

MARCH / APRIL 2010

IOWA OUTDOORS

THE DNR'S MAGAZINE OF CONSERVATION AND RECREATION



IN THIS ISSUE:
THE NEW GLORY DAYS OF FISHING
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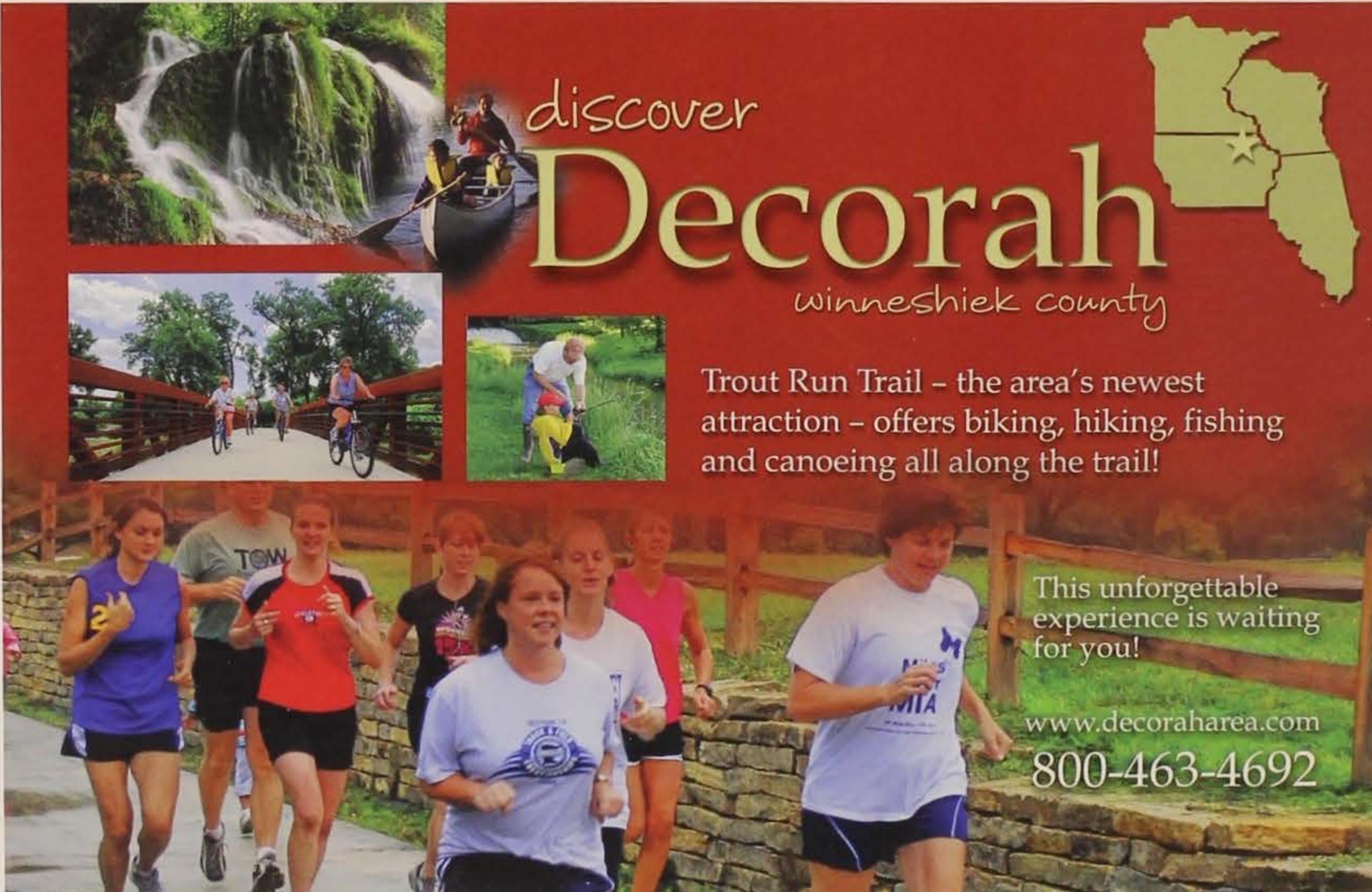
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Create a change for yourself and metamorphose with the butterflies...

Metamorphosis

The butterfly has taught us very clearly that no matter how things look on the outside, no matter how much stress we endure and no matter how much we judge others, things are not what they appear to be. There is always hope for change that constantly leads us to a more beautiful life.

I'm Earthyman, always here to teach and guide you. Imagine your yard and dream of a beautiful spot that you want to claim as your own where you can go and forget your troubles of the day. Relax now, close your eyes and enjoy this sunny summer day just sitting in your chair in your backyard with your favorite drink. As you gaze up at the sky, it is so blue with white puffy clouds. The day seems to stand still as your gaze drops to a spot right in front of you. Your world is filled with a magical vibration as you watch a Monarch Butterfly gently flapping its wings and landing only 2 feet away from you onto a Butterfly Milkweed. It's as if nature has matched the colors of this beautiful plant with the colors of the Monarch. You are filled with joy as you look to see several more butterflies hovering and lighting on their favorite flowers all planted by you only a short time ago.

Won't you create a change for yourself and metamorphose with the butterflies and me? Call or email me now and get started planning and creating your special place in your own world!

<http://www.ionxchange.com/bird%20and%20butterfly%20attractor%202.htm>

The #1 Perennial of 2010

The Perennial Plant Association has announced the 2010 Perennial Plant of the Year - Wild Blue Indigo, *Baptisia australis*. This showy native species has been popular with gardeners for many years because it is easy to grow and offers four seasons of interest in the landscape.

In mid to late spring, foot long spires of intense indigo blue flowers rise above the foliage, commanding attention in the spring landscape. After the flowers have faded, the trifoliate, soft blue-green foliage takes center stage, forming a sturdy, upright, shrub-like clump to 3-4 feet tall and wide at maturity.

It makes a terrific backdrop for other perennials and groundcovers growing at its feet. Taking the place of the spent flowers are 2-3 inch long, puffy seed pods which emerge green and then turn charcoal black when they ripen in late summer or early fall. They remain well into winter, providing that much sought after winter interest in the landscape.

Because of its commanding size, this shrub-like perennial makes a beautiful specimen on its own or in small groupings. It is commonly used as a backdrop in perennial borders, but also works well in native or meadow plantings. Deer usually do not bother Wild Blue Indigo. Butterflies are attracted to this plant.

