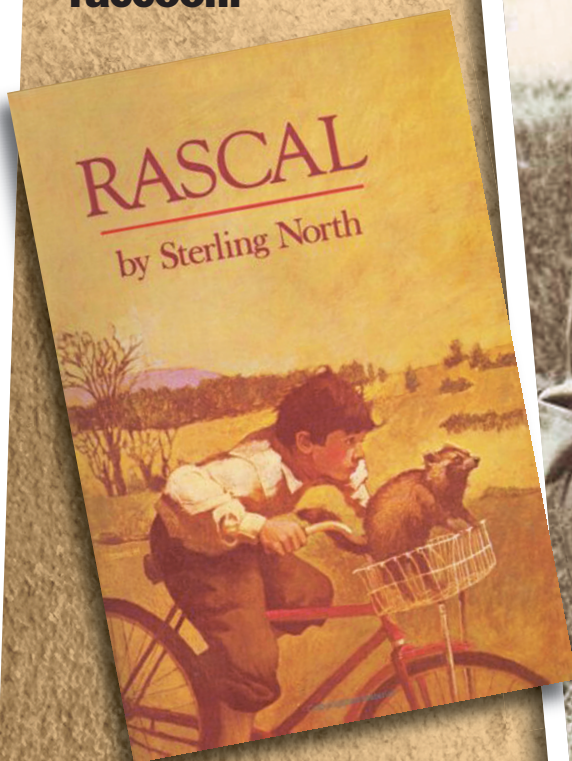
Strategies to reduce vehicle collisions with elk include sensors in the animals' collars that warn drivers to slow down when elk are near roads.

