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### **April 2008**

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# WISCONSIN NATURAL RESOURCES

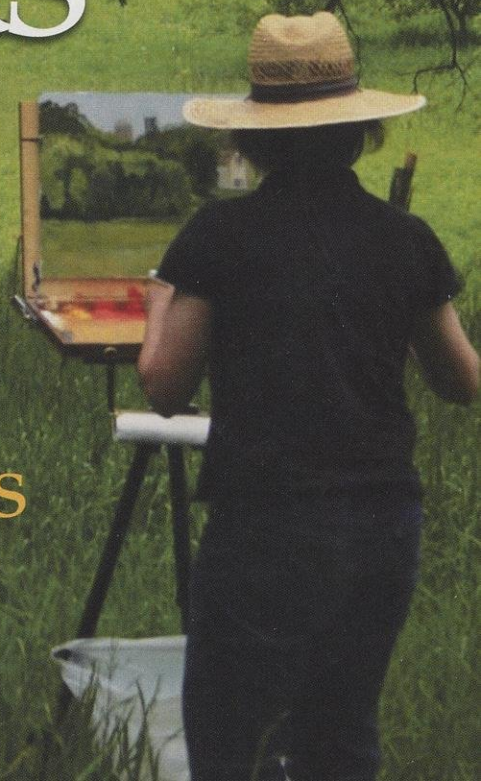
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## Your pick of the parks

58 weekend adventures

Archery on target in schools

Build a rain garden





# When the bill arrives

Northern shovelers dabble their way into springtime.

Anita Carpenter

A duck with a metallic green head and bright yellow eyes paddles slowly about a shallow cattail marsh. It rides low in the water, skimming the surface with its tail. At first glance this mystery duck might be identified as a mallard. Then it raises its head and the unusually large spoon-shaped black (not yellow) bill is noticeable. The super-sized bill immediately identifies the duck as a northern shoveler, one of the dabbling puddle duck species to grace Wisconsin's wetlands in spring.

Its over-sized bill is not the only helpful clue that aids in northern shoveler identification. This is a duck with bright, colorful patches. The male shoveler has bright rufous flanks that contrast sharply and vividly with its snow white breast and white vertical patch just ahead of its black tail. His bold colors stand out prominently against a brown or green cattail background. Mallards display similar colors, but in different locations on their bodies. The green-headed mallards have chestnut-colored breasts and lighter colored flanks in more subdued colors. The mallards seem to blend in more with their background.

continued on page 28



For most of the year male northern shovelers sport this plumage that helps them blend into the shallow cattails and shoreline vegetation where they typically feed. To see their jazzier breeding plumage with a greener head, reddish flanks and whiter breast, take a look at the image on page 28.

RICH PHALIN



# WISCONSIN NATURAL RESOURCES

April 2008  
Volume 32, Number 2



PAUL McQUEARY

## 2 When the bill arrives

*Anita Carpenter*

Dabbling big-billed northern shovelers are a sure sign of spring.

## 4 Reading, writing and archery

*Natasha Kassulke*

Archery is a popular recent addition to school physical education courses.

## 10 Weekend adventures

*Christine Tanzer*

58 field trips to consider from April through October. Join us!

### CENTER SECTION

## Fishing Forecast 2008

*Alisa Lopez and Lisa Gaumnitz*

Good bets on places to wet a line throughout the year and the projects that aim to make good fishing even better.

## 17 Build your own rain garden

*David L. Sperling*

This home improvement project is fun, attractive and darn good for the environment. Learn how step by step.

## 22 Seal of approval

*Kate Zurlo-Curva*

Your pick of the parks and trails that have a special something to provide special experiences.

## 28 Readers Write

## 30 Be pet smart if disaster strikes

*Natasha Kassulke*

Creature Comforts says make a plan to get up and go when you gotta get out.

## 31 Leap for love

Wisconsin Traveler visits lover's leaps and the birds who dance, leap and sing to bring on that lovin' feeling.



ROBERT QUEEN



SAND SCULPTURE CONTEST AT WHITEFISH DUNES  
COURTESY OF CAROLYN ROCK

**FRONT COVER:** An artist captures a quiet moment at New Glarus Woods State Park. Visitors selected favorite experiences at state parks, forests and trails for special recognition with Gold Seal Awards. Read about these best bets on pages 22-27.

DUNNELL KENDRICK-PARKER, New Glarus

**BACK COVER:** Rush River Delta State Natural Area in Pierce County. 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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**INSET:** Cerulean warbler.

© DENNY MALUEG

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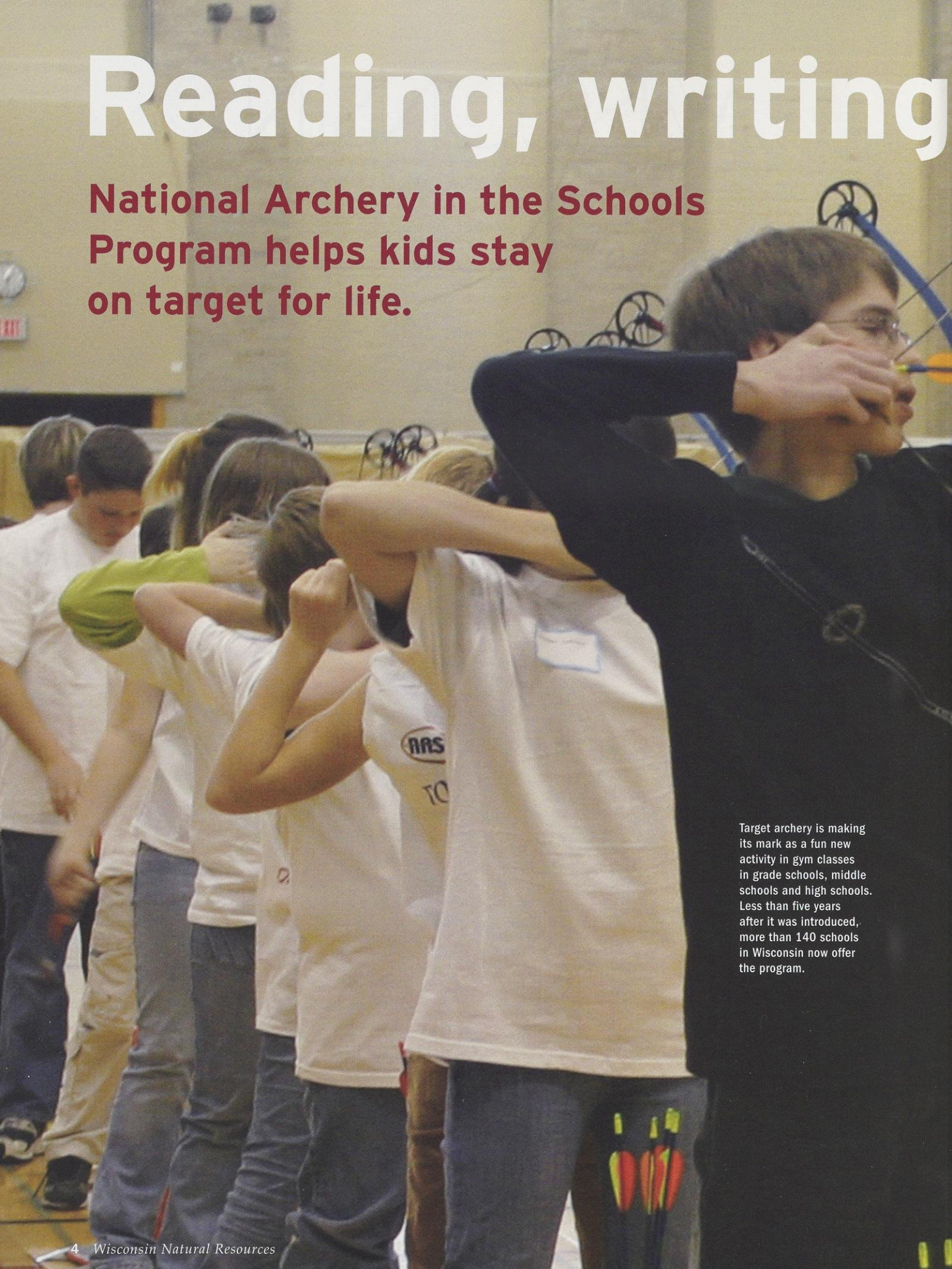


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# Reading, writing

**National Archery in the Schools  
Program helps kids stay  
on target for life.**



Target archery is making its mark as a fun new activity in gym classes in grade schools, middle schools and high schools. Less than five years after it was introduced, more than 140 schools in Wisconsin now offer the program.



# and archery



*Natasha Kassulke*

**M**ove over video games like Nintendo Wii and Xbox. An ancient sport may hold the key to getting young people interested in getting active.

The National Archery in the Schools Program (NASP) is gaining popularity around the world and aims to better engage students in school, build their self-confidence and instill a lifelong passion for the sport. As a physical activity, archery builds strength, improves concentration and develops fine motor skills.

"Archery is a great sport that engages all students, regardless of gender or physical ability," says Roy Grimes, NASP president. "It gives young people a wonderful opportunity to develop discipline, exercise their minds and bodies, and have fun learning a lifetime sport."





JON GAUTHIER

Lightweight equipment can be adjusted to fit the arm strength of all students. The program stresses safety and shooting techniques while building powers of concentration and self-confidence among the fledgling archers.

This international-style target archery program was spearheaded by the Kentucky Department of Fish & Wildlife Resources and the Kentucky Department of Education in 2002, but the program quickly expanded nationwide. On May 3, 2004, the program was incorporated as the National Archery in the Schools Program, a nonprofit, charitable organization. While piloted in Kentucky, the program has deep roots here in Wisconsin. Its curriculum was authored here and several important equipment manufacturers also are located in the state: Mathews Inc. and Brennan Industries Inc. in Sparta; Rhinehart Targets in Janesville; Field Logic in Superior; and Archery Shooter Systems in Endeavor.

Prior to the start of the NASP, most schools didn't offer an archery program for a few reasons:

- questions regarding safety
- lack of equipment
- no place to practice or compete
- teachers lacked the appropriate archery training

NASP is designed to teach archery to students in grades four through 12 and is delivered during physical education classes. Students have the opportunity to shoot at bull's-eye targets placed before an arrow-resistant net in their gymnasium. Teachers can run this course any time of the year, regardless of weather. It also can be adapted to outdoor ranges.

Students use state-of-the-art Genesis™ System equipment designed to fit individual needs, regardless of their arm strength. The core content of the program, prepared by professional curriculum writers, covers safety, shooting technique, equipment maintenance, mental concentration and self-improvement.

"[According to the National Safety Council] archery is statistically safer than all ball sports combined with the exception of ping-pong," says Jon Gauthier, the program's assistant international coordinator.

NASP is now active in 45 states, Canada, Australia and South Africa. Advertising isn't necessary. The remaining

five states are expected to start programs this year.

"People are coming to us and it is growing," Gauthier says. "At the end of this year, over five million students will have gone through NASP during in-school time." That doesn't count participation in after-school archery clubs, which also are gaining in popularity.

Archery is classified into two areas: target and field. Target archers shoot a specific number of arrows at set targets with established values. For example, a bull's-eye is worth ten points. Field archery includes an open-field target range where archers shoot at different targets set at different distances around a course. It simulates the type of shooting experienced while hunting. Surveys from the Archery Trade Association and the Sporting Goods Manufacturing Association suggest about 9 million people shoot archery in the U.S. annually (target archery and bowhunting).

NASP's focus is strictly target archery. Hunting and conservation messages are not built into the curriculum. But if a student decides to become a hunter, that is a bonus according to Mary Kay Salwey, DNR state wildlife education specialist and the DNR staff person assigned to bring NASP to Wisconsin.

Wisconsin DNR supports the program as a means to help students learn some basic skills needed for traditional outdoor activities including hunting and fishing, but also tent camping, orienteering and nature study. Declining numbers of participants in these outdoor activities threaten public and financial support for conserving the state's natural resources, Salwey says. The purchase of target archery equipment adds to the Pittman-Robertson Fund for general wildlife management and hunter education.

For those who want to apply their NASP skills to hunting, Wisconsin DNR offers a Bowhunter Education Program to train both experienced and new bowhunters. The training teaches fundamental skills and instills an ethical and responsible attitude toward people, wildlife and the environment. Anyone regardless of age is eligible to take the class and receive a safety education certificate. Cost is \$10 (visit [dnr.wi.gov/](http://dnr.wi.gov/)



The indoor program can be held year-round, a definite plus in places where cold weather and darker winter days might otherwise put a damper on activities. Target shooting can also spawn an interest in combining archery skills with the challenges of learning outdoor skills, safety, stealth, and powers of observation required to successfully bowhunt.

org/es/enforcement/safety/upcoming.htm to find a course).

Since Wisconsin has only been involved in NASP for a few years, we can't quantify if the program has led to increases in bowhunting or field archery instate. Kraig Kriger, Minnesota's NASP Coordinator, who was certified in Wisconsin, says Minnesota has experienced a 29 percent increase in youth archery sales since that state started NASP.

DNR Conservation Warden Tim Price is one of a few Wisconsin wardens who teach teachers archery as a part of NASP.

"For me, this program gives a child an opportunity to be successful in a sport," Price says. "There are a lot of kids who can't participate in ball sports. It's priceless to see a smile on a kid's face after hitting a target."

Price also hopes that by participating in the program, students will see conservation wardens as a positive resource and that impression will follow them into the field should they decide to take up bowhunting.

## STUDENT EVALUATION OF NASP

- 94** percent of students liked the program
- 84** percent expressed interest in more archery
- 77** percent would like to participate in a school archery club
- 37** percent of NASP schools have started an archery club
- 27** percent of NASP graduates purchase personal archery equipment
- 42** percent of NASP graduates become bowhunters
- 59** percent of NASP graduates become target archers

— NASP Student Survey



JON GAUTHIER

"Kids today are faced with so many distractions and we are losing a lot of potential hunters and anglers to other interests," Price says. "But if we introduce kids to archery and give them the opportunity to try it, my hope is we can reverse that trend and get kids interested in the outdoors again."

## A different kind of draw

Before presenting the two-week archery course to students, teachers undergo an eight-hour NASP Basic Archery Instructor Training Program. All NASP teachers undergo identical training, follow rigid safety rules, use positive language

and learn the techniques for target archery, says Chuck Stephens, one of four NASP Specialists in Wisconsin. These specialists teach Basic Archery Instructor Trainer courses to avid archers who then run the courses to certify the teachers.