Get your plants or seeds now and get ready to paint a stroke of blue in your garden spot. Call now to place your order.

http://www.ionxchange.com/species_pages/b/baptisia_australis.html

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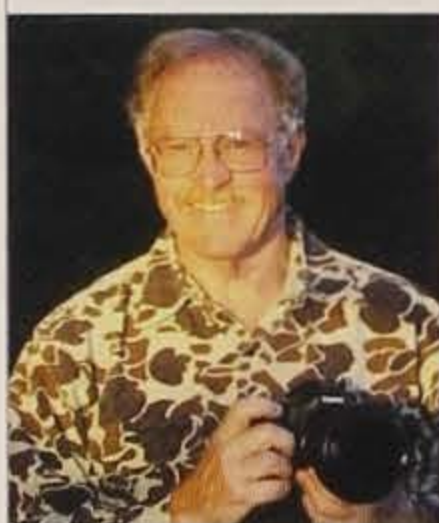
Contributors



DAVE LARSON lives near Clinton and hunts on the Mississippi River, makes duck calls, carves decoys, fishes and takes photos. "I have wonderful memories of my dad in the field when I was young. He taught me to use a gun and the camera. It's a great way to really appreciate wildlife."



A columnist stint at the *Mason City Globe Gazette* led to a career change for freelance writer and photographer **TIM ACKERMAN**, an ex-physician assistant. An avid hunter, angler and conservationist, he shares an acreage with wife Lynne (and assorted dogs and cats) near the Ventura farm where he grew up and the cemetery where his great-great-grandparents are buried. tackarman@yahoo.com



TY SMEDES is a full-time writer and photographer from Urbandale. Published in more than 25 magazines, his work includes wildlife, wildflowers and scenic images, along with Iowa's cultural events. He teaches photography classes and leads overseas photo tours. His book "Capturing Iowa's Seasons" is found at www.iowanaturestore.com or www.smedesphoto.com



JENNIFER WILSON is a travel and features writer based in Des Moines. Her work appears in *National Geographic Traveler*, *Frommer's Budget Travel*, *Midwest Living* and *Esquire*. She spent 2009 in Europe for her upcoming book, *Touching Up My Roots*. Follow her journey at www.touchingupmyroots.com

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DNR MISSION

To conserve and enhance our natural resources in cooperation with individuals and organizations to improve the quality of life for Iowans and ensure a legacy for future generations.

EDITORIAL MISSION

We strive to open the door to the beauty and uniqueness of Iowa's natural resources, inspire people to get outside and experience Iowa and to motivate outdoor-minded citizens to understand and care for our natural resources.

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MARCH / APRIL 2010

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Staff photographer Clay Smith created this image of spring splendor at Red Haw Lake. Find ways to enjoy the area on page 16.

OPPOSITE: Contributing photographer Ty Smedes captured this image of a flying squirrel just before it scurried off. See our feature on this remarkable species on page 24.

ABOUT THE COVER

Warm sunrise casts a golden glow at Bluehill Wildlife Area near Clear Lake in Cerro Gordo County. The 40-acre lake is just east of I-35.

"I have wonderful memories of my dad in the field when I was young. He taught me to use a gun and the camera. My father lost most of his vision after a car accident, so we don't get to do as much as we used to do, but we have lots of good memories," says photographer Dave Larsen of Clinton. Make your own memories—get fishing this spring using our fishing forecast on page 32.

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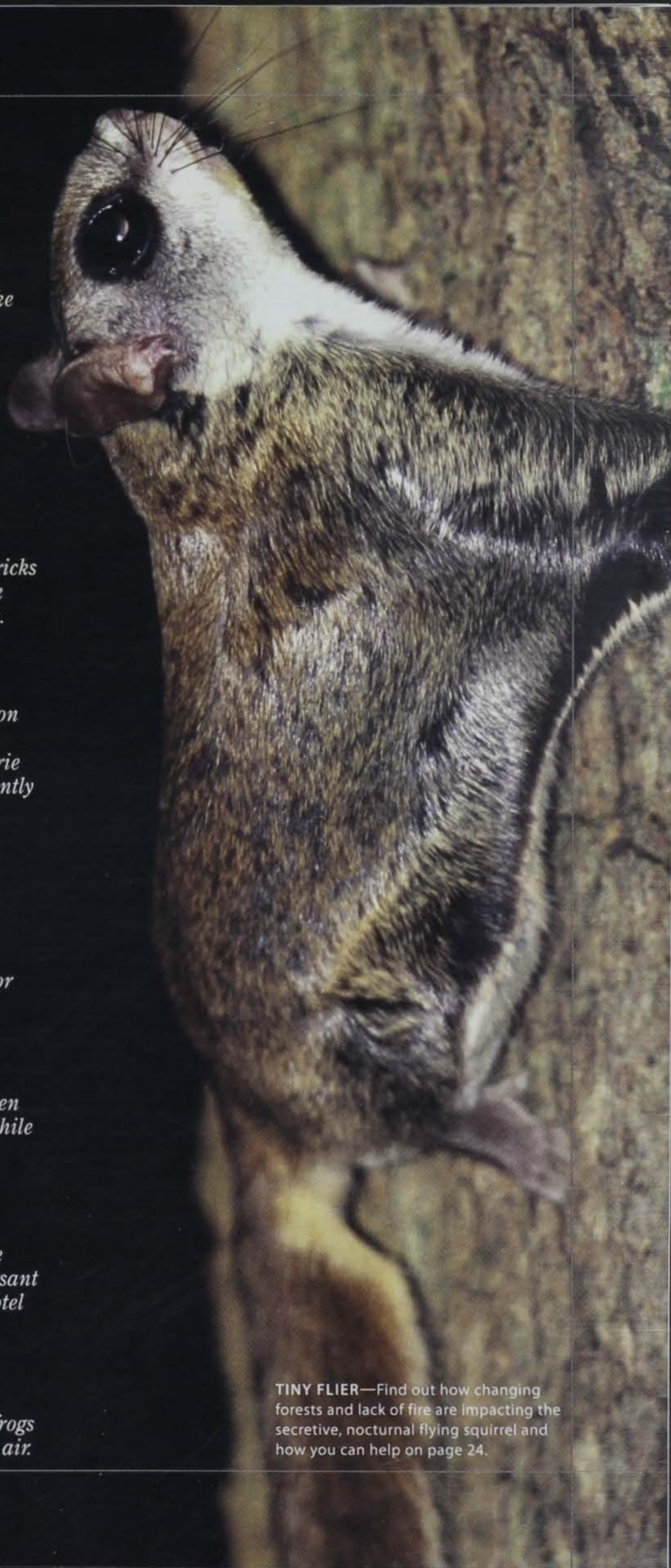
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ACTIVITIES, TIPS AND EVENTS FOR THE WHOLE FAMILY

Discover Rare Birds Along Central Iowa's New Birding Trail

With the annual northbound bird migration just about to move into full swing, central Iowa's new Makoke Birding Trail could not be more timely, offering great bird viewing adventures within a short drive of Des Moines.