DNR PHOTO

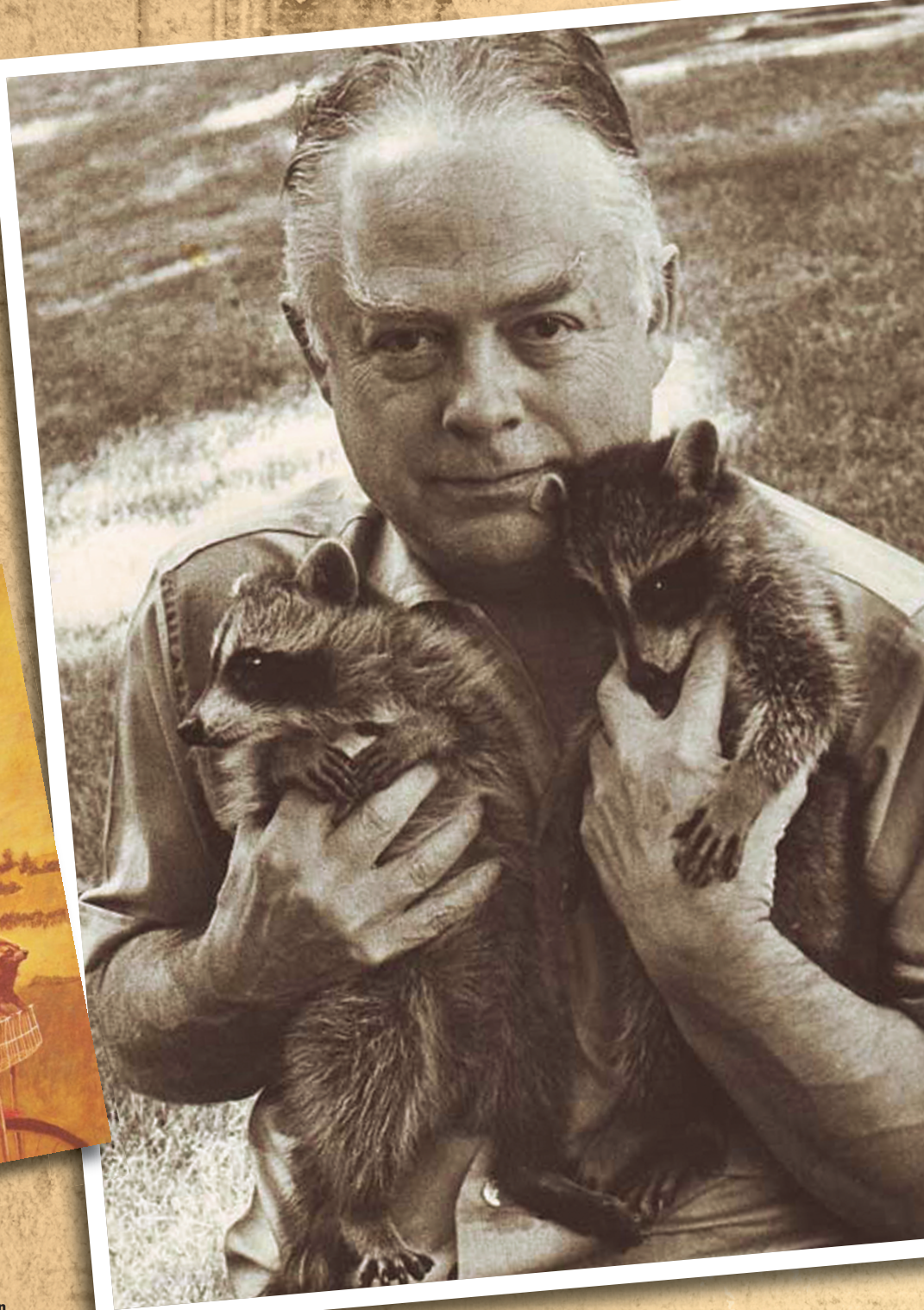


# Sterling North, W

**The author of the beloved *Rascal* was raised in Edgerton. Visit his restored home and the setting of his classic tale of a year with a raccoon.**



Thomas Sterling North had a distinguished career as a journalist and author. His childhood memoir of growing up in the Edgerton, Wisconsin area around 1917-18 as chronicled in *Rascal* is considered classic children's literature.





# isconsin storyteller

*"I think I know what your mother would have wished," his Aunt Lillie said to Sterling North when he was 11. "I think she would have wanted you to be a writer and then you could put it all down the way it is now. You could keep it just like this forever."*

Johanna B. Fabke

**T**hat narrative drawn from *Rascal*, North's engaging memoir of the year he shared with a pet raccoon, was prescient. The book captivated readers and captured a time in 1918 when the family home and barn in Edgerton were occupied by Sterling, his father, David Willard North, assorted cats and Wowser, a huge but gentle St. Bernard. Sterling's mother had died when he was only seven. His older sisters had left to pursue their adult lives, one married and one a graduate student in Chicago, and his brother was in the Army on the World War I battlefields of France.



The North home on Rollin Street in Edgerton has been restored, refurbished with period furniture, and is open for public tours from 1-4:30 p.m. on Sunday afternoons April through December or by appointment.

EDGERTON BOOK FESTIVAL/ STERLING NORTH SOCIETY

JOHANNA B. FABKE



The book introduced a worldwide audience to the landscape, plants, animals and culture of Wisconsin that gave a young boy and his readers the freedom to explore his world in safe surroundings. D.W. North, who had a remarkably relaxed attitude toward child-rearing, took scant notice when his son added a month-old raccoon to the menagerie already in residence. More than 40 years would pass before Sterling North, by then a successful newspaperman, wrote down the story of this friendship. He describes how his furry companion, lacking a mother to teach him, nevertheless acquired the hunting and fishing skills he would need when he returned to life in the wild. He notes with humor Rascal's astuteness in distinguishing friends from enemies, both human and animal. And, perhaps anticipating questions from readers, he reports that Rascal was housebroken from the beginning without any training.

The raccoon isn't this story's only star. Readers learn early on about Sterling's mother, a gentle and intelligent woman who began college at age 14 and graduated at the head of her class. The writer remembers how she taught him that "seeds carry in their 'memory' the whole complex pattern of stem and leaf and flower and fruit" and showed him "how the stamens and pistils begin the seed-making process all over again."

This knowledge transformed their experience planting and tending a vegetable garden, one of many victory gardens created to provide moral support to American soldiers who were fighting overseas. While the sale of produce helped Sterling finance such projects as constructing a canoe in the family living room, the lesson stayed with him that, like the plants, his little raccoon "also carried patterns in his brain, as do the migrating birds and the honey-storing bees."

Sterling introduces his father as a man who, "although he never touched a card...was a born gambler." D.W. invested in a Montana wheat ranch and several farms near Edgerton (called Brailsford Junction in the book) and took delight in visiting his properties to see how the crops were doing. In the safety of his small town he felt perfectly comfortable leaving Sterling and his animal companions by themselves

when business trips took him away from home.

D.W. North had grown up on the family homestead close to Busseyville and Lake Koshkonong. He was regarded as an authority on the location of trails used by the Native Americans who lived in the area before the arrival of European immigrants. As he studied the trails, North assembled a comprehensive collection of arrowheads. Educated at Albion Academy and the University of Wisconsin, he was also a pharmacist and inventor who created exercise and bread-wrapping machines well ahead of their times.