"In order to meet and enhance student learning and adhere to accountability standards, many schools integrate archery into core content areas including math, science and history," Stephens says. "Since the National Archery in the Schools Program came to Wisconsin five years ago, we have trained about 600 archery instructors and have programs running in more than 140 schools."



KENTUCKY DEPT. OF FISH & WILDLIFE RESOURCES

For those who also enjoy competition, after-school clubs and tournaments are a popular way to test skills and meet other enthusiastic archers. After just a few years, the National Archery in the Schools Program has participants in 45 states as well as Canada, Australia and South Africa.



Interested students who participate in a NASP phy ed class can compete in regional and national shoots. On February 18, Wisconsin hosted its third year of state shoots in Wisconsin Rapids. NASP tournaments feature co-educational teams. During the 2007 NASP National Tournament, 40 percent of the archers were girls.

Dan Schroeder, another NASP Specialist, was competing as a semi-professional archer when he noticed a decline in the number of women and young people at tournaments. His goal is to turn that trend around and he thinks NASP is one way to do that.

"When you see kids, parents and teachers all cheering for a student archer, that's the best selling point there is for NASP," Schroeder says. "It helps people who might otherwise not have considered the sport get excited about archery."

Bruce Trimble, a NASP Specialist, was field director of the Wisconsin Field Archery Association in 2006 when the state's first NASP tournament was held. His organization has been a strong advocate for NASP and instrumental in the state tournament's success.

"About 170 kids registered for the first tournament, but this year we've seen that increase to over 400," Trimble says. "It's extremely exciting to see how NASP will help grow and maintain the sport."

## Leveling the playing field

NASP allows all students — regardless of athletic ability or gender — to participate in this sport together. Accommodations are routinely made for physically challenged students. People with severe disabilities and even the blind use adaptive equipment to join in.

Trimble points to paralympic archer Jeff Fabry as an inspiration to young archers with disabilities. At the age of 15, Fabry was injured in a motorcycle accident and lost his right arm above the elbow and his right leg at the knee. In 1997 he started practicing and has become a gold medal archer. To release an arrow, he uses his left hand and pulls the bowstring back with his teeth.

Trimble's favorite NASP story is that of Katey Siekert, a seventh grader at East Junior High in Wisconsin Rapids



Katey Siekert, a stroke survivor from Wisconsin Rapids, stays on target holding the bow in her left hand and releasing the bowstring with her teeth.

SANDY NUGENT

who, in addition to singing, has added archery to her list of talents.

Katey, 13, suffered a stroke when she was five years old and as a result has limited vision and limited use of her right arm. But like Fabry, she releases the bowstring with her teeth. Katey uses a special mouth tab mounted on the string. With the help of her phy ed teacher and coaching by a custodian at the school who is an avid archer, Katey has been hitting bull's-eyes. At the time of this interview, Katey was planning to compete in the 2008 Wisconsin state NASP tournament with about 30 of her schoolmates and join an after-school archery club.

Katey's advice to other kids who might be hesitant to try archery is as straightforward as an arrow: "Just try it." She recalls her reaction the first time she hit a bull's-eye. "I smiled."

Kris Slattery is Katey's phy ed teacher and this is her third year teaching NASP to her students, but her first year teaching archery to students like Katey who have disabilities.

"I tell the kids to go for it," Slattery says. "I love that kids like Katey and an

eighth-grade boy in class who shoots from a wheelchair can have the same opportunity to be as successful at a sport as any other student. And Katey has the opportunity to take archery as far as she wants to take it." At the national level of NASP competition both recognition and scholarships are on the line.

Anecdotal information also suggests that NASP helps transform previously unreachable "high-risk" students by increasing their self-esteem.

"Archery helps students focus because if you don't center in on your target you aren't going to succeed. Students look forward to it so much it can [positively] influence student attendance," says Tom Bennett, the NASP director for government relations.

## Tools of the trade

Archery is a lifetime sport that can be an individual or team experience. Some compare it to golfing, but argue that archery is more accessible since the equipment is less expensive and you don't have to pay a golf course fee or club membership to play. The NASP



uses a Genesis™ bow because it fits everyone and the schools don't need various sizes. A typical classroom set of NASP equipment includes:

- 12 Genesis™ youth compound bows (one is left-handed)
- 5 bull's-eye 80 cm targets
- 5 dozen aluminum shaft arrows
- 1 30' arrow-resistant safety net and bowrack(s)
- 1 toolkit

The Genesis™ System combines "zero let-off" with light draw weights (adjustable from 10 lb to 20 lb) to create a bow that covers all standard draw lengths and fits everyone. A Genesis™ bow set at 20 lb, for example, stores and releases an amount of energy comparable to a 35 lb recurve bow.

The average cost of a classroom set is about \$2,700-\$2,900 and most schools need two sets. Some schools fund the program with donations from local civic or sporting groups and grants.

"Wisconsin is fortunate in having a number of strong statewide conservation organizations that partner with Wisconsin DNR to administer this program," says Salwey. These include the Wisconsin Field Archery Association, Wisconsin Chapter of the National Wild Turkey Federation, Wisconsin Bowhunters Association, Whitetails Unlimited and Safari Club International and many smaller local rod, gun and archery clubs.

Some schools have expressed concerns that archery classes could mar expensive gymnasium floors but NASP equipment is designed to be floor friendly. Painter's tape used on the floor may be pulled up easily without leaving a mark. The arrows are designed with a special tip that prevents them from digging into and scratching the floor.

Jennifer Layson, a Kentucky phy ed teacher who teaches the NASP in her class, said, "I taught archery this year and we have two gyms. I use the 'good' gym we have for basketball games and so forth. An arrow would hit the floor every now and then, but left no scratches or anything that I could see."

Some schools place tarps underneath the targets and rubber mats or carpet pieces in front of the targets for additional floor protection.

Arrow-resistant safety nets, special arrows and mats protect expensive gymnasiums from damage. Trained instructors teach students the discipline to target shoot safely. Studies by the National Safety Council deemed archery statistically safer than all ball sports except ping-pong, according to Jon Gauthier, NASP's assistant international coordinator.



JON GAUTHIER

## Changing lives one arrow at a time

Waunakee High School phy ed teacher Larry Kopf says his interest in archery stems from childhood. As a boy he participated in a target league. So, when he became a teacher, he decided to bring that interest into the classroom and share it with his students.

Kopf has been teaching the NASP in Waunakee to juniors and seniors for two years. "The students enjoy it because they get immediate visual feedback," Kopf says. "We do goal setting and start out aiming to just hit the target. They learn the technique and develop confidence with practice."

Robin Hooverson and Heath Folkedahl are students in Jon Steffenhagen's phy ed class at Gale-Ettrick-Trempealeau High School. Both come

from bowhunting families but have found a new love in target archery.

Folkedahl, a 17-year-old senior, started the NASP as a junior. While he plays football and baseball, he says he enjoys the individual competition archery affords.

Hooverson, a 16-year-old junior, started the program as a sophomore and says she enjoys target archery events more than bowhunting.

"It makes me think and it's fun — it's something different than typical sports and it combines physical work with mental work," Hooverson says. "And there is nothing like the pure adrenaline rush you get when you hit a bull's-eye...And, yes I am getting an 'A' in archery this year."

Natasha Kassulke is creative products manager for Wisconsin Natural Resources.

**T**he 2008 NASP Tournament will be held May 10 in Louisville, Kentucky with room for 1,920 student archers. For more information visit [www.nasparchery.com](http://www.nasparchery.com)

To reach the National Archery in the Schools Program: 2035 Riley Road, Sparta, WI 54656. Call (608) 269-1779.

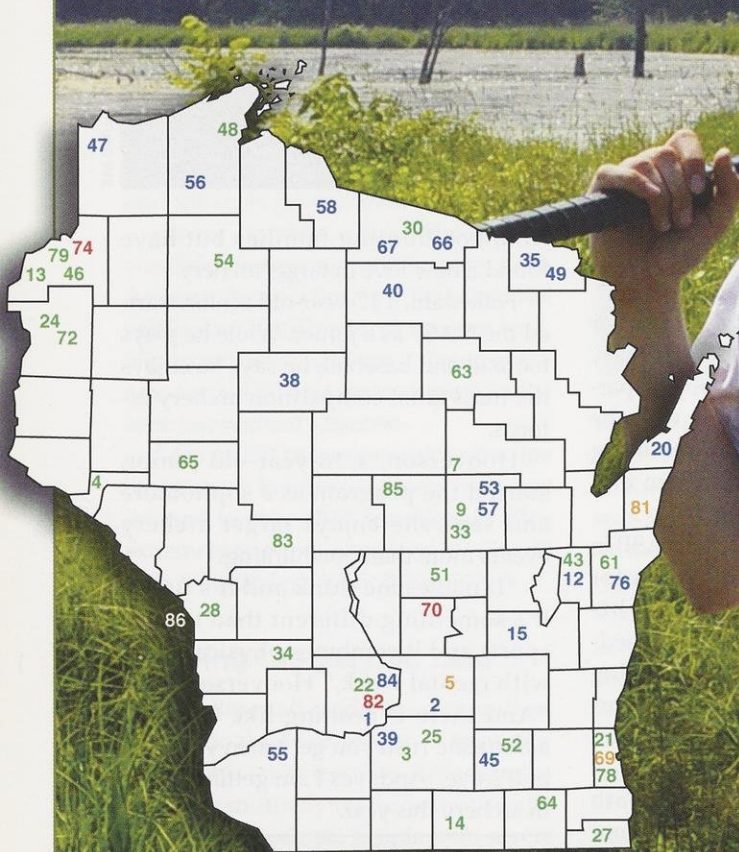
Another event to consider: The Wisconsin Outdoor Education Expo runs 8 a.m. to 3 p.m. (Thursday and Friday) May 15 and 16 at the Dodge County Fairgrounds located between Beaver Dam and Horicon. This year's Expo again features an Archery Camp. Visit [www.wisexpo.com](http://www.wisexpo.com) for more information.



# Weekend adventures

Join us for a weekend hike, tour or paddle from April through October.

*Christine Tanzer*



**H**ave an inexpensive adventure with us close to home, on the weekend and in the good company of friendly people who really know their way around the outdoors. The Natural Resources Foundation of Wisconsin is pleased to sponsor these field trips from April through October that offer an array of tours, day hikes, boat rides or paddles to explore the outdoors. Each of these tours is guided by naturalists and DNR staff who enjoy talking about the plants, animals and places you'll see. Many trips bring you up close to animals at peak migration for your amazement and enjoyment.




These 58 trips are arranged chronologically, and an additional 30 are available if you search and register online at [www.wisconservation.org](http://www.wisconservation.org). Assume these are day trips that fall on Saturdays unless otherwise noted. The physical demands of each trip are noted by the color tint behind each trip number: **ORANGE** — accessible to people with walking disabilities; **GREEN** — easy, short travel on level terrain; **BLUE** — average hike with a few hills; **RED** — steeper terrain, a more vigorous workout, or a longer trip.

 Accessible to people with walking disabilities	 Easy, short travel on level terrain	 An average hike with a few hills	 Steeper terrain, a longer hike or canoe trip with a few small rapids
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Space is limited and trips fill quickly on a first-come, first-served basis. Trips that can accommodate fewer than 20 people show these limits in the listing. Canoe and kayak trips are especially popular. Please request only one such trip per family or group.

Register online at [www.wisconservation.org](http://www.wisconservation.org) or by mail. We encourage online registration because it is quicker, you can immediately see if trips still have space or are full, and the online version offers an additional 30 trips that we just can't fit into this article. That's why you will note some gaps in the numbers in the listing that follows.

To reserve by mail, clip out or photocopy the registration form and fill it out in pen. List the trip number and number of people in your party. Tally any fees (all fees shown are per person) for those few trips that are fundraisers or charge for providing lunch, bus, boat or canoe rentals. Calculate total costs, include one annual \$35 trip registration with your order and mail one check payable to the Natural Resources Foundation of Wisconsin to the address indicated. Online registrants can use credit cards in a secure environment. Trip details and directions will be sent to registrants two weeks before each trip. Fees are nonrefundable if you cancel, but parties on waiting lists that can't be accommodated will receive refunds.

You can also check if trips have available space at the Natural Resources Foundation toll-free line, 1-866-264-4096 after 5 p.m. A recording updates trip availability, but we do not accept phone registrations. Further questions? Call me on Wednesdays at (608) 264-8548 or send an e-mail to: [christine.tanzer@wisconsin.gov](mailto:christine.tanzer@wisconsin.gov). 

*Christine Tanzer is field trip coordinator for the Natural Resources Foundation of Wisconsin.*

## Field trip sign ups.

Note: online registration at [www.wisconservation.org](http://www.wisconservation.org) is faster and you can use a credit card.

Name \_\_\_\_\_

Street Address \_\_\_\_\_

City/State/Zip Code \_\_\_\_\_

Phone (daytime) \_\_\_\_\_ (evening) \_\_\_\_\_

E-mail \_\_\_\_\_

I would like to attend the following trip(s):

Trip# \_\_\_\_\_ # of People \_\_\_\_\_ x Trip Fee \_\_\_\_\_ = \$ \_\_\_\_\_

Trip# \_\_\_\_\_ # of People \_\_\_\_\_ x Trip Fee \_\_\_\_\_ = \$ \_\_\_\_\_

Trip# \_\_\_\_\_ # of People \_\_\_\_\_ x Trip Fee \_\_\_\_\_ = \$ \_\_\_\_\_

☐ I'd like to carpool to trips or can offer a ride.

Trip Registration Fee \$ 35.00

NRF renewal or donation (\$15, \$25, \$50, \$100) \$ \_\_\_\_\_

Total Enclosed \$ \_\_\_\_\_

Make checks payable to Natural Resources Foundation of Wisconsin. Mail completed form and check to: NRF Field Trips, P.O. Box 2317, Madison, WI 53701 or sign up online at [www.wisconservation.org](http://www.wisconservation.org) using a major credit card.