Brown thrasher ▶



Birding trails have exploded across the United States recently, now approaching some 400 nationwide. These are not always trails in the traditional sense. Instead, most feature a map or guidebook to several bird watching hotspots within a defined area. Birders then drive (or walk, if the trail is short) to highlighted stops along the route. Stops feature a habitat, such as a marsh or woodland, particularly attractive to a large variety of birds. Birders might find interesting species more easily at these sites than if just randomly searching.

"Makoke Birding Trail is the first of its kind in central Iowa and features 22 sites selected for their birdlife," says Doug Harr, DNR Wildlife Diversity Program Coordinator. "Saylorville Lake, Red Rock Lake and Neal Smith National Wildlife Refuge serve as large anchor sites for the entire birding trail. All 22 sites are generally within an easy 30-40 minute drive from Des Moines, some within the city itself."

Makoke (MAH-koh-kay) means "bird" in the Ioway tribal language and was chosen to honor the native people once inhabiting much of central Iowa. Each trail stop is identified by special signage depicting a bobolink, one of Iowa's most recognizable and beloved grassland songbirds, and the Makoke name. The 32-page guidebook

will lead birders to each site with aerial photo maps. Maps are accompanied by a description of habitats, best time of year for seeing the most species, a brief bird list, details about local nature centers, hiking trails, facilities available and other notes useful for visitors.

"The purpose is to get people out to see birds that they probably won't see in their backyards. The guide directs people to a vast array of birds, instead of the 20 species common in backyards," says Harr. For serious birders, the guide points them to specific areas to see groups of birds to help them fill out their bird sighting lists. For example, "Colo Bog is an extremely good area for spring shorebird migration. You can pull off the highway to see them." He says a variety of gulls, shorebirds and rarer warblers can be viewed using the guide.

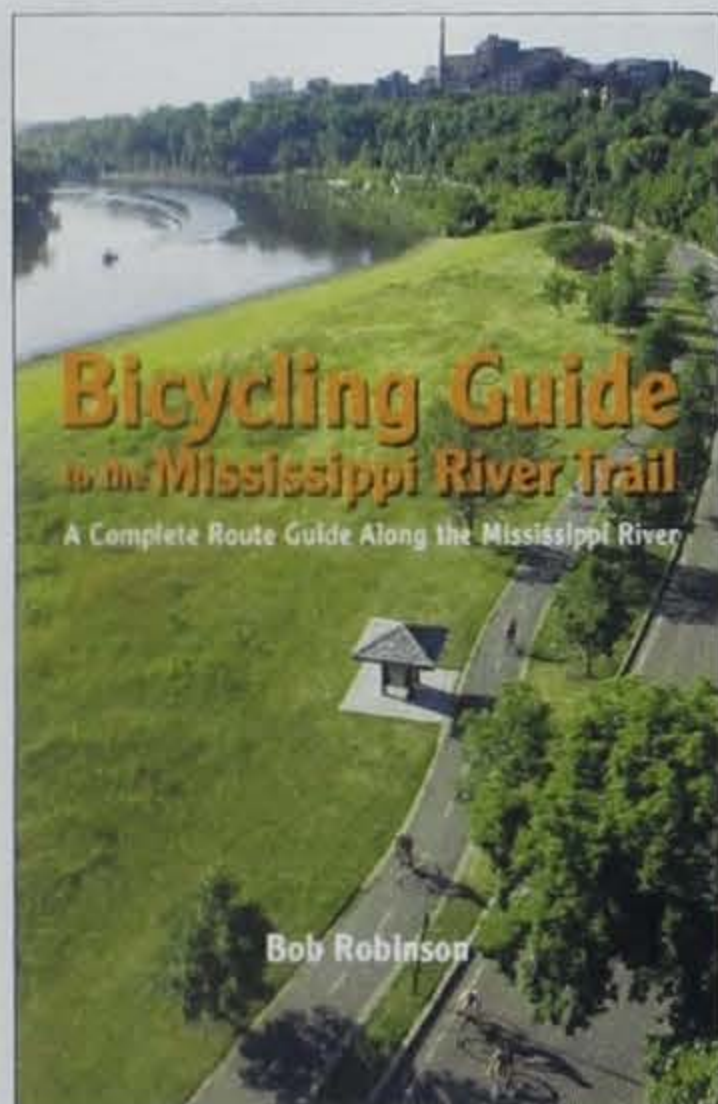
Guidebooks are available at many federal, state and county conservation offices, and nature centers featured in the Makoke Trail. They are also available by writing: Iowa DNR, 502 E. Ninth St., Des Moines, IA 50319-0034.

Publication of the trail guide culminates more than two years' effort by a number of conservation agency partners, each contributing to printing so that the publication is free. An online version may be viewed at www.iowabirds.org/places/documents/Makoke_Trail.pdf.

meadowlark



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"*Bicycling the Mississippi River Trail*" has detailed maps, mileages and insider tips. This guidebook is a must. Includes services, route directions, bike shops and maps. Order online at www.iowanaturestore.com or 1-866-410-0230 8 a.m. - 6p.m. Monday-Friday 200 pages. \$16.95



Craft a Natural Bird Feeder

Carolina Wren ►

Kids will enjoy foraging outdoors near pine trees to collect cones needed to make these fun feeders. Armed with a tree book, spend time trying to identify the pine tree species using the pine cone and some collected bundles of needles. (The National Audubon Society and National Wildlife Federation have excellent field guides for tree identification. Check local bookstores or online at www.audubon.org and www.nwf.org).

ITEMS

Pine cones (Large cones work best)
Suet and/or peanut butter
Small birdseed
String

TO MAKE

At home, protect tabletop with newspaper. Slather cones with suet and thick peanut butter. Roll the cones in birdseed. Cut various lengths of string to tie around each cone and hang from tree branches. Have children take photos or video of birds that visit their feeders. Help them identify each species that visits. To attract more birds, string cranberries and orange slices and hang nearby.



Head West to Watch a Massive Migration

With record Snow Geese populations, Don't Miss Flocks Your Forefathers Didn't Get a Chance to See

During early March, tens of thousands of snow geese descend upon Missouri River bottomlands before heading to the Canadian tundra to breed. Fremont County's Riverton Wildlife Area in southwest Iowa's Loess Hills is a prime spot to witness the flight.

"The best sight is when they leave early in the morning, or return around dusk," says area birder Ross Silcock. "Riverton is peaceful, without crowds of people," he says.

Unlike Canada geese, which gather in small flocks, the gregarious, highly social snow geese form metropolis-sized flocks. That not only makes for great photos, but chances to observe predators in action, such as bald eagles and coyotes preying upon the weak and sick—nature's way of keeping large populations healthy. Consider the whole wonder an opportunity to view The Discovery Channel, but live—from a front-row seat.

The largest concentrations are usually found at DeSoto National Wildlife Refuge near Missouri Valley. While 30,000 to 100,000 often concentrate at the Riverton and Forney Lake Areas in Fremont County, another 20,000 can be found at the Snyder-Winnebago Bend Wildlife Area in Woodbury County.