Sterling's father sharpened his appreciation for and knowledge of the natural world by spending time with Thure Kumlien (1819-1888), a pioneer naturalist and neighbor who settled in the 1840s on property adjoining the North farm. Kumlien had trained at the University of Uppsala in Sweden with the promise of an appointment as ornithologist at the royal court. When forced to choose between accepting the appointment or marrying a young woman deemed to be below his royal station, Kumlien chose marriage and emigrated to America with his bride and her sister.

Though held in high regard by the scientific community — gull, anemone and aster species are named for him — some locals regarded Kumlien as an ineffective farmer. They saw little value as he allowed a team of oxen to stand idle in a partly plowed field while he went off to study a bird that had flown by. Kumlien could stimulate nightly serenades by whip-poor-wills by playing his flute outdoors after dark.

Later in the summer of 1918 Mr. North proposed a two-week trip "up north" for Sterling, Rascal and himself. At that time, Sterling was fascinated with the sources of rivers and was pleased that their route followed the Rock River to its headwaters in the Horicon Marsh. They continued north past the west shoreline of Lake Winnebago, noting the change in scent as farm fields and hardwoods native to southern Wisconsin gave way to evergreens of the Northwoods. On the first night out they camped on the top of a granite cliff near a small, clear lake, dined on freshly caught black bass and prepared for sleep as the laughter of loons echoed across the water.



Walter Diedrick (right) with the Sterling North Society leads tours of the North home and other Rascal attractions in the Edgerton area including naturalists' hikes to the Thure Kumlien cabin site and the local cemetery.



After passing through Ashland and stopping to gather agates at a local beach along Lake Superior, they reached their final destination near the Brule River, then, as now, one of Wisconsin's finest trout streams. Not until they were setting up camp did Mr. North reveal that he had been asked to testify as an expert witness in a court case being heard in Superior. For the next several days he would head off to the court room each morning, serenely confident that Sterling and Rascal could take care of themselves while he was away.

Each day brought new delights.





JOHANNA B. FABKE



JOHANNA B. FABKE

First, the discovery of a blueberry patch and bushes heavy with ripe berries. On another day, Sterling and Rascal came home from their explorations to find a porcupine tearing apart a box of salt in their camping supplies. A hike up a tributary of the Brule brought them to a small lake where a white-tailed doe and fawn were standing in the water. Until then, Sterling had seen these creatures only in pictures in nature books.

They made friends with a man from Chicago who was spending the summer in his rustic cabin near the Brule. He took care to explain to Sterling that building this cabin was his reward for

many years of hard work managing a sporting goods store in the city. He introduced the boy and raccoon to the art of fly-tying and joined Sterling's father in conversations about Native Americans. On the last day of their vacation, he loaned them his canoe. As they headed downstream toward Lake Superior, fishing along the way, they came upon a black bear sow with two cubs feeding on honey from a hollow tree. Rascal seemed to realize without being told that it was wise to keep a safe distance. They returned home to Edgerton greatly refreshed by their Northwoods adventures.

The book includes many more entertaining stories such as the raccoon's friendship with a race horse, his visit to Sterling's classroom at school, and his enjoyment of Christmas gifts and decorations. Like many classic children's books, this one is built on a firm foundation of life lessons. Sterling's parents fostered his appreciation for the natural world by sharing their own enthusiasm for plants, animals and landscape. They gave him credit for understanding some of nature's complexities at a very early age and started him down a path that would eventually make it possible for him to share their insights with a worldwide audience through his writings.

In *The Wolfing*, published six years after *Rascal*, Sterling North speaks more explicitly about the history and science of the natural world. This story, based on his father's boyhood farm experiences, finds the hero, Robbie Trent, raising a wolf pup he has captured from a den near the family farm. The author recounts both the rewards and frustrations of sharing farm life with a wild companion. Detailed notes about animals and plants mentioned in the story and the history, economics and commerce of the time are recorded in a separate section. *The Wolfing* was a Dutton Animal Book award winner in 1969.

Other works of fiction by Sterling North included a best-selling novel, *So Dear to My Heart*, which was made into a successful Disney movie. North's first novel, *Plowing on Sunday*, revealed aspects of life in the Edgerton area that were considered so racy in their day that the book was banned by the local public library! He also crafted several biographies of famous Americans for young readers including *Thoreau of Walden Pond*.