**Note: The term SNA is used throughout these listings to refer to State Natural Areas. The term IBA refers to an Important Bird Area — a site with critical bird habitat or a location that is widely used by bird species.**

### 1. Parfrey's Glen SNA

Explore the natural and human history of this spectacular 100-foot gorge cut into the Baraboo Hills.  
1-A. April 26, 9 a.m.-noon  
1-B. May 3, 9 a.m.-noon  
Baraboo, Sauk Co.  
David Bouché, leader

### 2. Digital outdoor photography

Learn about digital photography with an indoor lecture about equipment, image exposure and composition. Then venture into the field for one-on-one instruction. For beginners to intermediates.  
April 26, 1 p.m.-sunset  
Poynette, Columbia Co.  
Dave Edwards, leader

### 3. Gourmet garlic mustard pesto

Turn this nasty pest into a tasty treat. Enjoy a hands-on workshop harvesting plants, then make your own pesto lunch.  
April 26, 11:30 a.m.-3:30 p.m.  
Madison, Dane Co.  
Steve Drake, leader • Cost: \$7

### 4. Train ride and birds of Tiffany Bottoms SNA

All aboard an antique open-air train with stops along the way for short hikes into blooming prairies, hardwood forests, wetlands and sloughs near the mouth of the Chippewa River.  
4-A. May 3, 9 a.m.-3 p.m.  
4-B. September 21, 9 a.m.-3 p.m.  
Durand, Pepin Co.  
Heidi Hughes & Kris Johansen, leaders • Cost: \$15





DAVE EDWARDS

#### 5. Maple syrup making

Savor the taste and hear hands-on history while making syrup in the beautiful maple grove at MacKenzie Environmental Center.

May 3, 9 a.m.-2 p.m.

Poynette, Columbia Co.

Derek Duane, leader

On trip 2 get a pep talk and some coaching on taking better digital photos, then take a field trip to try these techniques.

#### 7. Spring wildflowers at Plover River Woods SNA

See a diverse spring floral display, spot migrating birds and explore a cedar forest at the new Plover River SNA.

Friday, May 9, 9 a.m.-noon

Aniwa, Shawano Co.

Randy Hoffman, leader

#### 9. Bird banding neotropical migrants

Help band songbirds and learn about research at Waupaca Field Station.

9-A. May 10, 9 a.m.-noon

9-B. May 10, 1:30-4:30 p.m.

Dayton, Waupaca Co.

Bob Welch, Debra Martin & Mark Martin, leaders • Cost: \$5

#### 12. Warblers at High Cliff State Park

See rare migrating warblers from limestone cliffs overlooking the Lake Winnebago shore and explore grasslands to see bobolinks and dickcissels.

May 17, 6-8 a.m.

Sherwood, Calumet Co.

Carol & Tom Sykes, leaders

#### 13. Birds of Crex Meadows

Crex Meadows is home to more than 275 species of birds. Join a caravan to search for them in a variety of habitats.

May 17, 10 a.m.-1 p.m.

Grantsburg, Burnett Co.

Jim Hoefler, leader

#### 14. Birding at Fair Meadows SNA

You might see 50 bird species in a morning! Visit a sedge meadow, ash swamp, oak savanna, woods, prairie, fen and marsh. Catch a glimpse of hooded mergansers, marsh wrens, solitary sandpipers and more.

May 17, 8-11 a.m.

Milton, Rock Co.

Penny & Gary Shackelford, leaders

#### 15. What is a healthy forest?

Visit the Northern Kettle Moraine State Forest in spring to learn about research and management of plant, insect and disease threats to forests.

May 17, 9 a.m.-noon

Campbellsport, Fond du Lac Co.

Tim Beyer & Jane Cummings-Carlson, leaders

#### 20. Plants and birds of Moonlight Bay SNA

Fringed orchids, rare plants, shorebirds and geology await as we blaze a trail through a boreal forest and emerge into the undisturbed solitude of Moonlight Bay Bedrock Beach SNA.

May 24, 9 a.m. - noon

Bailey's Harbor, Door Co.

Mark Martin, leader

#### 21. Birdwatching at Havenwoods

Enjoy a birdsong serenade as we blaze a trail in Havenwoods State Forest in search of bluebirds, warblers, snipes, soras and other spring migrants.

May 24, 8-11 a.m.

Milwaukee, Milwaukee Co.

Sue Johansen & Gordon Zion, leaders

#### 22. It's for the birds:

##### Wisconsin riverbank restoration

Hike and bird in a black oak floodplain forest under restoration along the Wisconsin River.

May 24, 9 a.m.-noon

Sauk City, Sauk Co.

Susan Kenney & Gerry Clausen, leaders

#### 24. Frog night hike

An indoor talk features live frogs and videos of calling frogs. Then drive to local wetland areas to see and hear them.

May 31, 7:30-9:30 p.m.

St. Croix Falls, Polk Co.

Randy Korb, leader

Limit: 50 • Cost: \$6

#### 25. Digiscoping birds at Nine Springs

When the digital camera meets a spotting scope, you have "digiscoping." Join the digital age of birding in this hands-on intro class and shoot amazing close-up bird photos just like the pros. Equipment provided or bring your own camera and/or scope and we'll guide you with setup.

May 31, 2-5 p.m.

Madison, Dane Co.

Ben Lizdas & Kate Fitzmeyer, leaders



**27. Chiwaukee Prairie SNA & Kenosha Dunes**

Tread among blooming shooting stars as we explore the richest prairie in Wisconsin, with over 400 plant species! Learn about prairie ecology, then walk the sands of Kenosha Dunes along Lake Michigan.

May 31, 9-11:30 a.m.

Pleasant Prairie, Kenosha Co.

Marty Johnson, Doug Robinson, & Kristie Woods, leaders

**28. Holland Sand Prairie SNA**

Discover this gem teeming with rare and beautiful plants. It's the last sizable sand prairie remnant in this part of the state.

Sunday, June 1, 9 a.m.-noon

Holmen, La Crosse Co.

David Troester & Dean Edlin, leaders • Limit: 20

**30. Marsh birds and birch art**

Enjoy a morning visit to Powell Marsh IBA to view waterfowl, cranes and marsh-dwelling warblers. Travel to a nearby upland forest to learn about birch and forest ecology. Then harvest some birch bark and go indoors to create your own birch bark art project.

Friday, June 6, 9 a.m.-4 p.m.

Manitowish Waters, Vilas Co.

Colleen Matula & Linda Winn, leaders • Limit: 20 • Cost: \$5

**33. Oak barrens and sand prairies**

Learn about oak barrens and sand prairie ecology hiking four sites in various stages of restoration.

June 7, 10:30 a.m.-2:30 p.m.

Dayton, Waupaca Co.

Bob Welch, Debra Martin, Darcy Kind & Heidi Nelson, leaders  
Cost: \$5

**34. Trout of Coon Valley**

Come to Wisconsin's Coulee Region — the "Montana of the Midwest" — to learn about brook trout management.

June 7, 10 a.m.-noon

Coon Valley, Vernon Co.

David Vetrano, leader



JEREMY HOLTZ

Trip 35 journeys to Spread Eagle Barrens near the Michigan border in northeastern Wisconsin to take in the panorama of bracken grasslands, scattered pines, sedges, frost pockets and the Pine River, a designated wild river that traverses the site.

**35. Spread Eagle Barrens SNA**

Enjoy breathtaking vistas, rare plants, magnificent birds and animals in this unique bracken grassland.

June 7, 7 a.m.-noon

Eagle Barrens, Florence Co.

Jeremy Holtz & Kay Kavanaugh, leaders • Cost: \$5

**38. Beautiful bogs of Taylor County**

Traipse a boardwalk into pristine and beautiful sphagnum bogs. Keep your eyes open for carnivorous pitcher plants, sundew plants and pink lady's-slippers! Lunch included.

June 7, 10 a.m.-3 p.m.

Westboro, Taylor Co.

Scott Everson & Richard Dix, leaders • Limit: 20 • Cost \$10

**39. Birds and plants of Pleasant Valley Conservancy**

Spot a wide array of savanna birds including red-headed woodpeckers. Learn about restoration work on rare oak savannas.

Sunday, June 8, 9 a.m.-noon

Black Earth, Dane Co.

Tom and Kathie Brock & Roma Lenehan, leaders

**40. Golden-winged warblers — overnight**

Wisconsin supports 25 percent of the world's breeding golden-winged warblers. Enjoy an evening talk by a noted warbler biologist and spend the night at the UW Kemp Natural Resources Station. Tuesday morning we will visit birding hotspots. Fee includes lodging, breakfast and a donation to support the golden-winged warbler campaign.

Monday, June 9, 1 p.m.-

June 10, noon

Woodruff, Oneida Co.

Andy Paulios & Amber Roth, leaders • Cost: \$75

**43. Purple martin magic at High Cliff**

Delve into the life of purple martins as we peer into nests and assist in banding these colonial birds.

June 14, 10 a.m.-2 p.m.

High Cliff State Park, Calumet Co.  
Dick Nikolai, leader

**45. Birdwatching at Rose Lake**

Discover this pristine prairie pothole where we are likely to see white pelicans, black terns, yellow-headed blackbirds, common moorhens and other marsh and prairie birds.

June 14, 9 a.m.-noon

Fort Atkinson, Jefferson Co.  
Nolan Kollath, leader



**46. Osprey nesting at Crex**



Get your binocs ready! Come watch ospreys bring in fish for their young up in their big stick nests. Learn about osprey behavior and ecology.

June 14, 9 a.m.-3 p.m.  
Grantsburg, Burnett Co.  
Pat Manthey, leader

**47. Sea kayak through a Lake Superior estuary**

Enjoy a six-mile paddle through steep wooded shores, unique wetlands and meandering tributary bays in the remote wilderness of the St. Louis River Streambank Protection Area. Instruction provided. Beginners welcome!

June 14, 9 a.m.-4 p.m.  
Superior, Douglas Co.  
Frank Koshere, leader • Limit: 18  
• Cost: \$65 kayak rental, \$25 if bringing own kayak and gear

**48. Apostle Islands — All aboard!**

Board the *L.L. Smith* research ship to tour this beautiful area. Learn about local history, water resource issues and participate in water quality sampling.

Sunday, June 15, 12:30-5 p.m.  
Bayfield, Bayfield Co.  
Frank Koshere, leader  
Limit: 25 • Cost: \$25

**49. Bog vs. swamp in the Chequamegon-Nicolet**

Discover the difference! Venture onto a quaking bog mat to search for orchids, carnivorous plants and other rarities at Grandma Lake Wetlands SNA. Then explore Van Zile Cedars — a primeval old-growth cedar swamp — and marvel at the dark, quiet, moss-cloaked landscape of twisted trees.

Friday, June 20, 9:30 a.m.-3:30 p.m.  
Long Lake, Florence Co.  
Thomas Meyer, leader

**51. Wild Rose Fish Hatchery**

Tour the new Wild Rose Hatchery and see the technologies added during renovation.

June 21, 9 a.m.-noon  
Wild Rose, Waushara Co.  
Steve Fajfer, leader

**52. Aztalan SNA — ancient archaeology**

Learn about Native American Indians who inhabited Wisconsin's prehistoric frontier. Explore the numerous archaeological investigations conducted at this famed National Historic Landmark in Aztalan State Park.

June 21, 10 a.m.-noon  
Lake Mills, Jefferson Co.  
Mark Dudzik, Bob Birmingham & Tom Davies, leaders

**53. Grenlie & Skunk Lakes SNA — dam removal**

Hike a portion of the Ice Age Trail to view two kettle lakes where dams were very recently removed. Learn about the ecological benefits of dam removal and deep lake ecology.

Wednesday, June 25, 9 a.m.-1 p.m.  
Scandinavia, Waupaca Co.  
Scott Koehnke, Steve Hoffman, Al Niebur & Scott Provost, leaders

**54. Pontoon tour — Eurasian water milfoil**

Climb aboard to tour two lakes — the before and after of Eurasian water milfoil infestation control. Learn about milfoil ecology, ongoing treatments and controls.

Friday, June 27, 9:30-11:30 a.m.  
New Post, Sawyer Co.  
Kristy Maki, leader • Limit: 20

**55. Blue River Sand Barrens & Avoca Prairie SNAs**

The lower Wisconsin River SNAs are a study in extremes and opposites. First discover a remnant Wisconsin "desert," where cacti and other arid-loving plants thrive. Then venture into the lush wet prairies at the largest prairie east of the Mississippi River.

Friday, July 11, 10 a.m.-2:30 p.m.  
Blue River, Grant Co.  
Thomas Meyer, leader



Double your pleasure! Trip 58 provides a hands-on chance to help band osprey and tour the scenic Turtle Flambeau Flowage by boat.



**56. Wolf howl**

Join the pack as we enjoy a bus and hiking tour of the Chequamegon-Nicolet National Forest near Clam Lake and a nighttime drive through wolf territory. Stop along forest back roads to listen for wolves. Cost includes dinner at Lakewoods Resort and a donation to wolf tracking efforts.

July 12, 3 p.m.-midnight  
Cable, Bayfield Co.

Adrian Wydeven, Sarah Boles & Tom Matthiae, leaders • Cost: \$40

**57. Karner blue butterflies**

Flutter to several landscape restoration sites. See facilities for captive butterfly rearing and lupine propagation.

July 12, 9:30 a.m.-1:30 p.m.  
Dayton, Waupaca Co.

Bob Welch & Debra Martin, leaders  
Cost: \$5

**58. Osprey banding & Turtle Flambeau Flowage tour**

Visit osprey nests and help band nestlings. Take a scenic boat ride through the flowage to see wildlife and a patterned bog. Lunch included. This trip is a fundraiser for the osprey monitoring program.

July 12, 8:30 a.m.-4 p.m.  
Mercer, Iron Co.

Bruce Bacon & Roger Jasinski, leaders • Cost: \$65

**61. Maribel Caves**

Spelunk your way through time as we explore the fascinating geology, ecology, history and restoration of beautiful Cherney Maribel Caves SNA.

July 19, 9 a.m.-noon  
Two Rivers, Manitowoc Co.  
Bernie Brouchoud, leader

**63. Avian and raptor rehab center**

View spectacular birds up close in a behind-the-scenes look at a premier raptor rehabilitation and research facility.

July 19, 9 a.m.-noon  
Antigo, Langlade Co.  
Marge Gibson & Jeanette Kelly, leaders • Cost: \$5

**64. Landscaping is for the birds!**

Learn from an expert how "birdscaping" techniques can increase bird traffic. Then travel to Scuppernong River Habitat Area to compare large scale bird landscapes with backyard possibilities.