Large movements of geese occur all along the river as they work to build up reserves of fat and protein to migrate to Canadian tundras to nest. Before their Iowa arrival, the geese feed in rice fields all winter along the Gulf Coast. Better fed than ever, the geese are surviving the arduous migrations with less mortality. But when natural populations are out of balance, something has to give.

"Total snow goose numbers have more than tripled during the past 30 years," says DNR waterfowl biologist, Guy Zenner. "The fragile Canadian arctic, with its extremely short growing season, cannot support goose

populations of that size." A full third of the vast arctic tundra is already destroyed, and another third has been severely impacted. It could take a full century, perhaps more, for fragile plant life to recover. "Snow geese were literally eating themselves out of house and home, and something had to be done," he says.

To control the population, an expanded spring hunt began in 1999. The goal is to reduce the 6 million snow goose flock by half. Regulations allow extended seasons, liberalized shooting hours and bag limits, unplugged shotguns and the use of electronic calls. With another year of special goose hunts underway, biologists are encouraged by preliminary signs of success.

While the state areas are open to hunting (DeSoto Bend Refuge is closed to hunting), there is still room for observers, photographers and hunters alike. Anyway one looks at it, the massive migrations are a marvelous sight.

GETTING THERE

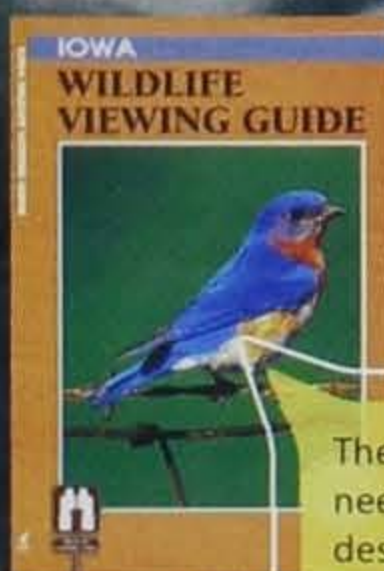
At Forney Lake Wildlife Area, the best viewing is from the gravel road along the south side of the area. Park in one of the pullouts, especially near hunting blinds 21-23. A canoe or kayak may be helpful in early spring. In March, 50,000 plus snow geese may be present. Bald eagles also peak; best seen roosting in cottonwood trees at the east end of the marsh. Listen for plains spadefoot toads, American toads and leopard frogs. April through May look for American white pelicans. **Directions:** From I-29, take Exit 24, head east 0.1 mile on County Road L31 then turn south still on L31. Go 2.8 miles and turn east on gravel.

DeSoto National Wildlife Refuge: This large oxbow of the Missouri River hosts up to half a million snow geese in the fall. Spring flocks are lesser, but still magnificent along with a variety of waterfowl. Watch for coyotes preying on injured geese, especially in fields north of the visitor center and across the lake from the observation platform. **Directions:** Located 25 miles north of Omaha. Take I-29 north to U.S. Hwy 30, Exit 75 at Missouri Valley, head west on US Hwy 30 for 5 miles to the refuge. Or take US Hwy 75 North to Hwy 30, go east 5 miles to the entrance on DeSoto Avenue.

LODGING

Find ample lodging in towns along the Missouri River. But readers will like the cabins at Waubesa State Park in Fremont County. Five year-round cabins vary in size from studio to two- and three-bedroom. All have kitchens, bathrooms and heat and stone fireplaces. Book direct from the park at 712-382-2786.





LEARN MORE

The *Iowa Wildlife Viewing Guide* has everything needed for successful wildlife viewing trips—detailed descriptions of the best 77 viewing areas and wildlife found in Iowa, maps and access info, viewing tips and beautiful color photos of wildlife and scenic areas. 96 pages. \$6.00. Order at www.iowanaturestore.com or 1-866-410-0230

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BRAIN DRAIN

BY TIM LANE



I am willing to guess that most if not all Iowans know that excess pounds place excess stress on the heart. But I would also assert that most Iowans don't know that obesity has a similar relationship to the brain! In recent years the ability to "map" the human brain has revealed that brains of overweight and obese individuals have lost tissue in the frontal and temporal lobe regions connected to decision-making, memory and thus Alzheimer's.

The loss can be dramatic. According to UCLA neuroscientist Paul Thompson: "The brains of obese people looked 16 years older than their healthy counterparts while those of overweight people looked eight years older."

All of us lose brain cells as we age. That loss is accelerated by smoking, pollution, alcohol and other factors. But imagine being able to adopt habits that keep us 16 years younger. In the past there have been observations that linked cognitive decline with excess weight. There is now physical evidence that solidifies the case and highlights the extent of the impact.

It was more than 60 years ago that some of the first research was done to demonstrate the impact of activity on health. In 1949 Jeremy Norris, a British epidemiologist, conducted one of the first studies demonstrating the health benefits of a job rich in physical activity. He compared the health of the drivers and conductors of London's double-decker buses, and detailed how on any given day the conductors had 500 to 750 more steps tending to business on the second level. The researchers then compared the incidence of heart attacks. The average 625 extra steps cut the conductor's risk of a fatal heart attack in half.

I am willing to bet that adding 500 to 750 steps will have a similar positive impact on your brain, memory, cognitive ability and risk of Alzheimer's. One of the last buttons on the DNR home page takes you to a page to volunteer. At this site you can find yet another reason to "park it," get some extra steps and feel good doing it. During these economic conditions, I think it can also send a message on how much we appreciate Iowa parks. (Volunteer at www.iowadnr.gov/volunteer/index.html or 515-281-0878.)

Speaking of the economy, another study from last year projected that in about eight years the annual cost for obesity will be \$344 billion dollars. Iowa's share of that burden would be roughly \$6.8 billion or \$18.6 million a day. That is \$130.2 million a week or \$520 million per month. This is a burden I assert we cannot afford and will be unable to afford.

So once again I arrive at a common theme...small steps, perhaps as few as 750 per day, can make a huge difference on many levels. Just like volunteering. This week go out and find a park trail, a route around your block, around your work site, anywhere and then count the steps so you know exactly what 750 steps looks like, and visit the aforementioned DNR site to see if you can be active and helpful.

Tim Lane is the fitness consultant with the Iowa Department of Public Health. A marathoner, former director of the National Ski Patrol, climber and volleyball coach, he has cycled across America once and Iowa 25 times. He's a regular on RAGBRAI. Tim also helped design and promotes Live Healthy Iowa.

But Why?

Helping adults answer children's nature questions

BY A. JAY WINTER

A. Jay Winter educates up to 20,000 Iowa children each year as the DNR's training specialist at the Springbrook Conservation Education Center.

If water is clear, why is snow white?