His attachment to the woods and waters of Wisconsin that he knew as a boy found expression in his books *Hurry, Spring!* and *Raccoons Are the Brightest People*, also in North's decision to buy recreational property in Michigan when he worked in Chicago. Later, when work took him to New York City, the North family bought an old farmstead on 25 acres in New Jersey. There, as a grown man, he once again enjoyed the companionship of baby raccoons that lived in the wild but seemed to know they would always be welcome visitors on his porch.



Tony Hillerman, the writer of best-selling mystery stories and chronicler of the homeland culture of the Navajo people, once said, "When I'm writing it's essential for me to have in my mind a memory of the landscape." Sterling North must have approached his craft in much the same way.

Happily for today's readers, many of the places described so affectionately in his books are still accessible for 21st century adventures. The website of the Sterling North Society is a good place to start planning a visit to some of the landmarks described in *Rascal*. You can find the Society at [sterlingnorth.com](http://sterlingnorth.com) or reach them by phone at (608) 884-7589. Here are some possible trips:

#### North home and barn in Edgerton

Walter Diedrick and his late wife, Elizabeth, were leaders in a community effort to form a nonprofit corporation, purchase and restore the North family home at 409 Rollin Street, Edgerton, when it was in danger of falling into decay. After several years of fundraising and restoration work, mainly by volunteers, the home opened to the public in 1997. The house is refurbished with period furnishings circa 1917 and many North family photos and artifacts are on display. Visitors are welcome on Sunday afternoons from April through December or by appointment for large groups.

#### School field trips

The Society offers school groups two itineraries for field trips, each of which begins with an introductory slide show at the public library. One trip features *Rascal* landmarks in and around Edgerton, including the North home and barn and the dam at Indian Ford. The other trip includes a hike into the woods to visit the site of Thure Kumlien's cabin near Busseyville. The hiking trail runs parallel to a number of Indian mounds.

#### Sterling North History Geocache

Launched by the Sterling North Society in 2008, the Sterling North History Geocache Series (GC156FH) will take you to five sites related to *Rascal* and the author.

#### Special events

The Sterling North Society celebrated the centennial of Sterling North's birth in 2006 with an autumn book festival featuring nationally known writers. In 2008 an Antiques Appraisal Fair was held to benefit the society. Watch the website, [sterlingnorth.com](http://sterlingnorth.com), for announcements of future events.

#### Hoard Museum, Fort Atkinson

The Bird Room of the Fort Atkinson Historical Society's Hoard Museum is



Look closely and you can see where Sterling North carved "Damn Kaiser Bill" into the wooden siding of the family home when Germany was an enemy combatant. Sterling's brother, Herschel, served in France during World War I.



A school tour group waits on the front porch of the North home during a class trip to the Edgerton landmark.

home to a collection of over 500 mounted birds. Several of Thure Kumlien's specimens and mounts are preserved here. The museum, at 401 Whitewater Avenue, is open free of charge throughout most of the year Tuesday through Saturday, 9:30 a.m. until 4:30 p.m. Visitor information is available at [hoardmuseum.org](http://hoardmuseum.org) or at (920) 563-7769.

#### Road trip to northern Wisconsin

By following State Highway 26 north from Fort Atkinson, you can start out along a route similar to the one taken by Sterling North and his father in 1918.

A right turn onto State Highway 49 near Waupun will take you along Horicon Marsh, described by North in his narrative. Although their route through the central part of the state is less clearly defined, there is little doubt that they caught their first glimpse of Lake Superior from what is now U.S. Highway 2 west of Hurley, a view as spectacular now as it must have been in 1918. The state forest along the Brule River in Douglas County can be enjoyed by canoe — there's a landing along State Highway 13 — or on foot. Walk-in access is available from parking areas located along Brule River Road north and west of Highway 13.

#### Other road trip guides

Wonderful guide books are available for 21st century adventurers. For instance, *Roadside Geology of Wisconsin* is a profusely illustrated reference book that can help kindle your sense of wonder at state landforms. A copy can be ordered from the Wisconsin Geological and Natural History Survey, (608) 263-7389, or picked up at bookstores and libraries.

The *Great Wisconsin Birding and Nature Trails* offer a series of five regional viewing guides that inform travelers about places and routes to see birds and other nature at peak season. The color-coded maps are available online at [wisconsinbirds.org/trail/maps.htm](http://wisconsinbirds.org/trail/maps.htm), at [travelwisconsin.com](http://travelwisconsin.com), from tourism offices and from the DNR's Bureau of Endangered Resources. Select from the Lake Superior Northwoods Region, Central Sands Prairie Region, Lake Michigan Region, Mississippi/Chippewa Rivers Region or Southern Savanna Region booklets.