July 19, 9 a.m.-noon

East Troy, Walworth Co.

Mariette Nowak, leader • Limit: 25

**65. The "power" in landfills**

Methane gas captured at Seven Mile Creek Landfill is now powering 2,600 local homes. Come see this project fueled by refuse.

July 26, 10 a.m.-noon

Eau Claire, Eau Claire Co.

Dave Lundberg & Mark Vinall, leaders

**66. Lichens of the Northwoods**

Explore the elusive life of lichens as we traverse the boreal forest of Johnson Lake Barrens SNA. Learn about lichen ecology, conservation and tips for identification.

August 2, 9:30 a.m.-noon

Boulder Junction, Vilas Co.

Jim Bennett, leader • Limit: 20

**67. Wildlife photography**

Photograph birds and mammals at the Tenderfoot Forest Reserve. Learn from longtime nature photographer Norm Ritland about equipment and tricks of the trade. Do more than point and shoot to capture incredible natural images.

August 9, 9 a.m.-4 p.m.

Boulder Junction, Vilas Co.

Norm Ritland, leader • Limit: 20

**69. Wildlife-friendly design and landscaping**

Explore environmentally-friendly landscaping and architecture of the Urban Ecology Center. Get tips on how you can improve your home or yard to attract wildlife and reduce bird/window collisions.

August 16, 11 a.m.-1 p.m.

Milwaukee, Milwaukee Co.

Tim Vargo & Kim Forbeck, leaders

**70. John Muir's boyhood haunts**

Traverse the lake, wetlands, prairie and savanna where John Muir grew up. Lunch at Observatory Hill atop a cedar glade with a spectacular view.

August 23, 9:30 a.m.-1 p.m.

Montello, Marquette Co.

Mark Martin, leader

## Keep your eye on the birdie



Look for this symbol for trips specially designed to describe birding hot spots, spectacles of bird migrations, bird banding and bird research. Why this emphasis this year? First, by December we'll finish our five-guide series of auto tours that carry you to Great Wisconsin Birding and Nature Trails statewide. These handy guides lead the way to prime bird watching areas at prime times of the year and also offer a host of travel information to make your trip planning easy.

Second, we're kicking-off the Wisconsin Bird Conservation Campaign created by bird experts of the Wisconsin Bird Conservation Initiative and the fundraising gurus at the Natural Resources Foundation of Wisconsin. This campaign will help manage and preserve critical sites used for resting and feeding by migratory birds, breeding by Wisconsin's native species and for wintering grounds (in South America) by our neotropical migrant birds.

These trips will take you to many of these sites and enhance your enjoyment of birds in your backyard. So grab your binoculars and seek out these trips that marvel at birds where they flock, breed, feed and migrate. And learn more about campaign-supported projects at [www.wisconservation.org](http://www.wisconservation.org).



**72. Migrating monarchs**

Discover how tagging monarch butterflies unlocked the secrets of this species' life cycle and migration. Capture, examine and tag some of these beautiful migrants as they pass by the scenic St. Croix River. Sunday, August 31, 1-3 p.m. St. Croix Falls, Polk Co. Randy Korb, leader • Cost: \$6

**74. Trumpeter swan cygnet round-up and banding**

Help capture endangered trumpeter swan cygnets in Crex Meadows. Paddle through the marsh in your kayak/canoe while overhead aircraft direct you to the swans' locations. Help band, collar and check the health of cygnets. You must bring your own kayak or canoe and expect a long day of paddling. For experienced and physically fit paddlers only! Monday, September 8, 8 a.m.-4 p.m. Grantsburg, Burnett Co. Pat Manthey, leader • Limit: 16 experienced, fit paddlers • Cost: \$25

**76. Woodland Dunes SNA — bird banding**

Discover a protected oasis of marsh, meadow and forest as we take an off-trail hike through Woodland Dunes SNA. Join school children in catching, banding and releasing birds. Friday, September 19, 9 a.m.-2:30 p.m. Two Rivers, Manitowoc Co. Bernie Brouchoud, leader

**78. Urban migratory birds**

Join avian researchers studying tropical songbird migration in urban Riverside Park. Observe their bird-banding station and see songbirds in hand. September 20, 9-11 a.m. Milwaukee, Milwaukee Co. Owen Boyle, Bill Mueller & Tim Vargo, leaders

Get a flavor for wildlife research right in town. Trip 78 takes you along to capture, band and release migrating songbirds taking a rest as they wing toward the tropics.

**79. Balancing our forests**

Learn how forest management balances recreation, aesthetics and forest health as we hike the beautiful Governor Knowles State Forest. September 27, 10 a.m.-2 p.m. Governor Knowles State Forest, Burnett County Daniel Thill, Mike Wallis & Todd Hintz, leaders

**81. Chinook salmon**

Watch Chinook salmon on their last journey in life. Learn about Great Lakes history, salmon lifecycles and egg collection at the Besadny Fisheries Facility. October 4, 9:30-11 a.m. Kewaunee, Kewaunee Co. Kathy Dax, leader

**82. Closer look at turkey vultures**

Learn about vulture natural history and hike up into Devil's Lake State Park to view more than 300 birds assembling in their night roost. Meet a live vulture up-close. October 11, 3-7 p.m. Baraboo, Sauk Co. Lisa Hartman & Mike Mossman, leaders

**83. Prairie and savanna seed harvest**

Learn about prairie and oak savanna restoration while harvesting seed! You can keep the seed for your own restoration or donate it to a good cause. Enjoy lupine, lead plant, milkweed, cup plant, native grasses and asters. Tuesday, October 14, 11 a.m.-1 p.m. Black River Falls, Jackson Co. Ron Cork & Joey Esterline, leaders

**84. Wildlife photography — sandhill cranes**

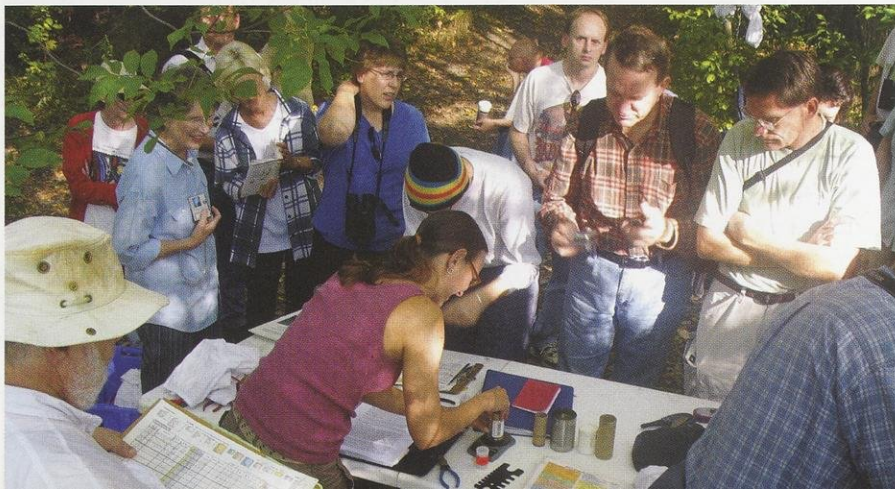
Learn the do's and don'ts of wildlife photography with a noted professional photographer. An indoor presentation is followed by a field trip to capture your own images of sandhill cranes. October 18, 1-7 p.m. Wisconsin Dells, Sauk Co. Bill Pielsticker, leader • Cost: \$5

**85. Northern saw-whet owl banding**

Have an up-close encounter with Wisconsin's smallest owl. Experience mist-netting and banding these charming birds at Linwood Springs Research Station which bands up to 700 migrating owls annually. 85-A. Saturday, October 18, 7:30-10 p.m. 85-B. Friday, October 24, 7:30-10 p.m. Stevens Point, Portage Co. Gene Jacobs, leader • Cost: \$10

**86. Migration on the mighty Mississippi**

Expect to see up to 250 bald eagles and more than 100,000 waterfowl as we scan Pools 8 and 9 of the Mississippi River for waterfowl, pelicans, eagles and hawks at the peak of migration. 86-A. Friday, October 24, 8 a.m.-2 p.m. 86-B. Saturday, October 25, 9 a.m.-noon. Brownsville, Minn. Andy Paulios, leader, session A Fred Leshar, leader, session B





# Build your own rain garden

With simple tools, some simple calculations and a little work, you can grow a garden that lets rainwater settle down and stay close to home.



*By David L. Sperling*

*Story photos by Robert Queen*

Rain gardens can add an attractive splash of color to your landscaping while trapping runoff and recharging groundwater.

**G**ravity assures that where water falls, it runs — down roofs, down streets, downhill all the way to the sea.

Draining water efficiently from homes, streets and businesses has long been relegated to the world of engineers and community planners. Roofs are pitched, landscapes graded and sidewalks sloped to quickly carry rainwater away. Home gutters, drain pipes and driveways flush and rush stormwater toward curbs and into storm sewers that pipe the water directly into streams, lakes or treatment plants. All that engineering was deemed necessary because paved surfaces prevented rain from doing what it was meant to do naturally: filter through the ground into the water table. But we're slowly appreciating that there's another way to get stormwater out of gutters and away from foundations while keeping this liquid asset near our front and backyards — rain gardens.



Roger Bannerman helps foster rain gardens at homes, businesses and community developments as local, low-tech solutions to reduce runoff, and protect lakes, streams and the water table.

Rain gardens are shallow depressions with loose soil designed to collect rain from impervious surfaces such as roofs and parking lots, slow it down and give plants, bacteria and soils time to clean the water as it seeps into the ground. The concept is simple enough for anyone with some green space to put into practice. More important, according to Roger Bannerman, a DNR stormwater specialist, these gardens can be sustained like any other garden without using manmade energy. Rain gardens can help recharge local aquifers, protect communities from flooding and slow the flow of city street pollutants like fertilizer, road salt, oils and pesticides.

We're slowly getting past the mindset of viewing stormwater as a waste product that needs to be piped and ponded, says rain garden advocate Larry Coffman, associate director for the Department of Environmental Resources in Prince George's County, Maryland. Rainfall and snowmelt are typically piped to storm sewers or collected and directed to detention ponds that give roiling stormwater and sediments time to settle out before the water flows offsite.

By keeping stormwater more widespread close to where it falls, rain gardens provide less opportunity for stormwater to dissolve and scour contaminated oils, metals and other chemicals from the roads and curbside. Rain gardens actually filter pollutants from the water as it percolates through the soil on its way to becoming groundwater.

Declining groundwater levels due to human use not only drop the water table but significantly affect aquatic ecosystems. Groundwater flowing into streams is "vital to their well-being," says Ken Potter, UW water resources engineer. During periods of little rain, groundwater discharge forms the main flow in streams, and this cooler water "can be critical since cold water holds more oxygen." So, rain gardens make for better surface water quality, groundwater quality and overall hydrological health.

The concept started in 1988 while Coffman was thinking "out of the box." He had heard about the practice of growing plants over septic system drain

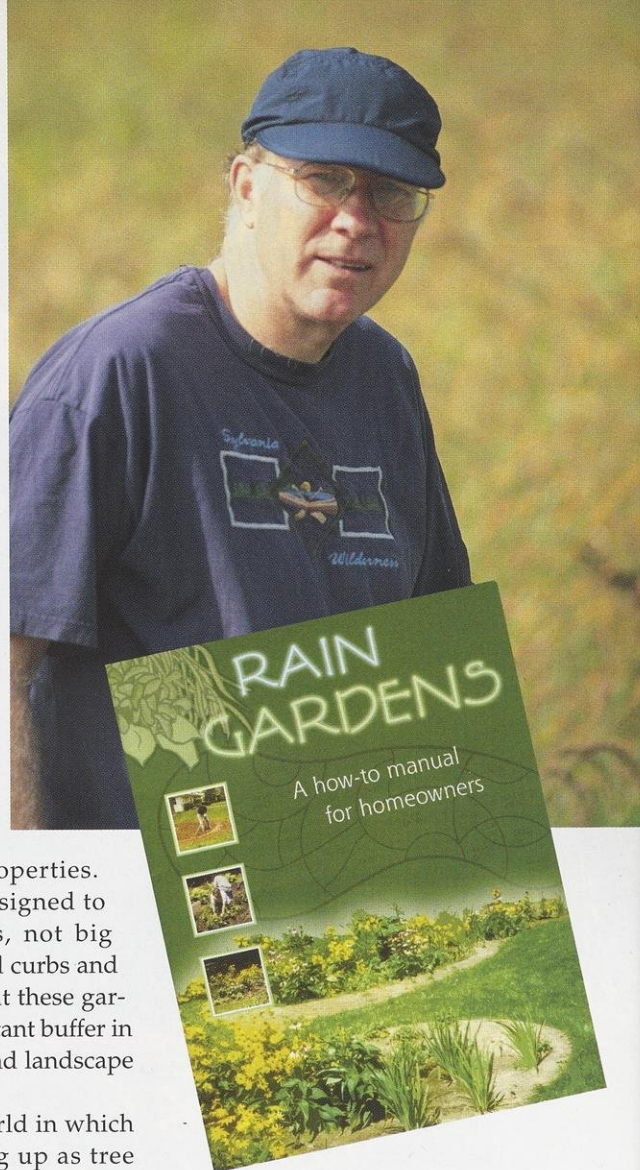
fields as a way to break down pollutants. Why not use this kind of on-site treatment and infiltration (known as bioretention) in an urban setting? Coffman and others felt that the name bioretention was too technical and cold. So they coined the term "rain garden," which they agreed was perfect: simple and catchy.

More catchy than the name is the idea itself. Individual homeowners, neighborhood developers and commercial businesses are all experimenting with designs to incorporate rain gardens on their properties. Since rain gardens are designed to handle average rainfalls, not big blowout storms, traditional curbs and gutters are still needed. But these gardens can provide an important buffer in both new developments and landscape renovations.

Coffman foresees a world in which rain gardens are popping up as tree boxes, peeking over ditches and peering off rooftops, not to mention blooming in yards, campuses and parks. If that seems utopian, just take a look around. Such gardens are now commonplace in new subdivisions, in parking lot renovations, and in rehabs at churches, schools, strip malls, gas stations and residential neighborhoods. They don't involve a lot of centralized planning. They don't require much space. They can fit into oddball shapes, and are readily added to existing buildings. Rain gardens look nice, and you don't need to be an engineer to build one. Anyone can make a rain garden — including you!