EVA, AGE 7

To understand why water is clear and snow (a form of water) is white, first review with a child the properties of light.

When particles of light hit the surface of an object it has various reactions: light may bounce back (reflection), like a tennis ball tossed against a wall. It may pass through (transmission) like a ball tossed through a hole in the wall. Light may be soaked up (absorption) like rain soaked up by a Nerf™ ball. Or it may bounce in several directions (scatter), like several Superballs™ tossed against a wall at the same time.

The human eye and brain translate these reactions to produce the colors that we see. The surfaces of some objects reflect some colors and absorb others. We see only the reflected colors. For example, when light hits the surface of a banana it reflects the color our brain interprets as yellow. The other colors are not visible to us because the banana surface soaks them up like a sponge.

Red, green and blue are the primary colors of the color spectrum. By varying the amount of red, green and blue light reflected, all of the colors in the visible spectrum can be produced. An object that absorbs all colors in the spectrum appears as black. An object that scatters all colors appears as white. When all colors in the spectrum pass through an object it appears to us as clear or translucent.

The reason that water is clear and snowflakes are white is determined by their surfaces and how those surfaces reflect light. Generally, water in liquid form does not reflect nor absorb light – light passes through water and appears to us as clear or translucent. Water in solid form (ice) also appears translucent in color.

Snowflakes, on the other hand, are formed by an accumulation of several individual ice crystals each with their own surfaces. If you were able to view each individual crystals that make up a snowflake they too would appear clear or translucent. However, when light hits this accumulation of ice crystals and its many surfaces, it bounces or scatters in several different directions and is not reflected or absorbed, thus appearing white in color.

THE DREADED WHITE PATCH?

We're not going out on a limb when we tell you that winter in Iowa is when you might notice smooth patches on many tree species—primarily white and bur oaks. This condition, known as **white patch or bark patch**, may appear harmful to the tree, but this blight doesn't have much bark.

To get to the root of this issue, we've contacted Tivon Feeley, forest health program leader with the DNR. White patch is caused by saprophytic fungi that attach to the tree bark.

"It does change the aesthetics of the bark, but it should not cause damage to the tree," he says.

The seed of misconception that white patch is harmful is buried in the fact that some of these fungi produce whitish fruiting structures, which may be misidentified for certain types of wood decaying fungi. The difference is wood decay fungi will eventually kill the tree, but bark patch fungi does not.

According to Feeley, "Spray treatments with fungicides rarely have any effect on white patch." So the best practice in managing this true parasite is to stick to the basics and leave it alone—sound advice that we are sure you will follow (knock on wood).

Ask The Expert Jennifer in Jones County asks, "Why do stars twinkle?"

BY SHELENE CODNER

The scientific name for the twinkling of stars is **stellar scintillation** or **astronomical scintillation**, but stellar scintillation, stellar scintillation little star...doesn't roll off the tongue and isn't all that catchy for a nursery rhyme. Twinkle was the word of choice in the popular children's song describing this astronomical anomaly. This nursery rhyme has been entertaining children since 1806. Star gazing itself was entertaining long before that time and watching stars twinkle is still entertaining today.

Stars twinkle because of turbulence in the atmosphere. When we see them from the Earth's surface we are viewing them through thick layers of moving air. This causes the star's image to change slightly in brightness and position—thus twinkle.

Stars, with the exception of the sun (our closest, most popular star) appear as tiny dots in the sky; as their light travels through many layers of the Earth's atmosphere, the light of the star is refracted (bent) many times and in many directions. This random refraction looks as though the star is moving and our eye interprets

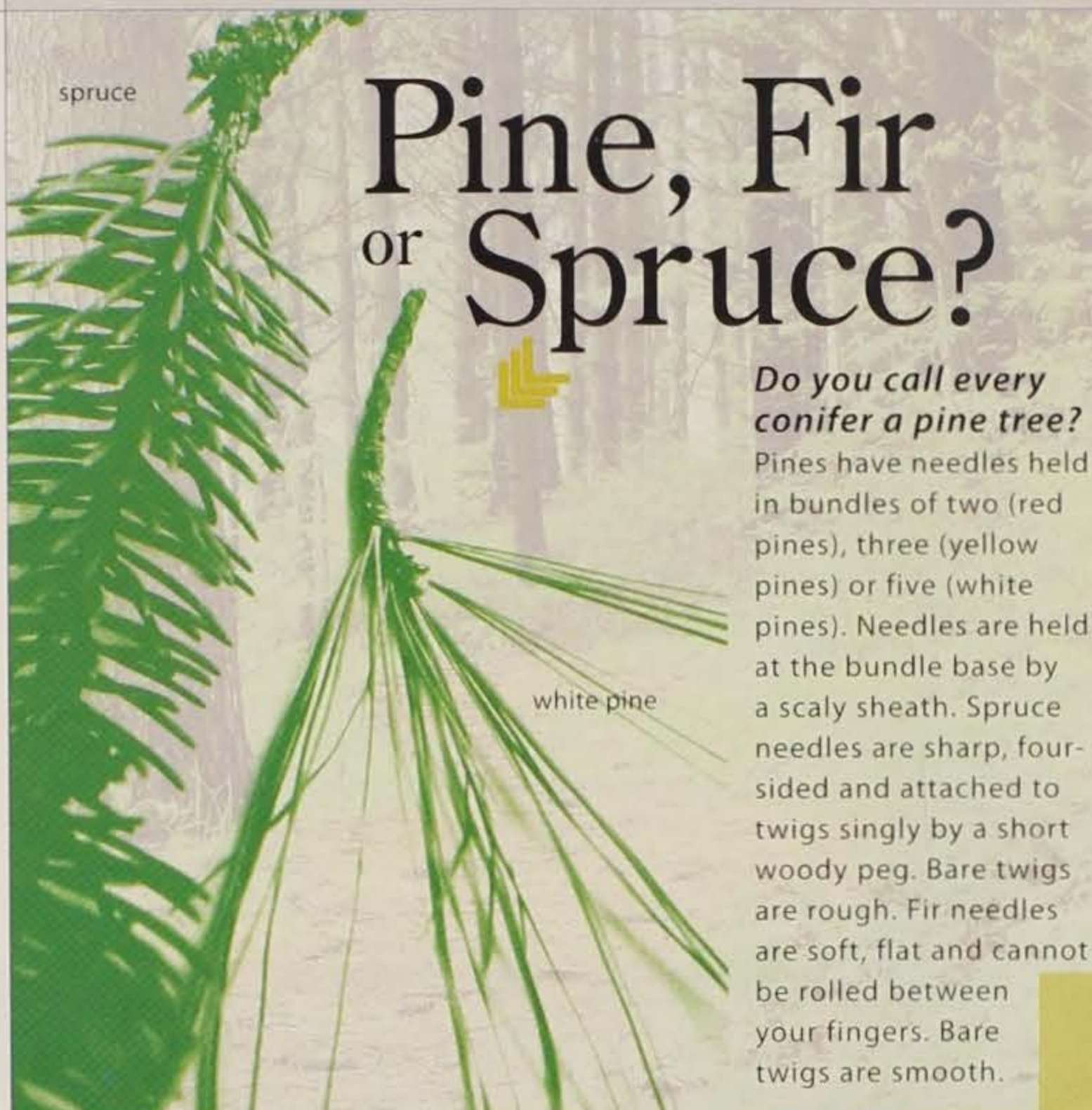
this as twinkling. Viewed from space, stars appear as a steady, non-twinkling light.