Detailed listings of state parks, forests, trails and natural areas are also available from the Wisconsin Department of Natural Resources at [dnr.wi.gov](http://dnr.wi.gov). There's also a program designed by the State Park System to encourage families to spend more time outdoors. It's called Get Outdoors! Wisconsin and you'll learn all about it at [dnr.wi.gov/org/land/parks/interp/getoutdoors/](http://dnr.wi.gov/org/land/parks/interp/getoutdoors/).

Johanna B. Fabke writes from McFarland.



## COMMENT ON A STORY?

Send your letters to: Readers Write, WNR magazine, P.O. Box 7921, Madison, WI 53707 or e-mail letters to david.sperling@wisconsin.gov. Limit letters to 250 words and include your name and the community from which you are writing.

### MORE "WILD WHODUNITS"

I saw the article "Wild Whodunits" online for the *Wisconsin Natural Resources* magazine.

Once I saw what the article was about, I was hoping to see my favorite author listed with the rest.

Nicholas Evans (the author of *The Horse Whisperer*) also wrote a few gripping tales that involve natural resources professionals. One is called *The Divide* and is about a young woman's personal struggle to figure out which kind of environmentalist she is — a hippie or a hunter? He wrote *The Smoke Jumper*, which is about a fiery love triangle (pun definitely intended!) between a man, a wife, and the man's best friend. The two men are smoke jumpers in the western states and the woman is a type of back-pack boot camp counselor. And the other one that instantly came to mind is *The Loop*, about a U.S. Fish and Wildlife biologist who gets called out to a tough Montana town to research and protect the wolves against the very people whose hospitality she has come to rely on.

All are fantastically written, must reads on my list! I would highly recommend them to any conservation-minded individual looking for a serious "page turner" to use the old saying. Maybe not "whodunits" but certainly beautifully sculpted novels (and that's coming from a bit of a book critic!).

Thanks for the recommendations!

Caitlin Carmody  
Madison

What a surprise treasure trove of books — the "Wild Whodunits"

in your August magazine.

I've long been a Nevada Barr fan and now I'm anticipating many months of enjoyment — especially if we get snowed in this winter. I enjoy the whole magazine, but this is a real treat!

Mrs. Ron Schroeder  
Rock Island, Ill.

### WARBLER NEST BOXES

Excellent article on prothonotary warblers. I received three of the nest boxes and provided one to a couple who had been putting up milk cartons so they would have this sturdier design. I erected my two nest boxes in Columbia County east of Wyocena on a branch of Duck Creek. One box had a wren nest and the other was empty. We'll place the boxes in the same location next year.

Mark Martin  
Arlington

### BAT DIET

In your story "Going to Bat for Bats" (August 2010) there's a reference to the number of insects consumed annually by one million bats equal to a staggering 694,456 tons. Can you double-check those numbers? If true, they are indeed staggering and hard to believe. That would equal about 1,348 pounds per bat annually and nearly 3.8 pounds per bat per day. That seems unlikely given that the common North American bat weighs only about an ounce.

Doug Carlson  
Eau Claire

Bat Ecologist David Redell responds: *You're right! Testimony by Boston University's Professor Thomas H. Kunz before a congressional subcommittee on white-nose syndrome estimated insect consumption at 694 tons by a million bats. Translated to the number of insects eaten by one little brown bat in your backyard on a given night amounts to the equivalent of 60 medium-sized moths or up to 1,000 mosquito-sized insects. So losses from white-nose syndrome significantly reduce insect control by bats.*

### NO ACCESS TO THE WEB?

Don't have access to a link we mention in a story? Let us know when you want to follow a link we list. We'll do what we can to get you a copy of the material if it is available free of charge and is relatively short in length.

## UPDATES

### DOE-TO-DOE CONTACT IS A KEY CWD TRANSMISSION ROUTE

Close contact among adult female white-tailed deer in Wisconsin appears to be a more important route of transmitting chronic wasting disease (CWD) than environmental contamination. As a result, CWD management should consider harvesting does and doe fawns to keep female social groups small and reduce doe-to-doe interaction.

That's one of the findings in a research study — "Influence of genetic relatedness and spatial proximity on chronic wasting disease infection among female white-tailed deer" — led by Prof. Mike Samuel of the U.S. Geological Survey's Wisconsin Cooperative Wildlife Research Unit at UW-Madison.