### A good guide to get going

To plan a rain garden step-by-step, we highly recommend getting a copy of the free publication *Rain Gardens — A how-to manual for homeowners*, available from DNR Service Centers as DNR Publica-



tion WT-776-2003, from UW-Extension offices as UWEX Publication GWQ037, or ordered by phone at 1-877-947-7827. It can also be viewed and printed from PDF format on the web at [clean-water.uwex.edu/pubs/home.htm#rain](http://clean-water.uwex.edu/pubs/home.htm#rain).

A lot of your planning can be done outside of the gardening season. First decide what you want to accomplish. Rain gardens can be placed fairly near your house (at least 10 to 20 feet from the downspout and foundation) to catch roof runoff or farther out if you want to collect water from your lawn and roof.

**SKETCH IT OUT** — Draw a rough sketch of your property and house. Note the locations of property boundaries, septic fields, buried utility lines (including sewer laterals, water lines, power lines, phone lines and gas lines). Don't plan a rain garden under big tree roots that would be tough to excavate and where additional water might damage trees. Also don't be tempted to place a rain garden in places in your

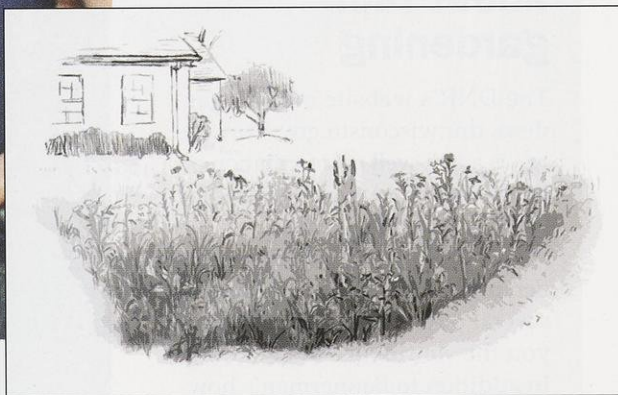




Step-by-step instructions can give you the confidence to assess if a rain garden makes sense on your lot. You can plan, sketch out and build a rain garden yourself or seek help from landscaping firms, nurseries and a host of experienced consultants statewide.



Booklets and online resources can help you select hardy perennial, native plants that look good and can attract wildlife, if that is your goal. Many nurseries and landscapers offer advice and plant sets to get going.



yard where water already ponds. Your goal is to encourage infiltration, and wet patches already indicate where soil is compacted and drainage is slow. You also don't want to place a rain garden in high traffic areas where children play or where foot traffic will only further compact or muddy up wet soils.

**GAUGE THE SLOPE** — Once you've picked a relatively flat area of your yard, you'll want to gauge the slope, test the soil type and determine the plot size. Typically rain gardens only need to be about four to eight inches deep. You can determine the slope with a few wooden stakes, a piece of string and a carpenter's level, a simple line level or a laser level, all of which are available at hardware stores. Measuring slope is a simple calculation. Stretch the string horizontally between stakes placed about 15 feet apart. Check that the string is level. Measure the distance (width) in inches between the two stakes, then measure the height on the downhill stake between the string and the ground. Divide the height by the width and multiply by 100 to find the percent slope in that part of your lawn. If the slope is less than four percent, plan on a rain garden about three to five inches deep. If the slope is between five and

seven percent, figure you will need a rain garden that is a bit deeper, say six to seven inches. If the slope is between eight and 12 percent, you will need a rain garden about eight inches deep. For greater than 12 percent slope, consider working with a professional landscaper because you'll have to dig a bit deeper and will likely need some equipment.

**LOOK AT SOIL TYPES AND ESTIMATE GARDEN SIZE** — The rain garden manual offers similar practical tips for evaluating if the soil is generally sandy, silty or clayey. Sandy and silty (also called loam) soils drain much faster than clayey soils. The size of the rain garden will have to be larger if it is draining clayey soils that allow water to seep in more slowly. Typically soils are mixtures of sand, silt and clay. Once you have an idea of the soil types and drainage pattern, you can decide to either work with what you've got or increase your soil's permeability. "Mixing compost or mulch into your soil really increases infiltration later," Bannerman says. "Incorporating dead leaves or dried grass clippings boosts permeability as well."

The manual also provides tips on estimating the square footage of the area that will drain toward the rain garden(s) from roofs and yards. Both are important factors in setting the size, shape and configuration. A rain garden in sandy soils needs to be about 20 percent of the size of the drainage area, 30 percent for silty or loamy soils and 60 percent in

clay soils. Typical rain gardens for residential homes range from 150 to 400 square feet and are wider than they are long. The how-to manual gives directions for shaping the garden and creating a lip or berm on the left, right and downhill side of the garden to contain water.

Give your rain garden an outlet, too. Just like an overflowing tub, there are times when it may overflow the berm. Rain gardens are meant to handle average storms and you don't want to drown or wash out your plants when a big rain comes along. When it overflows, you want to give the water a path to follow the natural drainage pattern and keep flowing away from your house or lot.

**PLANT SELECTION** — In most rain gardens plants are alternately deluged then left high and dry. So, the trick is choosing hardy species that can handle both situations. Some of the best vegetation for rain gardens in the Upper Midwest comes from the native prairies that adapted to these same conditions. Prairie flowers have deep roots that may go down ten feet. When the weather is dry, they can access sources of water unavailable to other vegetation, and when it's wet, their root structures provide deep conduits where rain can flow.

If a prairie garden isn't what you envisioned, there are more traditional trees, shrubs and flowers that "don't mind getting their feet wet," says UW-Extension Home Horticulturist Helen Harrison. She recommends starting



## A fount of information about rain gardening

The DNR's website on rain gardens, [dnr.wisconsin.gov/runoff/rg/](http://dnr.wisconsin.gov/runoff/rg/) is a rich well of information on books, lists, guides and services for planning your rain garden.

The Build Your Own Rain Garden portion provides PDF links to several publications that will give you the confidence to get going. In addition to Bannerman's how-to guide, there are links to several other basic guides. Take a closer look at the publication *Wisconsin Native Plant Sources and Restoration Consultants*. This 12-page gem lists nearly 50 nurseries throughout Wisconsin where you can buy native seeds and plant sets for rain gardens, whether you intend to put in prairie, woodland, wetland or shoreland species. You'll also find a listing of businesses and consultants who can help you prepare your plots and then design, install and maintain a rain garden if you don't view this as a do-it-yourself project.

At the same site, check out the *Wisconsin Native Plants for Rain Gardens* portion where you can search for plant species by their height, color, bloom time, preferred habitat, common name or scientific name. It's very handy and we also like the feature that recommends particular species if you are interested in attracting birds and butterflies. A separate listing recommends plants that will do well in shady gardens.

Want to get your kids into the act? Can do! The website links you to books and ideas for planning rain gardens and water projects with younger gardeners. Just don't let them convince you that a swimming pool would provide a better place to store water!



Even modest, small spaces between homes can host attractive rain gardens.

with smaller quantities of a variety of plants to "see what works with your site and what doesn't, then smooth out any kinks."

The manual offers tips for designing attractive gardens and shares eight patterns including sample plant selection. If the scientist and engineer in you designed the garden specifications, then free the artist within to select a visual palette for the floral display. Think about plantings that will provide a variety of height, color and texture in each season. If you want the garden to act as a screen to provide a bit of privacy, block the wind or provide shade, consider planting taller species along that border and cascade plants that grow in descending heights toward the side that you see most frequently from your house, patio or windows. Setting plants that will bloom at different times of the gardening season will extend your flowering period. Plants with flowers, fronds, curly leaves, variegated foliage, fruits and colors all add texture and interest to the plantings. In laying out your garden plan, think about clumping three to seven or more plants of the same color to establish splashes of color in the garden patch, then repeat these groupings if you want a more cohesive, traditional look. Also consider mixes of

flowering and fruiting plants with some grasses, sedges and rushes. These will develop dense underground networks of roots that can outgrow and crowd out weed species. Consider planting low groundcover that can spread and fill in over time to shade out weedier species.

You may have other aims for the rain garden like attracting butterflies or creating backyard habitat and food for birds. Build those into your plan as well. Or you may want some taller species in part of the garden to provide a shady patch that's perfect for a garden bench or trail border. Take the time to visit local arboretums, nature centers and garden centers to get ideas about hardy perennial species that won't require much maintenance and will develop a nice mat of roots to absorb and hold moisture after a rainstorm.

When it's time to plant, follow the old tree planter's maxim and dig a \$2 hole for every dollar's worth of planting. Since rain gardens are subject to sudden flushes of forceful water, you are better off starting with one- to two-year-old plant sets that already have well established roots. Dig each hole twice as wide as the plant plug. Loosen the soil and plant them just deep enough to keep the crown at grade level.



# Blooms to watch

As each area is planted, cover the spaces between plantings with double-shredded mulch to minimize moisture loss, act as a weed barrier and allow stormwater to infiltrate. Water the plants gently with about an inch of water a week unless the weather does that work for you. Once the plantings are in place for a few years, their roots should be deep enough that they can fend for themselves as long as you top dress them with a little fresh mulch during their first few years.

Mulch keeps the weeds down, acts as a sponge to hold in moisture and works as a filter to remove oils and other grit near the surface before the rain seeps down toward groundwater. Avoid cypress mulch. It's effective, but it's made by chopping down rare, old-growth cypress in Southeastern wetlands. Shredded hardwood mulch works particularly well in rain gardens because it doesn't float or blow away.

**MAINTENANCE** — No matter what kind of garden, expect that you'll need to weed until the plants you want become well established. Don't rely on pesticides and fertilizers to keep a rain garden growing. You don't want those compounds soaking downward or running off onto paved areas. As the plantings mature, dense roots will squeeze out weeds. When you put your garden to bed for the season, leave the seed heads and stalks in place to provide winter cover and then cut them back in the early spring when four inches or so of new growth appear. A string trimmer or gentle wiggling of the old stems usually is adequate to loosen up the dried, dead stalks from the previous year without disturbing the root or new growth.

**ENJOY!** — The last step in this whole process, emphasizes Bannerman, is to enjoy the results! Your rain garden will add more birds, butterflies, colors, sounds and smells to your life. And start feeling good that this garden offers a path and a means to get rainwater back in the ground and back into the local water cycle where it belongs. ■

*David L. Sperling edits Wisconsin Natural Resources magazine. This article is based on "Rain Gardens" by Karen Cozzette.*

## Here are just a few of the possible plantings to consider in a rain garden

### spring/early summer bloomers

red milkweed  
shooting star  
wild iris

### summer bloomers

nodding pink onion  
prairie blazing star

### late summer/fall bloomers

New England aster  
Ohio goldenrod  
sweet black-eyed Susan

### grasses

Indian grass  
prairie drop seed

### ornamental options

Not only can these plants tolerate wet conditions, they also can withstand our Upper Midwest winters. Helen Harrison adds, you don't need a particularly talented green thumb to grow them. Mixing trees, shrubs, flowers, and ground covers to create different plant levels will attract a greater diversity of wildlife to your garden.

### trees

red maple  
(prefers acid soil)  
river birch  
swamp white oak

### shrubs

glossy black chokeberry  
northern lights azalea  
(prefers acid soil)  
red-osier dogwood

### perennials and annuals

asters  
astilbe  
campanula  
cardinal flower  
hosta  
orange coneflower  
salvia  
Siberian iris

### ground covers and ferns

creeping willow  
dwarf arctic willow  
(Most mosses do well in moist, acid soils. Ferns need moist yet relatively well-drained soils.)

### plants in wetland stands

Wetland gardens may have three zones — one in which plants are in for some occasional wading, one in which they continually have wet feet, and one in which they are completely immersed. Select plants accordingly.

**NOTE:** Hardy cattail species can easily come to dominate an entire wetland. Keep pulling some of the cattails out of wet rain gardens once a year.

### wet meadow/prairie (occasionally wet feet, dry tops)

blue lobelia  
boneset  
fox sedge  
Joe Pye weed  
ironweed  
meadowrue  
New England aster  
porcupine sedge  
red cardinal flower  
red milkweed  
switchgrass  
turtlehead

### emergent (feet in permanent pool, dry tops)

blue flag iris  
marsh marigold  
pickerelweed  
softstem bulrush  
sweet flag  
wapato duck potato  
water plantain

### submergent

native lily pad  
Chara



# Seal of approval

Gold Seal awards honor the best and favorite experiences at state parks, trails and forests.

*Kate Zurlo-Cuva*

A candlelight beach walk adds atmosphere to a beautiful sunset stroll along the Lake Michigan shore at Whitefish Dunes State Park. The lit path will flicker again on the third Saturday in August.

**R**ecognizing the beautiful and praising the unique: it's an enviable task whether you are sizing up horse flesh, the buffet line or the landscape. A great joy for the Friends of Wisconsin State Parks (FWSP) is dreaming up ways to enhance experiences at parks and trails. These volunteers plant the seeds of these improvements, roll up their sleeves, then share the fruits of their labor with other enthusiastic travelers. A cornerstone of all these Friends groups is taking a little time to celebrate their successes.

Each summer, the Friends invite the campers, bikers, hunters, hikers and anglers to vote on their favorite features at the state parks and trails they visit. Votes are cast online at the Friends website [www.fwsp.org](http://www.fwsp.org), counted up and Gold Seal awards are presented each year at the Friends annual meeting in mid-October.

"We look forward to recognizing and highlighting the state's terrific and unique features," notes John Waring, FWSP President. "Our mission to promote, protect, preserve and restore the parks and trails is enhanced by pointing out what visitors tell us made their visits extra special. We hope we can get kids out to parks for the first time as well as help adults relax and relish their childhood memories in the outdoors," adds Waring. Here are favorites you picked in 2007. Consider them "best bets" for sure-fire enjoyment throughout the seasons. If you'd like to cast your lot on highlights for the next Gold Seal awards, just visit the Friends website during the summer season and click on the Gold Seal icon to weigh in. Voting is open to all park visitors.





More than 17 miles of groomed ski trails wind through woods and pass near prairies and wetlands at Lapham Peak near Delafield. More than two miles of trails are lighted for night skiing. Thanks to the forest's Friends group, snowmaking equipment assures these trails will stay blanketed in white during lean snow years.