Stars closer to the horizon appear to twinkle more than stars that are overhead—this is because the light of stars near the horizon travels through a greater distance of atmosphere than the light of stars overhead and so it is subject to more refraction.

In addition, planets do not usually twinkle, because they are so close to us. They appear big enough that the twinkling is not noticeable (except when the air is extremely turbulent). We can't scientifically prove that a star's twinkle is responsible for making all your dreams come true—but after all, we don't wish upon a planet, do we?

GOT A QUESTION? Send to: ASKTHEEXPERTS@DNR.IOWA.GOV

TIPS, TRICKS AND MUST-KNOWS TO ENHANCE YOUR OUTDOOR FUN



Pine, Fir or Spruce?

Do you call every conifer a pine tree?

Pines have needles held in bundles of two (red pines), three (yellow pines) or five (white pines). Needles are held at the bundle base by a scaly sheath. Spruce needles are sharp, four-sided and attached to twigs singly by a short woody peg. Bare twigs are rough. Fir needles are soft, flat and cannot be rolled between your fingers. Bare twigs are smooth.



Midnight Navigation

Use the moon as a nighttime compass. If the crescent moon rises after midnight, the brighter side faces east.

Cold Weather Fly Fishing

Trout, lethargic and recovering from winter, respond to a slow retrieve that bounces off the stream bottom and imitates insects that flow gently downstream. Mimic the action with the fly, keeping it close to bottom. Use subsurface flies like nymphs, scuds and bead heads instead of dry flies. When trout are deep in wintering holes, use a strike indicator on a weighted fly. Make an indicator by tying a piece of fluorescent yarn onto a leader.

Trout tend to be less active in early spring compared to summer, so use a lot of fly movement, stripping it toward fish. Get as close to them as possible with the fly. "Put it right in front of their nose," says Brad Mullin of Cedar Rapids, president of the Hawkeye Fly Fishing Association.



MINING RESOURCES FOR PARKS

FRIENDS OF MINES OF SPAIN, DUBUQUE

Group supports Dubuque County park, raises \$1.5 million for nature center addition

The doors are about to open on a \$1.5 million project that the Friends of Mines of Spain hopes will teach people about one of Iowa's richest historical, archeological and natural areas. This effort—a far cry from any other of the group's fundraisers—will double the size of the E.B. Lyons Interpretive Center in the Mines of Spain State Recreation Area south of Dubuque. The sustainable building will increase space for classes, programs and exhibits, update aquariums, and add an auditorium and biology lab for students. "This will give us the ability to do a lot more programming and introduce people to the outdoors," says treasurer Rich Henderson. While the expansion may be the pièce de résistance, the friends group has worked since 1997 to improve the area and educate locals. The group logs thousands of hours each year coordinating volunteer efforts and programs, promoting the park, fundraising and making park improvements. That's included large undertakings like prairie restorations and building 15 trails, to smaller projects like purchasing tech and maintenance equipment. "This park would really have nothing without this group," says park ranger Wayne Buchholtz. With sweeping views of the Mississippi River, the area is steeped in history, including Native American burial mounds and the final resting place of Iowa's first European settler, Julien Dubuque. "The Mines of Spain is such a unique area. The natural beauty and resources make you forget you're minutes away from downtown Dubuque," says Laura Carstens, who serves on the group's board. "It's a historic, cultural and archeological resource that tells you a story about this country."



Laura Carstens, Howard Higley, and Daniel Ernst

RESTORATION TAKES ROOT

CARROLL AND KAREN PERKINS, JEFFERSON

Greene County couple's former pasture finds new life as state prairie preserve



"There are a lot of things you can't rush," says Carroll Perkins, whose labor of love is one of Iowa's newest state preserves. "I've only been at this for 20 years. Give it another 80 years," he says of his former pasture that now boasts 76 native tallgrass prairie species and 24 types of butterflies. When Perkins acquired his Greene County farm about 50 years ago, he continued the decades-old practice of using these 30 acres as pasture. But a move to California for 20 years left the land idle, and prairie plants began to reclaim their old turf. Greene County Conservation Board Director Dan Towers noticed, and worked with the Perkins family to revive the prairie. They set up a burning program and cleared invasive plants like red cedar and thorny locust trees. As the prairie began to take root, so did the idea of permanently protecting it. Carroll and his wife, Karen, began meeting with DNR botanist John Pearson, who determined the pasture was a natural prairie remnant. "They are very proud of their prairie, and very knowledgeable and motivated about conservation," says Pearson, noting that less than 0.1 percent of original prairie remains in Iowa. Now, Perkins Prairie State Preserve will be forever protected prairie, regardless of who owns the property in the future. It's also open to the public to explore. "There's nothing like a walk through the prairie, especially when it's blooming. It's a real gift for generations to come, with our increasingly cultivated and urban landscape," says Karen.