"Social organization and interactions among does are suspected to play important roles in transmitting and potentially managing wildlife diseases and does interact with other closely related does more than any other deer," notes Samuel.

CWD is a fatal nervous system disease that belongs to the family of transmissible spongiform encephalopathies (TSEs) or prion diseases. Though it shares features with other prion diseases, like mad cow disease in cattle and scrapie in sheep, CWD is known only to affect members of the deer family (white-tailed deer, mule deer, moose and elk).

Samuel and the team of researchers used genetics to ascertain how does were related and whether direct deer-to-deer interaction between these closely related females is an important route of CWD transmission.

"Mitochondrial DNA is only inherited from the mother, so it can be separated from the father's DNA and enables us to identify first-generation female relatives (mothers and daughters or sisters)," says Samuel.

"Females cluster on the landscape and don't move a lot compared to males. Female fawns typically live near mom where they interact a lot with their close relatives, smelling and grooming each other," points out Samuel.

"Such closely related kin have more contact, higher frequency and intensity of interaction and greater spatial overlap" when compared to less-related females, according to Samuel.

Hunter-harvested deer from the 210-square-mile "Core Area" of western Dane and eastern Iowa counties were examined in the study. CWD prevalence (percentage of infected deer) and deer density are highest in the Core Area. The group analyzed 1,387 adult females, of which 77 (5.5%) tested positive for CWD and 1,321 adult males, with 99 (7.5%) testing positive. Using regression models, the researchers found that the odds of CWD infection in adult female deer increased 138-fold in first generation adult female deer. The results are published in the *Journal of Applied Ecology*.

### What does it mean?

The group's research, from a CWD management and field perspective, points toward a continued emphasis on harvesting female deer.

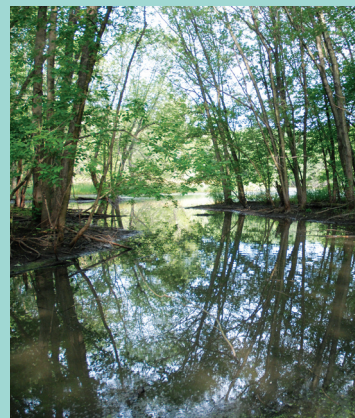
"Given that our data demonstrate a strong relationship between infection probability and female relatedness, CWD management should consider harvesting females to maintain smaller female social groups and reduce contact among females. Evaluating the effects of this strategy on deer social behavior and contact is needed," advises Samuel.

One way to harvest more females is to keep Earn-a-Buck (EAB) in the agency's CWD management tool box. Under EAB, hunters must first shoot an antlerless deer before they can harvest a buck during both the bow and gun seasons in the CWD Management Zone of southern Wisconsin.

Members of the research team and authors of the paper are Daniel Grear, UW-Madison graduate student who conducted the project, Kim Scribner, Michigan State University, Byron Weckworth, University of Calgary, and Julie Langenberg, Wisconsin Department of Natural Resources.

### WARBLER HABITAT

We've had lots of positive response to our story about enticing more prothonotary warblers to nest in Wisconsin ("New kingdoms for little birds in golden robes," August 2010). Several readers asked to see what good prothonotary habitat looks like and where the birds have been found nesting. Here's a photo of the lowland floodplain forestland and confirmed nesting sites. Find a range map at [wisconsinbirds.org/plan/species/prow.htm](http://wisconsinbirds.org/plan/species/prow.htm).



ANDY PAULIOS



# Comforts

Natasha Kassulke



## Films with fur

TOM SENATORI

We love petting them, walking them and, yes, watching them. Pets on the silver screen often translate to box office gold.

Horicon Marsh hosts "Movies at the Marsh," family friendly films 6:30 to 8:30 p.m. almost every other Saturday. Admission is free. Upcoming films include *The Fox and the Hound* on January 1, *Iron Will* on January 15, *Balto* on February 5, *Charlie the Lonesome Cougar* on February 19, *Madagascar 2: Escape to Africa* on March 5 and *Wild America* on March 19. Call (920) 387-7877 for more information.

Can't make it to Horicon? Rent a movie and stay in to enjoy popcorn with your pet.

According to Animal Planet, here are the top 10 animal movies of all time.