## The 2007 Winners:

**BEST GROOMED SKI TRAIL: Kettle Moraine State Forest — Lapham Peak Unit, Delafield.** The 17.2 miles of ski trails winding through glacial terrain are a mecca for both serious and amateur cross-country skiers in southern and southeastern Wisconsin. Trail difficulties are rated blue, green and black; blue are the easiest for newer skiers. A good rule of thumb for training athletes is if you can do four black loops in a day, you are ready for the American Birkebeiner ski race. There is always at least one set of classic tracks on the ski trails. Wider areas have two sets to accommodate both skaters and striders. The trails intersect so that skiers can return quickly to the start, if they need to. For evening skiing, 2.5 miles of the trails are lighted. Trail maps are available at the office, shelters and along the trails. Parking is available at the two trail heads and both heated shelters have restroom facilities. Last year, the Friends group completed its second step of trail improvements by raising \$100,000 to provide snowmaking equipment that will ensure the trails are in good shape for those years when natural snowfall is weak. In 2005-06 with Friends help, the area maintained a one-kilometer practice loop with artificial snow.

In addition to the rolling terrain through the woods, these trails traverse savannas, prairies, pine plantations and wetlands. Along the way, you may see hawks, owls, turkeys, deer and a wide variety of animal tracks. In the thawed out season, the area is equally popular for its five miles of mountain biking trails. The Friends are also involved in prairie restoration. They eradicated buckthorn and honeysuckle from trails to knock back these invasive species to restore clear views of the mature trees and prairies.

TOM DAVENPORT, RD IMAGE



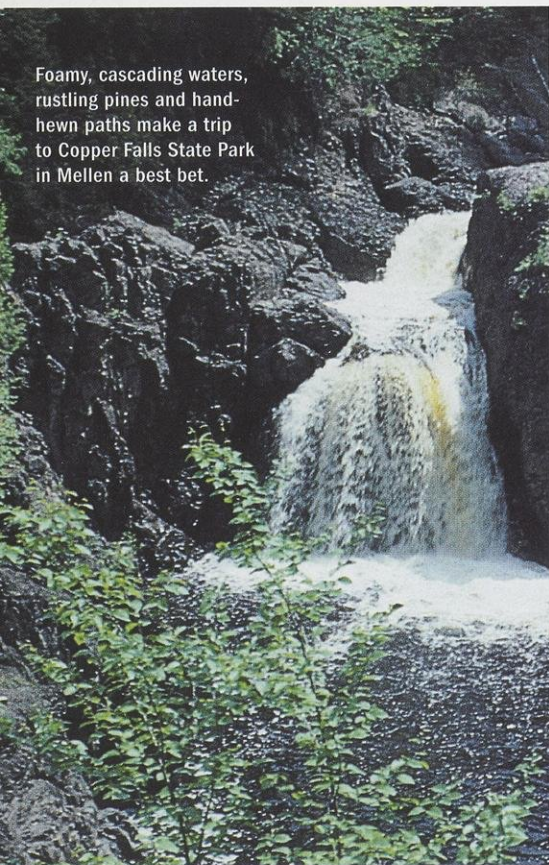
**BEST PICNIC AREA: Devil's Lake State**

**Park**, Baraboo. This massive 9,500-acre playground features 500-foot high quartzite bluffs and more than 300 acres of deep blue lake stretched out before you. The main picnic area on the South Shore and two sites on the North Shore offer tables, water, grills and access to plenty of space. In addition to the amusements in your picnic basket, the park offers a swimming beach, fishing, scuba diving, boating, 17 hiking trails, naturalist programs, rock climbing routes, canoe and sailboat rentals and concession stands. It's just a beautiful, open, relaxing place year-round with plenty of parking for both day users and campers. Pick a table in the full sun or shade. If the beanie weenie you brought has lost its luster, just cozy up to your new best buddy at the next table who had the good sense to grill steaks, sauté onions and pack enough s'more fixins' for a crowd!

**BEST VIEW OF A WATERFALL: Copper**

**Falls State Park**, Mellen. The rugged woods and rock terrain carved out by the rushing waters of the gorge of the

Foamy, cascading waters, rustling pines and hand-hewn paths make a trip to Copper Falls State Park in Mellen a best bet.



DON BLEGEN



Mountain bikers voted the trails at Blue Mounds as a top pick for vistas, woody scenery and a good workout.

DNR PHOTO

Bad River coupled with the ageless architecture of the CCC work from the 1930s creates a landscape that transcends time at Copper Falls. The park was established in 1939 and carries the name of the 29-foot falls that marks the first drop of the Bad River as it flows through approximately two miles of steep-walled canyons. Downstream, Tyler Forks joins the main branch of the Bad River plunging nearly 28 feet into the canyon over Brownstone Falls. The Doughboys Trail, named for the World War I veterans who first put down the path, is the most popular trail in the park. This 1.7 mile path takes you along the rim of Bad River Gorge and offers views of Brownstone Falls and Copper Falls. Although the falls can be seen from several locations along the trail, two wooden platforms provide the most spectacular views of Brownstone Falls and Tyler Forks Cascades. On either side of the swift-flowing water, the rock walls rise 60 to 100 feet. It's especially beautiful during fall color when sugar maple, red maple, basswood, ash, aspen, white and yellow birch put on a splashy show that contrasts with the verdant hues of hemlock, balsam fir, red and white pine, spruce and northern white cedar, all common along the trail.

Admire the rustic, historic architecture along the trail. Bridges, stone stairways, benches and buildings were constructed by the CCC workers. A notable beauty is the hand-hewn log structure at the beginning of the trail known as the "combination building" because it is home to a covered pavilion and indoor concession area.

**BEST MOUNTAIN BIKE TRAIL: Blue Mound State Park**, Blue Mounds. The addition of a new trail in Pleasure Valley now forms an 11-mile loop of almost entirely single track bike trail at Blue Mound State Park. The trails are very hilly and take full advantage of the mound with varying elevations above the surrounding hills and farmland. The four-mile Overlode Trail has many challenging rock features, more than any other trail in the area. Late in the season, beautiful fall colors dapple the trees along the Overlode Trail that winds through a maple forest. The trails at Blue Mound are especially popular because they were built by bikers and meet many of the mountain bikers' single track needs and challenges. Shower and bathroom facilities are available for park visitors.**BEST ELECTRIC CAMPSITE: (tie) Wyalusing State Park**, Bagley and **Peninsula State Park**, Fish Creek.

The Wisconsin Ridge Campground at Wyalusing offers campsites with panoramic views capturing the Wisconsin River Valley where it converges with the Mississippi. The campsites are perched 500 feet above the Wisconsin River, which makes campers feel like they are perched in the clouds, viewing eagles and hawks as they soar at eye level above the Wisconsin River. The Wisconsin Ridge Campground offers a modern shower building, several hiking trails and a new playground all within easy walking distance. The Homestead Campground at Wyalusing offers larger and more secluded campsites. The 34 electric sites in the Wyalusing camp-





DNR PHOTO

The Wisconsin Ridge Campground at Wyalusing State Park is a favorite to relax and take a long view over the valley where the Wisconsin and Mississippi Rivers converge. In spring and fall, it's a great spot to watch migrating hawks, waterfowl and songbirds.

grounds are flat and especially suited for trailers or motor homes.

Peninsula State Park has 467 family campsites in five separate campgrounds. All campsites are within a short walk to the waters of Green Bay and a large number of these sites along the shore provide breathtaking views and spectacular sunsets. The water view campsites in north and south Nicolet Bay campgrounds are among the most sought-after campsites in the whole state park system. Visitors should request these sites 11 months in advance to reserve them during the May through October time period. All but 12 campsites are within walking distance to many unique amenities including the Nicolet Beach, food, bicycle and boat rentals, the White Cedar Nature Center, the Amphitheater and American Folklore Theatre, two full service playgrounds, and three picnic areas. In addition, all campsites are linked by the Sunset Bicycle Trail system and provide easy access to a wide range of hiking trails. Most of Peninsula's campsites are wooded and separated from other sites by 75 to 100 feet. One hundred sites at Peninsula have 30-amp electrical output. All campgrounds have newly modernized toilet and shower facilities.

**BEST VIEW OF A MOONRISE: New Glarus Woods State Park.** New Glarus Woods is located on one of the highest hills in Green County and is surrounded by mature hardwoods. The area gets very dark in the evening and its rural location has little light pollution from urban areas.

"The moon crests the trees and is first

visible from the main picnic area in a large gap in the forest," notes Park Manager Steve Johnston. "It always seems too large to be real." The Group Camp Area is the best place to view the moon arc above the canopy, as it floods the area with light from the Milky Way, planets and meteors.

**BEST PLAYGROUND: New Glarus Woods State Park.** The playground materials and design fit into the look and feel of the old-growth hardwood forest that surrounds it. The slides, climbers, tunnels and bridges at the playground were designed for physical and imaginative play. The playground even includes a large open area that can be used to stage pretend activities. It adjoins a large stone sandbox and a short trail that leads to a series of large

rocks for play. "The play area was designed with the philosophy of 'you must teach children to love nature before you can ask them to protect it,'" adds Johnston. "I feel that is the reason it was a Gold Seal winner this year." Although New Glarus Woods does not have running water for toilets or showers, it does offer three drinking fountains throughout the campgrounds and picnic areas.

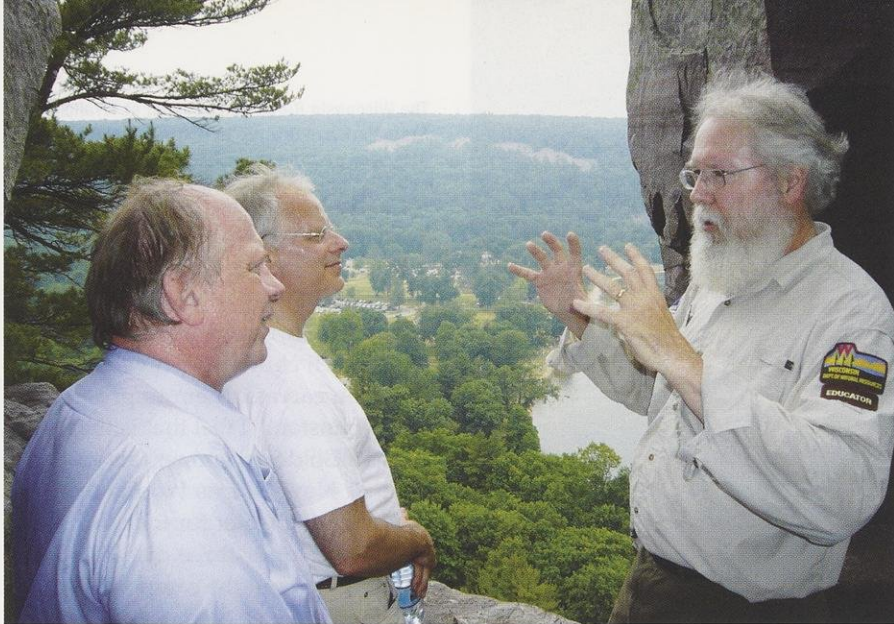
**BEST INTERPRETIVE DISPLAY: Devil's Lake State Park, Baraboo.** The nature center at Devil's Lake is a traditional center with a twist. Park Naturalist Dave Bouché, along with numerous volunteer naturalists, interprets the human and natural history of the area. The stone building, built in 1925, was once a golf course clubhouse. Its cottage-style exterior, hardwood interior floors and vaulted ceiling provide a warm, welcoming feel. The upper level houses natural history and geology exhibits. "Live animals, glacial geology displays and 'What's Happening Now' in the world of plants are favorite exhibits at Devil's Lake as well as mounted exhibits on birds and animals of the park," explains Bouché. "Visitors are encouraged to feel many of



FRIENDS OF NEW GLARUS WOODS STATE PARK

A ribbon-cutting celebrates the grand opening of a playground visitors have voted a "winner" at New Glarus Woods State Park. Slides, tubes, walkways and stage areas offer elbow room and lots of creative play space. It was funded by the Friends group, other local donations and a Knowles-Nelson Stewardship grant.





DEVIL'S LAKE STATE PARK

The geologic shoving match that produced magnificent 500-foot quartzite bluffs, huge boulder rubble and the azure pool of Devil's Lake provides an awesome setting for nature interpretation. It's clearly one of your favorites and earned a Gold Seal. Park Naturalist Dave Bouché (right) describes some of the natural and human history to German visitors at Balanced Rock near the south end of the East Bluff. Bouché, other staff and a cadre of volunteers provide programs for campers, school, youth and community groups at the park.

County Lighthouse Walk. The event is open to the general public.

#### **BEST PRAIRIE: New Glarus Woods State Park.**

The prairies at New Glarus Woods are a treat for all the senses. In bloom, wildflowers delight the eye in a varied palette of colors and textures. There is a wonderful scent throughout. Sounds of insects humming and working the foliage blend with bird song. Hawks soar above hunting the mice, shrews, voles and ground squirrels darting among the stems. In early morning and evening, birds, deer, woodchucks, fox, skunks, badgers and coyotes venture out of the woods.

There are two prairies at New Glarus Woods. The 40-acre prairie has a mile trail with benches for sitting and enjoying the prairie views. A self-guided interpretive trail with signs is currently being installed. The larger 55-acre prairie is located on the Havenridge Trail, which has a guidebook keyed to numbered posts along the route interpreting sights and sounds throughout the seasons. The prairie, along with the playground and moonrise at New Glarus Woods make it a terrific destination for visitors stopping by the quaint city of New Glarus.

In addition to the Gold Seals, the parks friends recognize a DNR land manager, a local Friends group, and a Friends member with State Park Hero awards each year. These awards showcase the terrific leadership and exemplary service of individuals and groups that selflessly support the State Park System. Those nominated give tremendous time, energy, dedication and love of special places that so many people enjoy in parks and trails.

**Carolyn Rock, Park Educator at Whitefish Dunes State Park won LAND MANAGER OF THE YEAR** honors at the last ceremony. Whitefish Dunes on Wisconsin's Door County Peninsula is an 865-acre day-use park that was set aside to protect the fragile dune environment. Whitefish Dunes has more visitors than any other day-use park in Wisconsin. The park features programs, exhibits and brochures on archaeology, highlighting

the items especially on the touch table called 'Remains of the Day.'" A reference area gives visitors space to peruse field guides and natural history resources. Pictures, displays and interpretive text guide visitors through a span of over 500 generations of human habitation at Devil's Lake. Native American culture, early European settlement and the fascinating "Hotel Era" of Devil's Lake are all part of the journey. A corner just for kids on the lower level offers containers full of natural surprises, games and books ready to be explored by curious children and their parents.