BACKYARD BEAUTY HELPS LAKE

MIKE AND DONNA MAHLENDORF, OKOBOJI

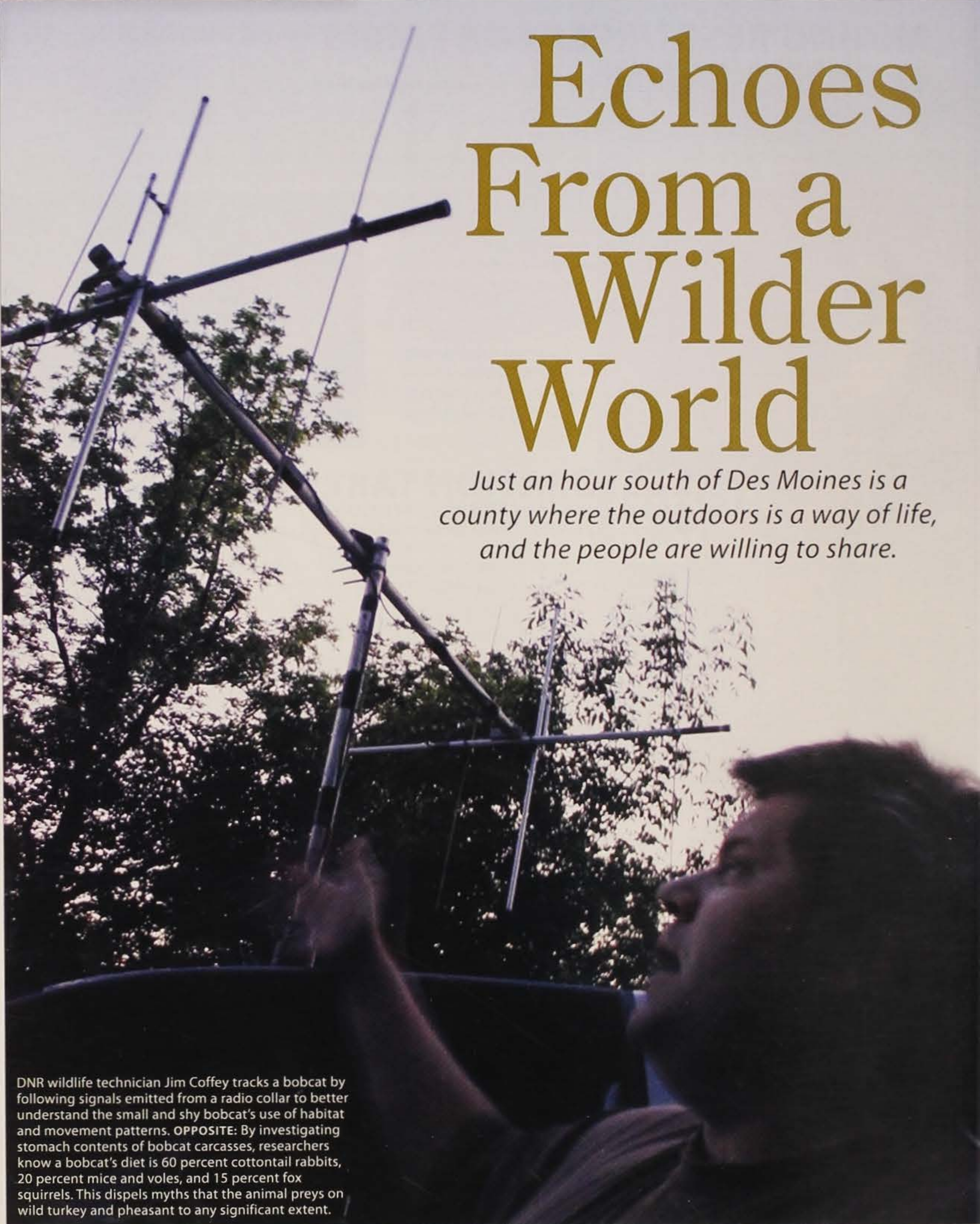
Couple invests in protecting Iowa Great Lakes—in their own backyard

Mike and Donna Mahlendorf's home may be in Nebraska, but their hearts are still at East Okoboji Lake. The former northwest Iowans have relaxed at the Iowa Great Lakes for 30 years and are making sure others can enjoy the lakes' quality water. When the couple bought a cabin two years ago to make room for grandkids, they noticed the property had runoff and erosion issues. After calls to the local Clean Water Alliance, they began investing thousands in improving their property to benefit the lake. With the help of grant funding, deep-rooted plants and brightly colored flowers in six stair-stepped rain gardens now catch runoff water, keeping an estimated 70 percent of pollutants in the runoff out of the lake. "Those rain gardens completely fill up with water when it rains, and within an hour, all that water is gone," says Donna. Knee-high native grasses along the shoreline catch any runoff that slips past the rain gardens. The couple maintains 14 wood duck nesting boxes, too. "You don't often get a landowner that says, 'tell us what to do and we'll do it,'" says the Alliance's John Wills. "They've gone out of their way to protect the lake." Wills often shows off the site for others interested in backyard conservation. "We love what we've done and know that it works," says Donna. "We're trying to do our part to keep the lake clean and preserve it for families that come to the lake."



Echoes From a Wilder World

Just an hour south of Des Moines is a county where the outdoors is a way of life, and the people are willing to share.



DNR wildlife technician Jim Coffey tracks a bobcat by following signals emitted from a radio collar to better understand the small and shy bobcat's use of habitat and movement patterns. **OPPOSITE:** By investigating stomach contents of bobcat carcasses, researchers know a bobcat's diet is 60 percent cottontail rabbits, 20 percent mice and voles, and 15 percent fox squirrels. This dispels myths that the animal preys on wild turkey and pheasant to any significant extent.

IT'S OUT THERE.

The bip, bip, bip from Jim Coffey's tracking radio indicates that there is a bobcat afoot, its radio collar signaling like an echo from some primeval alternate universe.

"We are less than half a mile away from a bobcat right now," Coffey says on a country road near Chariton, an hour south of Des Moines, as the sun dips below the horizon.

Bip, bip, bip.

I'm here.

You can't see me.

You'll never see me.

Coffey throws his truck into park, its giant radio antenna wobbling on the roof. It's officially dusk in Lucas County, home to a lake-centric state park, a great little coal-mining museum, Iowa's largest forest and lots of bobcats.

Coffey is the DNR's forest wildlife research technician for the area, and the bobcat research project based here in Lucas County is the nation's largest. They trap and radio-collar the cats to track their movements, seeking clues about an elusive animal that's mysteriously expanded its Iowa population.

He steps onto the road, gravel crunching under his boots. His eyes follow a creek down the road a ways, then he places a thick finger on a map pocked with symbols tracking the movements of *Lynx rufus* through the pasture, forest and Chariton River tributaries in Lucas County. Tonight, he stalks the spotted phantom known as the North Chariton Cat.

"This is bobcat habitat," says Coffey, who looks like he was a lineman in school, a single patch of gray in his hair hinting that may have been a while ago. Coffey delivers his encyclopedic knowledge in laid-back Iowa banter: twice the size of an average housecat; tufted ears like a lynx; bobbed tail that gives them their name. They're most active at dawn and dusk, when they can use their large eyes as an advantage over smaller prey with inferior night vision.

"I've seen a bobcat kill site, and it's almost nonviolent," says Coffey. Its death leap spans up to 10 feet, delivering a quick severed spine or neck gash. "He's the ultimate stalker."

Most people still think bobcats eat game birds, though earlier at the research station in Red Haw State Park (open weekdays to visitors), Coffey rummaged through dried stomach contents to prove that it's mostly rabbits, voles, squirrels and mice on the menu. "That people think bobcats are responsible for the demise of our bird population is the biggest rumor that we fight," he says.

And that's one of the reasons for a bobcat research project. Though it's the most abundant and wide-ranging wildcat in the U.S., according to *National Geographic*, Iowans just don't know much about them. And they want to know. Coffey gets calls all the time. "It's our obligation as the DNR to understand and manage the population of the animals for the people of the state," he says.