- 10 **Dr. Dolittle** (1998 remake). Eddie Murphy plays a doctor who can talk to animals and they talk back!
- 9 **That Darn Cat!** (1965). This film stars a mischievous Siamese whose new collar makes her the prime informant in a kidnapping. An FBI agent on the case happens to be allergic to cats.
- 8 **Free Willy** (1993). A 12-year-old street kid. A three-ton Orca whale. An amazing friendship. This movie inspired a letter writing campaign to free the real Willy (Keiko) from captivity.

### While the geese are away...

Horicon Marsh continues to play! Master garden designer Shannon Barniskis discusses "Creating a Bird Friendly Garden" at 7 p.m. on January 5. Learn about what plants will attract birds. Learn how to incorporate the basic needs of birds (shelter, food, space and water) into your yard. Barniskis' presentation will be held in the auditorium of the Horicon Marsh International Education Center located on Hwy. 28 between Horicon and Mayville. For more information contact Liz Herzmann at (920)387-7893 or e-mail [Elizabeth.Herzmann@wisconsin.gov](mailto:Elizabeth.Herzmann@wisconsin.gov)



GREGORY K. SCOTT

7 **Eight Below** (2006). This film is based on a true account of an Antarctic expedition when a devoted dog-sled guide was forced to leave behind his team. The dogs fended for themselves for nearly six months.

6 **The Jungle Book** (1994). In this live-action version of Rudyard Kipling's classic, Mowgli is raised by wolves after his parents are killed by a tiger. It's packed with vine-swinging fun with friends.

5 **The Yearling** (1946). Based on a Pulitzer Prize-winning book by Marjorie Kinnan Rawlings, this is the story of a Florida family struggling after the Civil War. Times are tough but 11-year-old Jody comes to love an orphaned fawn, Flag. But as the deer grows, a heart-breaking choice becomes inevitable.

4 **Fly Away Home** (1996). A teen girl's dad teaches her to fly an ultralight in order to guide a flock of orphaned geese south for the winter. The movie is based on a true story and raised awareness of wetland preservation. Film profits helped fund migratory bird projects.

3 **Babe** (1995). The star of this show is a young pig named Babe who defies the odds by learning to be an award-winning sheep dog. The talents of about 500 trained animal actors were blended with stunning animatronics.

2 **The Black Stallion** (1979). This classic tells the story of Alec, a boy who survives a shipwreck and befriends an Arabian stallion on a deserted island. When they return home, the duo finds success as a jockey and racehorse, coached by a washed-up trainer.

1 **Old Yeller** (1957). A simple story of a poor family on the Texas frontier in the 1860s. The heart of the story is the love affair between Travis, the oldest son, and his beloved yellow dog. Sweet, yet, heart-wrenching.



CANDYLEI YAP

## Insure for pets and peace of mind

Can you afford a \$1,000 veterinary bill? Often pet owners are not aware of the costs associated with veterinary care until their pet has an illness or suffers an injury. Fortunately, reasonably priced pet insurance is available. This is especially good news since so many treatments once confined just to humans are now available to pets.

It is now possible, for example, for veterinarians to do hip replacement surgery or cancer surgery. Advances in veterinary medicine mean that pets can live longer, more rewarding lives. But these advances come at a price and less than one percent of America's pet owners have pet insurance. Like human medical insurance insurers, pet insurance companies charge premiums and there are deductibles for different policies. There might also be exclusions for older animals, pre-existing conditions and breed-related problems.

Key pet insurance issues to consider:

- **Age** - Insurance premium costs may rise as pets grow older.
- **Coverage levels** - Pet health insurers offer basic policies and upgrades. More expensive policies also cover annual check-ups and vaccinations.
- **What's covered?** Basic pet insurance policies generally cover treatment for accidents, injuries and illnesses. Some cover partial medication costs and lab work as well. Some may include spaying and neutering along with dental care.

To learn more, ask your veterinarian about options and advice. You can also compare policy provisions and costs on-line.

Natasha Kassulke is creative products manager for Wisconsin Natural Resources magazine.



## Look up, down and around

Time-lapsed star trails and one  
of the Geminid meteor tracks.

JIMMY WESTLAKE, NASA

The season of snow blankets the ground and clears the air. Even as skies darken earlier, reflected light and a base of white help us see more clearly. Take advantage of that opportunity.