Interpretive programs are scheduled at the nature center seven days a week during the summer months and it's a favorite stop on school field trips in the spring and fall. A wildflower garden and birdfeeders next to the building add to the delight of nature lovers. A dedicated and knowledgeable group of local volunteers help staff the nature center during the busy summer months and they add to the welcoming feel of the center.

**BEST WALK-IN CAMPSITE: Rock Island State Park,** off the tip of Door County. Rock Island has 35 campsites and two group sites in a traditional campground setting within a quarter-mile of the boat dock. Seventeen of the campsites have a water view and there are five additional Gold Seal award-winning backpacking sites on the opposite side of the island from

the dock only a mile hike away. There are no showers on the island but drinking water and firewood are available.

Visiting Rock Island is a three-step process: first, visitors drive to the tip of the Door County peninsula on Hwy. 42, which ends at Northport. From here, they take the ferry to Washington Island where they can drive across to Jackson Harbor, park their vehicles and pick up a passenger-only ferry, *Karfi*, to Rock Island. There is a contact station at the dock on Rock Island where campers check in and receive information. It takes about 90 minutes to get from Northport to Rock Island, and in July and August the Washington Island ferry runs on the half hour from 8 a.m. to 6:45 p.m.

"Rock Island is a unique state park," notes Tim Sweet, President of the Friends of Rock Island State Park. "Not only is it exciting to take a ferry to get there, but with no cars allowed, your camping experience is guaranteed to be rustic."

"Traveling by ferry is a special experience and I believe the pristine resources on Rock Island have been especially preserved through this feature," notes Kirby Foss, DNR manager on the island. Additionally, this year, the Potawatowmie Lighthouse, located in Rock Island State Park, is turning 150. To mark this significant milestone, the Friends of Rock Island are hosting a Sesquicentennial Celebration on Saturday, May 17th during the annual Door





DNR PHOTO

At the Whitefish Dunes amphitheater, Carolyn Rock talks about dune ecology, archaeology and the lives of eight Native American cultures that formerly thrived on the property. The state park houses a nature center, trails and recreated Native American village sites.

generated enormous publicity for the park. You can view it online by linking to the Aztalan web page from the State Parks website, [www.wiparks.net](http://www.wiparks.net).

The 2008 Gold Seal awards event will be held on November 7th at Governor Dodge State Park and will bring together the network of over 80 local Friends groups of state parks, trails, forests and recreation areas. The event is open to the public.

"Local Friends groups around the state show year-round dedication to these important lands. Their service is an invaluable contribution to the people of our state," comments Bill Smith, acting state parks director. Last year, more than 6,000 volunteers provided over 140,000 hours

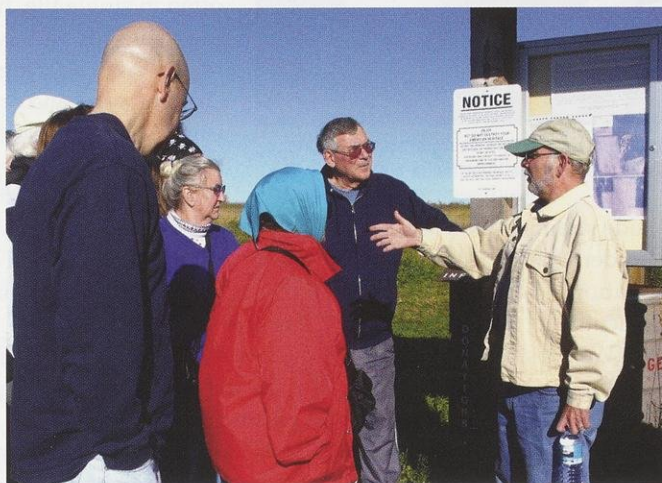
eight significant Native American villages on the site that are listed on the National Register of Historic Places. In addition, the nature center offers displays on ecology, geology and human history of the park. Programs for all ages are presented year-round at the park, a special treat for those who visit the Door. Carolyn is instrumental in all of these programs and activities at the park, works with the park's Friends group, and coordinates many events throughout the year such as the sand castle contest. As one supporter mentioned in her nomination, "Carolyn has single-handedly arranged for very popular interpretive programs at three of the five state parks in Door County during the past several years through her own significant efforts and with the help of very talented summer interns she has hired and mentored."

**The Friends of Lapham Peak** were honored as the **MOST ACCOMPLISHED FRIENDS GROUP** in 2007, recognizing that they are meeting their ambitious goals of completing a new cross-country ski trail through the forest. Lapham Peak's glaciated topography provides excellent hiking, backpacking and cross-country skiing on lighted trails. Lapham Peak has a variety of sights and activities to offer, including hiking trails, a portion of the Ice Age National Scenic Trail with a reservable backpack campsite, ski trails, mountain bike trails, several prairie restoration sites and a butterfly garden.

Former State Archaeologist and President of the Friends of Aztalan State Park, **Bob Birmingham** won the award as **STATE**

**PARK HERO OF 2007.** Aztalan is a National Landmark as well as a state park with historic features marking the site of a Native American village from a society archaeologists call the Middle Mississippian. This was the most extensive and complex ancient society documented in what is now the United States, and Aztalan is considered a unique, pristine archaeological treasure of Native American culture that is recognized worldwide. Aztalan is believed to be the northernmost outpost of the Middle Mississippian culture whose members also built great pyramidal mounds and villages in Cahokia, Illinois; Ocmulgee, Georgia; Moundville, Alabama; Marietta, Ohio; Emerald Mound, Mississippi; and similar sites in northern Louisiana, Arkansas, western Kentucky, western Tennessee, southern Illinois and southern Indiana.

To promote this rich history, the Friends of Aztalan State Park, under Birmingham's leadership, have sponsored promotional and fundraising activities including Aztalan Day Tours, with special lectures by prominent experts, and developed a line of park promotional clothing. Additionally, Birmingham produced and funded a DVD with Wisconsin Public Television titled *Aztalan: National Historic Landmark* that



COURTESY OF BOB BIRMINGHAM

Bob Birmingham (right) was named a State Park Hero for his work to recognize and preserve the northernmost outpost of the Middle Mississippian Native American people who built a settlement just east of present-day Lake Mills. The site of Aztalan State Park is considered a worldwide archaeological treasure.

of services, and made over \$800,000 in contributions. Friends not only protect important and unique natural assets but also create memories that transcend generations of park and trail users in Wisconsin," Smith says. The work of Friends groups comprises fund-raising, building support for resource protection and advocating for public lands — a valuable asset to all visitors who enjoy recreating in our great outdoors.

Kate Zurlo-Cuva is Friends group coordinator for DNR's Parks and Recreation program.



# When the bill arrives

continued from page 2

Female northern shovelers and mallards are both dressed in shades of camouflage brown, but the female shoveler has that same over-sized bill which is brown washed in shades of orange.

The enormous bill is the most prominent feature of this 18-inch-long shoveler. Early taxonomists also noticed it and dubbed the duck *Anas clypeata*, literally, duck with a shield. The large bill seems awkward for preening but makes the northern shoveler a very efficient feeder. Bills of all the surface-feeding ducks are lined with tiny, traverse tooth-like ridges or lamellae located just inside the cutting edge of both upper and lower mandibles. When the shoveler's bill is closed, these tiny teeth serve as a sieve. When feeding, water enters its bill and the duck presses its tongue against the roof of its mouth forcing water out the bill's backsides. The lamellae trap tiny food particles that are then swallowed. These ducks can strain out incredibly small organisms such as




HERBERT LANGE

In spring, the male northern shoveler sports brighter, more distinctive plumage to attract a mate.

plankton, diatoms and copepods which are unavailable to other surface-feeding ducks. You may see one or a few shovelers paddling along the shore, often in single file, holding their bills on the surface while stirring up shallow water and organisms. Sometimes you will see these ducks swinging their bills from side to

side straining food as they go. They will also dip their heads half underwater to feed on aquatic insects, seeds and submerged vegetation. These ducks rarely feed by tipping up as mallards frequently do, letting their curly tail feathers stick up in the air.

We mostly see northern shovelers during spring migration from late March into early May as they rest and feed before winging their way to preferred nesting areas in the prairie pot-hole region of the Great Plains and Canadian prairie provinces. During migration these quiet, retiring ducks might be found in shallow marshes, on flooded fields, small ponds, quiet bays and backwaters. Some northern shovelers do nest here on grassy meadows surrounding marshy wetlands. For 23 to 25 days the female sits tight on a well-hidden ground nest lined with down. She incubates an average clutch of 10-12 buff-colored eggs. Soon after hatching, the precocial youngsters follow their mother to the water. Even now, the ducklings display their proportionately large, spatulate bills.

Northern shovelers are just one of several duck species that make a visit to a wetland in spring so inspiring. Now is when all ducks are dressed in their finest and brightest nuptial plumage. The males are chasing away other males while courting the females. Meanwhile, red-winged blackbirds and marsh wrens are singing the joys of spring's warmth and northern leopard frogs are croaking their amorous come-ons. The natural world is coming alive and tuning up for warm weather once again. 

Anita Carpenter warms up for spring observations near her Oshkosh home.

## Readers Write

### 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](mailto:david.sperling@wisconsin.gov)

### MORE CROW FEEDBACK

After reading the story about crows ("Cunning corvids," October 2007), I thought this would be of interest. I'm 68 years old now but when I was in seventh grade a friend found a baby crow, took it to the vet and had its tongue cut. The crow had a 40-word vocabulary and put any parent to shame. It talked so clearly you would have thought someone was in the next room. The crow gave us a lot of fun for many years. At the end it had over 100 sentences it could say.

Dale Belke  
Sheboygan

*It was once widely believed that in order to teach crows to speak, their tongues had to be split. This was probably based on the fact that unlike a mammal's, a bird's tongue has a bone in it. The centuries-old myth held that if the tongue was split, it would be more flexible and speech would be easier. Modern veterinary practices totally disavow the practice because birds don't use their tongues for articulation and can mimic dozens of sounds, including human speech, without having their tongues split. Don't do it.*

In reference to your article on "Cunning corvids," I don't especially like crows, but I enjoy the great outdoors and most of the creatures that we have. Just to let your readers know, crows don't only destroy nesting birds. I have seen crows take bats off the sides of buildings and destroy turkey eggs. All the young snakes, tree frogs and toads in our area have all but disappeared. What really worked around my buildings was shooting one crow and the others would not return for about a year. A close second for destroying eggs and young birds is the blue jay.

Marv V. Clark  
Sparta

### FLOAT THE ST. CROIX TO SEE EAGLES

We so enjoyed the article "Bald and beautiful" in the December 2007 issue. If anybody has a chance, float the St. Croix or upper Namekagon rivers and you will discover an abundance of eagles nesting and watching as you float by. We have experienced catching a sucker and letting it float ahead of us on top of the water just to watch Mr. Baldy snatch it off the water with great ease. We named a point on the St. Croix River for just the spot to do this. What a great article!

Bill Dubek and Jack Gasparac  
Danbury



## Endangered Resources Tax Checkoff

Please consider a donation to the Endangered Resources Fund at tax time. Talk with your tax preparer or look for the loon symbol on your state tax form.



## UPDATES

### BULLSNAKE SIGHTING PROJECT REPORTS PRODUCTIVE FIRST YEAR

A project to document bullsnake sightings, kicked off in the April 2007 issue ("More bluff than bite"), had a very successful first year, according to project coordinator Josh Kapfer. This harmless constricting rodent-predator, one of the largest snake species in North America, has experienced a marked drop in population throughout the Upper Midwest because of habitat loss. The Bullsnake Sighting Initiative offers a resource for citizen naturalists to report sightings online for review by state herpetologists.

"Reports to the website began coming in by mid-April, which corresponds with the species' emergence from winter dormancy," reports Kapfer. "Sightings continued through early September, with the last substantiated bullsnake report coming in on July 17, 2007. A total of 43 snake sightings were submitted."

Ten bullsnake sightings from four counties (Monroe, Sauk, Dane and Columbia) were substantiated by photographs. Four more sightings from Grant, Richland and Crawford counties were not verified by photo but were considered valid due to observer experience. Ten additional sightings were possibly of bullsnares, but could not be fully verified. Kapfer stresses that such reports are still valuable in guiding future survey efforts by state herpetologists. Two unsubstantiated sightings from Jackson and Burnett counties were of particular interest because both locations represent the periphery of this species' range and more information from such locations is important to its conservation.

"We're not done yet!" says Kapfer. "We ask that you please continue to submit your observations online at [dnr.wi.gov/org/land/er/herps/snakes/bullsnake1.htm](http://dnr.wi.gov/org/land/er/herps/snakes/bullsnake1.htm). You'll also find photographs of bullsnares, photographs of confusing similar

species, a range map and life history information. I can't emphasize enough the importance of submitting pictures with your sightings. The success of this initiative relies on the diligence of citizen naturalists and those who own private land, which may be suitable for this species. Snakes are members of that oft-maligned, frequently ignored niche of wildlife that need your support. So, please continue to watch where you step, carry a camera and tell your friends to be on the lookout for some of Wisconsin's most elusive creatures!"

*Joshua M. Kapfer, Ph.D., until last August was a herpetologist with DNR's Bureau of Endangered Resources. He is currently a wildlife biologist with Natural Resources Consulting, Inc. (Cottage Grove, Wis.). If you have any questions about native amphibians and reptiles, please contact him at [jnkapfer@hotmail.com](mailto:jnkapfer@hotmail.com)*

### TARGET FERAL PIGS, DNR URGES

Since first sighted in Wisconsin in 2000, feral pigs have been reported in 29 counties and DNR wildlife managers continue to encourage hunters and landowners to shoot them year-round. Hunters need a small game license, but landowners do not.

Dave Matheys, wildlife biologist for Vernon and Crawford counties, recently told the *Green Bay Press-Gazette* that 32 pigs were harvested in 2007 in Crawford County, the only county in Wisconsin with a self-sustaining wild pig population estimated at 50 to 100 animals. Matheys said last year DNR received reports of wild pig sightings or shootings in Calumet, Clark, Crawford, Eau Claire, Jackson, Marathon, Oneida, Pierce, Polk, Sauk, St. Croix and Wood counties.

Aside from being non-native to Wisconsin, wild pigs are undesirable because they damage agricultural lands and wildlife habitat, and pose a threat to domestic swine from diseases like brucellosis and pseudo rabies.

Feral pigs reproduce any time of year, adapt well to a range of habitats and are very smart. During the warmer months they tend to be nocturnal, but in winter they are more active in early morning and late afternoon. They can be hunted 24 hours a day because they are an unprotected species.

Matheys said DNR has plans to survey Crawford County lands where pigs are concentrated so hunting and trapping efforts can target those locations. "We really want to do more trapping because hunting alone hasn't eradicated the pigs."

## Door County Festival of Nature

Mark your calendar for this three-day event Thursday, May 22nd through Saturday, May 24th. Experienced naturalists will be leading field trips to search out wildflowers, birds and insects. Lectures, night hikes, canoe trips and a barn dance Saturday night add to the festivities. Sponsored by the Door County Land Trust, Wisconsin Department of Natural Resources, Crossroads at the Creek and The Clearing. Visit [www.ridgesanctuary.org/festival.htm](http://www.ridgesanctuary.org/festival.htm) for details, registration information and costs.



KAREN NEWBERN

*We will visit the St. Croix in June as part of the 40th anniversary celebration of its designation as a Wild Scenic River.*

### FASCINATING FOX TROT

Thank you for bringing to us readers another excellent issue! The cormorant story in the February 2008 issue ("Cormorant conundrum") was of special interest and value to many of us living in Door County. The outstanding story, "Sociable encounters," regarding the red fox was also of high appeal to me in that I have had many fascinating experiences with these wily creatures. The beautiful photograph at the top of page 27 clearly indicates to me that the red foxes were performing their own version of the "Fox Trot!"

I had the good fortune several times, during the years 1964-1990 when I managed the Ridges Sanctuary at Baileys Harbor, of following a red fox trail in the snow, coming upon where it had gone down into the deep snow, caught a shrew, killed it but left it lying upon the snow uneaten. All I could deduce was that the taste of a shrew did not appeal to the fox.

On another occasion while living at the Ridges Sanctuary I was able to record at pre-dawn the loud, far-reaching, agonizing and wailing screams, one after another, "WHAAaa, WHAAaa," of a red fox which was unsuccessfully trying to break into my neighbor's fenced-in chicken coop. The fox was so intent on its mission that I was able to approach to within about 50 yards while using my portable tape recorder and a parabolic reflector with which to capture the drama. Thanks again for your high quality magazine. Keep them coming!

*Roy Lukes  
Egg Harbor*



# Comforts

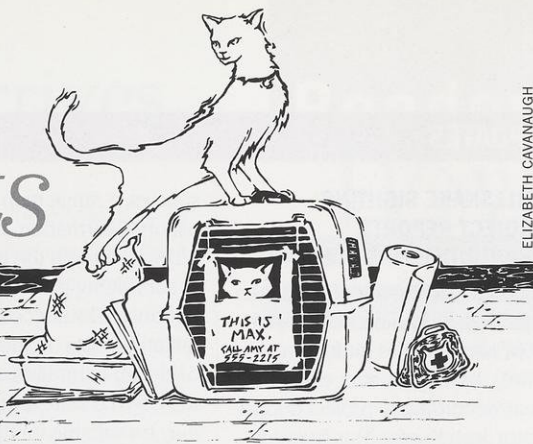
## Be ready if disaster strikes

**T**ornadoes. Floods. Fires. Spills. We hope it won't happen. But every year in Wisconsin, emergencies — natural and man-made — strike. Sometimes whole communities are at a loss.

As a responsible pet owner, it's important to keep your pets in mind when making emergency plans. In the event of a disaster you may even be asked to evacuate your home. When that happens, it helps if you've arranged a safe place to take your pets. Emergency shelters that are safe for people likely will not take in pets because of health and safety regulations. Some hotels, though, are pet friendly — research your options in advance of a disaster (visit [www.petswelcome.com](http://www.petswelcome.com)) or discuss the matter with friends and family who might put you up temporarily.

Assemble a portable pet disaster supply kit and keep it in an accessible place, stored in a sturdy container. Supplies should include a crate for your pet with its photo posted on the outside of the crate — include the pet name and your name and phone number, plus any medical concerns. Add food and water dishes, a file with health history and vaccination dates, leash and collar, litter box supplies, ample food and medication for an extended stay away from home, paper towels, trash bags and newspapers.

But even with planning, it is possible that you could become separated from your pet in a disaster. The American Kennel Club Companion Animal Recovery Program is dedicated to providing 24-hour recovery services for micro-chipped and tattooed pets that are enrolled in the CAR database. Visit [www.akccar.org](http://www.akccar.org) to learn more about this nonprofit program.



ELIZABETH CAVANAUGH

## Gardening — what your pet wants you to know

**J**ust like people, pets look forward to spring and the promise of some time outside in the sun and shade. Keep your pets in mind when planning your gardens and going about your lawn work.

Put your pets inside when mowing the lawn. Hitting a stick or rock with a lawnmower creates a projectile that can injure your pet, even from a distance. Put garden tools away when you are finished working and keep your pets inside when applying chemicals to the lawn or garden. Many of these products are designed to persist in the environment days to weeks after application, so a pet can be exposed for an extended time after initial application.

Dr. Amy Wolff at Petplace.com cautions pet owners about planting the following due to their toxic nature. If you are considering a plant of which you are unsure, consult your local plant nursery:

castor bean  
oleander  
morning glory  
Japanese yew  
Jerusalem cherry  
foxglove  
nightshade  
lily of the valley  
precatory beans  
trumpet vine

And while most vegetable plants do not pose toxicity problems, Wolff notes that there are exceptions. Onions, chives and garlic, which a lot of pets do like, contain compounds that, if ingested, can cause anemia. The leafy part of the potato plant and the green part of the potato skin contain compounds that are toxic if eaten in sufficient quantities. Fruits also contain toxic chemicals in their seeds and pits. Apple, plum, cherry, apricot and peach seeds and pits contain cyanide, which can cause fatal seizures. Keep pets away from compost pails and heaps as well.

## All in a name...

*Old Possum's Book of Practical Cats* (a set of whimsical poems by T. S. Eliot about feline psychology and the basis for the musical *Cats*) reminds us,

"When you notice a cat in profound meditation,

The reason I tell you is always the same:  
His mind is engaged in a rapt contemplation  
Of the thought, of the thought, of the thought  
of his name..."

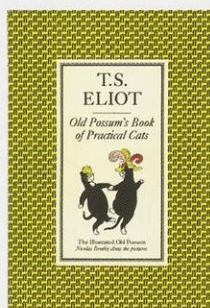
"Max" has taken top honors as the nation's most popular male pet name with "Molly" leading the way for female pets, according to research by Veterinary Pet Insurance (VPI). Here is their competition:

### Top 10 male pet names:

1. Max
2. Buddy
3. Jake
4. Rocky
5. Bailey
6. Buster
7. Cody
8. Charlie
9. Bear
10. Jack

### Top 10 female pet names:

1. Molly
2. Maggie
3. Daisy
4. Lucy
5. Sadie
6. Ginger
7. Chloe
8. Bailey
9. Sophie
10. Zoe



## Have a heart, hold the worms

Heartworm is a serious and potentially fatal disease. It is also preventable. Heartworm primarily affects dogs, cats and ferrets. Heartworms are transmitted from animal to animal by mosquitoes carrying the infective stage of the larvae. Indoor and outdoor pets are at risk. Heartworm disease has been reported in all 50 states.

According to the American Veterinary Medical Association, though, heartworm disease is almost 100 percent preventable in cats and dogs. There are several FDA-approved heartworm preventatives and your veterinarian can recommend the best option based on your pet's risk factors and lifestyle.

A blood test for existing heartworm infection is recommended before beginning a preventive to confirm that your pet is not already infected and to avoid flushing worms into your pet's bloodstream. To learn about heartworm and how you can protect your pet visit the American Heartworm Society website at [www.heartwormsociety.org](http://www.heartwormsociety.org).



UNIVERSITY OF WISCONSIN SCHOOL OF VETERINARY MEDICINE





WOODCOCK CARVING  
BY JOHN BEULE  
PHOTO BY JACK  
BARTHOLOMAI

# Wisconsin Traveler

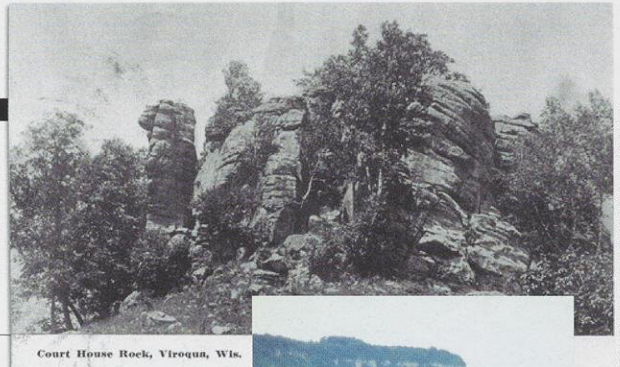
## Leap for love

Lover's Leap: a toponym for more than a dozen Wisconsin places where a literal or figurative tumble from a great height marks the stuff of legends.

On the towering limestone bluffs south of Maiden Rock abutting the broad Mississippi, the Native American Princess Winona, daughter of Chief Red Wing, reputedly leapt to her death rather than marry a suitor she did not love. An equally stunning site rising above the Great River Road is **Maiden Rock Bluff State Natural Area**. The 400-foot bluff is one of six rocky cliffs riverside in Wisconsin where peregrine falcons nest and other raptors including gyrfalcons and eagles hang tight. The site is owned by the Western Wisconsin Land Trust and is about two miles northwest of Stockholm. See [www.dnr.wisconsin.gov/org/land/er/sna/sna410.htm](http://www.dnr.wisconsin.gov/org/land/er/sna/sna410.htm) for directions.

At Viroqua's lover's leap, the daughter of the Indian Chief Black Hawk was chased by the military and found refuge in a cave running under

the city. When subsequently spotted by white men and seeing no escape, story has it she tragically rode her horse over the edge of high rocks atop Court House Rock. Several accounts of her fate are available from the **Vernon County Historical Society** in "Hometown Heritage...A Celebration of Viroqua's 150th Birthday," available by mail for \$3 plus \$2 shipping. Better yet, come visit exhibits on the second and third floors of the Historical Society at 410 S. Center Street in Viroqua. Hours are Tuesdays through Thursdays from noon-4 p.m. in the winter months, Monday through Saturday from noon-4 p.m. from mid-May through mid-September, or call (608) 637-7396 for an appointment. E-mail [vcmuseum@frontiernet.net](mailto:vcmuseum@frontiernet.net).



Court House Rock, Viroqua, Wis.

VERNON COUNTY HISTORICAL SOCIETY



BRUCE S. HECKSEL

History shows that lovers often leap to escape suitors who don't suit them or as a last resort when cornered. (top) Court House Rock in Viroqua. (above) Maiden Rock bluffs along the Mississippi.

People are not the only creatures that display signs of undying love or at least impending affection. Prairie chickens, sharp-tailed grouse, cranes and woodcock are among the feathered species that dance, spiral and vocalize in mating rituals for all to see. The predawn rituals of chickens on their booming grounds are a spectacular rite of spring. They thrust their bodies parallel to the ground, throw up their pinnae, inflate gorgeous orange cheek sacs, strut their stuff and emit low cackles, clucks and booms two hours before sunrise. Bookings started in January to reserve a seat in a blind for excellent viewing on the

**Buena Vista Marsh and Paul J. Olson Wildlife Area** in the Golden Sands country (715) 343-6215. You can still enjoy a heck of a show at the **2008 Prairie Chicken Festival** from April 18-20 in portions of five central Wisconsin counties where special events will be held throughout the weekend. **Mead Wildlife Area** in Milladore will host readings from conservation writers and wildlife craft workshops on Saturday, April 19th. **Necedah Wildlife Refuge** in Necedah offers tours to see the rare whooping cranes on Sunday, April 20th from 9 a.m. to 2 p.m. On trips through the grasslands of **Sandhill Wildlife Area** in Babcock, you can practice wiggling like the Blanding's

turtles and radio-collared porcupines that are under research. For more festival information, visit [www.prairiechickenfestival.org](http://www.prairiechickenfestival.org), call (715) 343-6221, or drop a line to the Golden Sands RC&D office, 1462 Strongs Avenue, Stevens Point, WI 54481.

If you'd rather see sharptails strut their stuff, check out the nine prime locations in northern Wisconsin that we listed in our February 1999 story, "Winged sand dancers," [www.wnrmag.com/stories/1999/feb99/sgrouse.htm](http://www.wnrmag.com/stories/1999/feb99/sgrouse.htm).

Still want to let your spring spirits soar? Take flight with the American woodcock for a twilight performance through

April. Forest edges with grassy openings are a good bet for the singing ground. The male woodcock performance starts with a "peenting" buzz-like sound as it takes a few strutting steps on the ground before launching skyward in an erratic bat-like twittering flight nearly straight up for 200 feet or more. Then he goes into a power dive, twisting at breakneck speed, peenting away before dropping his wing flap about 20 feet off the ground and gently fluttering to an easy landing — thrilling to watch, inimitable and one of the great exhibitions of the avian world. Leapin' lovers! How the female timberdoodle resists his antics is a mystery for other romantics to solve.

Sharp-tailed grouse, on the other hand, dance, leap and call to attract a mate.

RJ & LINDA MILLER







## Wisconsin, naturally

### RUSH RIVER DELTA STATE NATURAL AREA



**Notable:** A flat, alluvial plain formed by the sediment-laden Rush River as it spills into the Mississippi River at Lake Pepin harbors a floodplain forest of silver maple, cottonwood, willow, American elm and green ash. The airy forest canopy provides a great site for bird watching, with red-shouldered hawk, Acadian flycatcher, and cerulean warbler in residence. A sand spit curving from the delta into the lake provides nesting habitat for turtles and feeding areas for shorebirds.

#### How to

#### get there:

From the intersection of Highways 35 and S in Maiden



Rock, go 1.3 miles west on 35 to a parking area at the junction of Highway A. Walk south across Hwy 35 and the railroad tracks into the natural area. Visit [dnr.wi.gov/org/land/er/sna/sna202.htm](http://dnr.wi.gov/org/land/er/sna/sna202.htm) for a detailed map and more information.



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