Head to Bristol in the countryside far enough west of Kenosha to get away from the city lights. At the Pringle Nature Center, 9800 160th Avenue, they'll be gazing up on Sunday, December 12 to catch the late night **Geminid meteor shower**. Astronomers consider this annual celestial show a best bet with up to 60 multicolored meteors an hour streaking the dark heavens on a clear night. This light shower is strongest this year between Dec. 6-19, peaking around the 13th. There's a small fee to join the center naturalist's talk. If the weather looks iffy, call or contact naturalist Valerie Mann just to make sure the program is on: (262) 857-8008, [naturalist@pringlenc.org](mailto:naturalist@pringlenc.org)

Learn to read the tale of the winter trail at winter weekend **Wolf Ecology Workshops** at the UW-Stevens Point's Treehaven Center, W 2540 Pickerel Creek Avenue in Tomahawk. The workshops running 9 a.m. Saturday through noon on Sunday will be offered February 5-6 and repeated February 26-27. The program includes a mix of class study, tracking field

practice and a nighttime howling survey. The \$146 fee includes three meals, instruction, materials and lodging. E-mail [treehaven@uwsp.edu](mailto:treehaven@uwsp.edu) or call (715) 453-4106.

Have cold weather fun at the **Winter Festival** at the Kickapoo Valley Reserve on Saturday, January 8, S3661 State Highway 131 in La Farge. The festival based at the visitors center includes snow sculptures, an ice cave hike, horse-drawn bobsled rides and lots of activities like skating, sledding, skiing, archery, face painting and a snow cave demonstration. The Tri-state Mala-

mute Club holds a sled dog race, weight pull and a mutt race. The La Farge Lions Club hosts an annual chili and bread contest. Contact [kickapoo.reserve@krm.state.wi.us](mailto:kickapoo.reserve@krm.state.wi.us) or call (608) 625-2960 for times and details.

It's a fire and ice experience on Saturday, January 29 from 6:30-8 p.m. at the Mosquito Hill Nature Center, N 3880 Rogers Road in New London. Naturalist Steve Petznick will warm you up to a toasty glow with his **Campfire Astronomy** talk. Then you'll gaze upwards and practice newfound skills recognizing constellations as you walk this picturesque property near the Wolf River in Outagamie County. There's a \$5 fee for adults, \$3 for students, seniors and members. Register by January 21. Contact Mary Swifka, (920) 779-6433, [swifkamk@co.outagamie.wi.us](mailto:swifkamk@co.outagamie.wi.us).

Come back to Mosquito Hill

on Saturday, February 26, 10:30 a.m.- 4:30 p.m., to learn **tree care basics** like pruning techniques, tree root care and trouble shooting early signs of tree problems before the branches start to bud up, bloom and leaf out. There's an \$18 program fee, \$15 for seniors and members. Please register by February 18. Call (920) 779-6433.

Still hopping around for something to do? Take in the **Frogs: A Chorus of Colors** exhibit at the Milwaukee Public Museum, 800 West Wells Street that runs through January 2.

The self-guided tour puts you nose-to-nose with 17 species of live frogs where you can learn about their lifestyles and habits. Reserve your tickets for the exhibit and add to your fun by booking seats to see "Bugs!" at the neighboring IMAX. Rates and reservations available at (414) 278-2714.



Tropical tree frogs are among the colorful denizens at the Milwaukee Public Museum exhibit.

REPTILIAN



Rides, dog races, snow sculpture and a chili feed are all part of the fun at the Kickapoo Valley Reserve Winter Festival.

KICKAPOO VALLEY RESERVE





## Wisconsin, naturally

### PLEASANT VALLEY CONSERVANCY STATE NATURAL AREA

**Notable:** Located in the rugged Driftless Area, this diverse natural area sits on a long, narrow ridge sloping down to wetlands along Pleasant Valley Creek. A complex of several natural community types, including oak woodland, oak savanna, dry and wet prairie, sedge meadow, open marsh, and flowing springs, provides habitat for many species, including several rarities. Prairie turnip, upland boneset, purple milkweed and giant yellow hyssop are among the uncommon plants found here. Commonly sighted birds include red-headed woodpecker, eastern bluebird and scarlet tanager. The 143-acre preserve is privately owned by Tom and Kathie Brock, and in part by The Prairie Enthusiasts, but is open to the public for hiking and nature study.



#### How to get there:

From the junction of Highways 78 and KP in Black Earth (Dane Co.), go west on KP 1.1 miles, then south on Highway F 3.7 miles, then east on Pleasant Valley Road 0.75 miles to the preserve entrance. Park along the road. Visit [dnr.wi.gov/org/land/er/sna/index.asp?SNA=551](http://dnr.wi.gov/org/land/er/sna/index.asp?SNA=551) or [pleasantvalleyconservancy.org](http://pleasantvalleyconservancy.org) for maps and more information.