A barred owl floats across the road into a copse of

trees. A chorus of frogs ushers out the day. The North Chariton Cat won't show itself tonight. But, without a doubt, it's out there, in the riparian corridors Coffey calls "the connective tissues of Iowa," where stretches of forest meander along trickling streams, supporting wildlife large and small.

This describes much of Lucas County. There's a striking amount of habitat in this swath of farmland to keep a weekend interesting. There are just enough indoor pursuits as well.

Bobcats aren't the only interesting things about Lucas County.

STARTING AT THE START

The John L. Lewis Museum of Mining and Labor in the town of Lucas lays out some of the area's geological history, beginning 300 million years ago when Lucas County was a mucky forest. As the forest grew and fell, carbon-rich debris settled into the earth and decayed, being buried and compressed until it turned into the soft, bituminous mineral called Iowa coal.

Flashing forward, the museum exhibits pick axes, lanterns and shovels alongside images of the Iowans who risked their lives to descend into coal mines. AFL-CIO volunteer docents tell visitors about Iowa mining and its ties with national organized labor history. Famed labor



Bobcat, (*Lynx rufus*)

Lost In Iowa



leader Lewis grew up nearby.

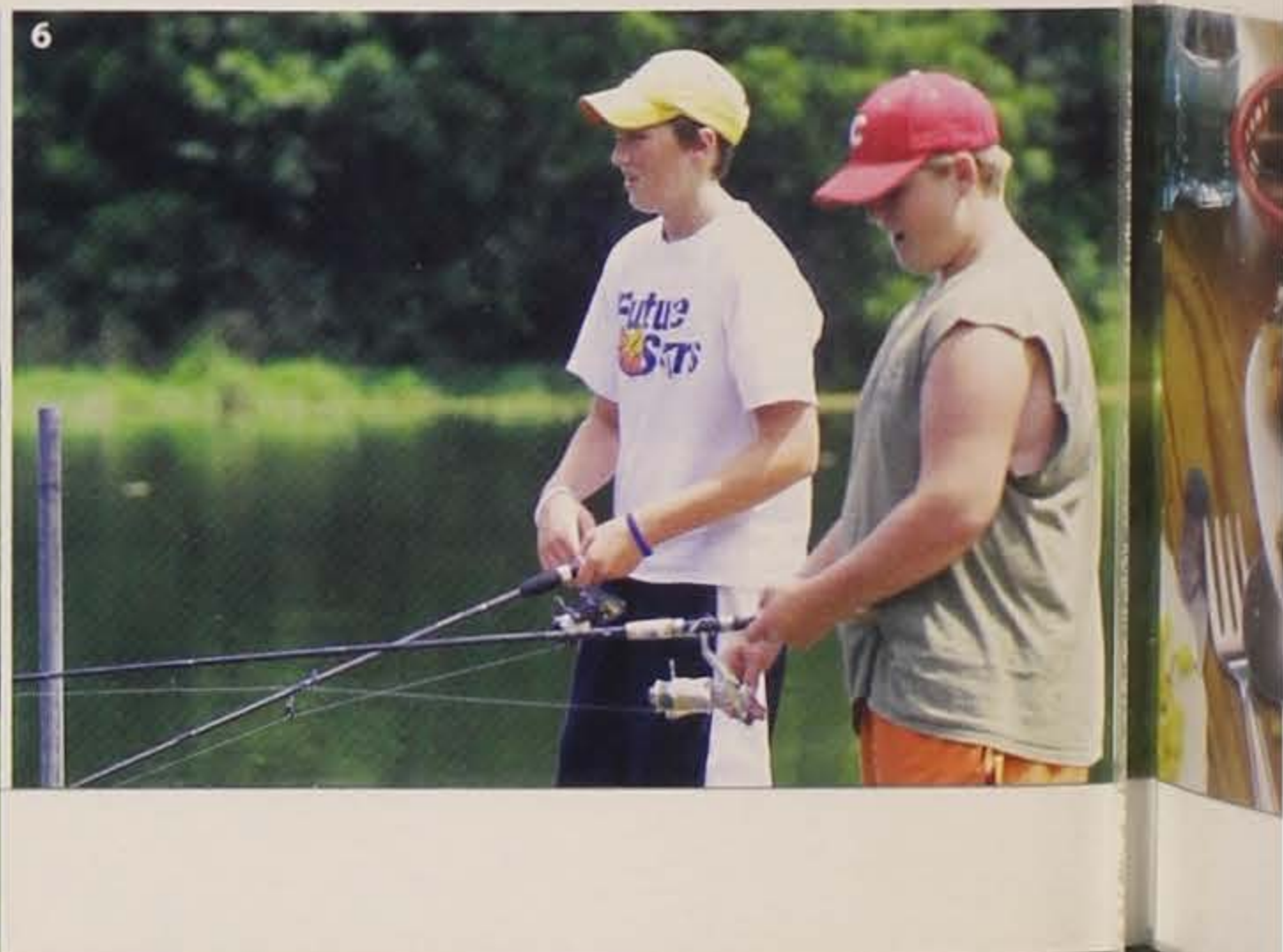
"The history of labor and coal is Iowa history. It's national history," says volunteer docent Earl Seymour of Churchville. "Things just weren't handed to us on a silver platter. Students graduate and get jobs and expect to work 40-hour weeks with a negotiated health care package and pension plan. Unions slaved and fought for those benefits."

Near the museum, there's an ice cream shop and general store that should find a place in a weekend itinerary. But the county seat of Chariton, eight miles east, is the biggest town (pop: 4,500). Shops line its old-fashioned town square. Next door to the Ben Franklin store is Piper's, with a deli counter that'll supply the sandwiches for a picnic in Red Haw State Park four miles southeast on Highway 34. Open since 1905 with the worn hardwood floors and tin ceiling to prove it, Piper's biggest

draw is its small-batch, hand-dipped chocolates, toffee, caramel and fudges. (Try the turtles.)

Lucas County is home to 30 to 40 Amish families. Visitors curious about this strict Mennonite sect that lives without modern conveniences, such as electricity, can book a meal in an Amish home through the Chamber of Commerce. The chatty, cordial Gingerich sisters, Polly and Malinda, whip up a gut-busting multi-course feast, all from the fruits of their garden and farm—think baked chicken, mashed potatoes and gravy, fresh bread, chicken and noodles, and pies. It's well worth a visit, if you've ever been curious about the lifestyle but afraid to ask. They answer questions openly, and have a few of their own. Bonus: They'll write down recipes for guests who ask nicely.

People also come to Lucas County for Stephens State Forest, Iowa's largest, started in the 1930s by the Civilian Conservation Corps. Stephens is divided into seven units





1-3 Born in 1880 in Lucas County near Lucas, as a teenager, John L. Lewis helped mine the local natural resource—coal. Rising to power, he served as president of the United Mine Workers from 1920 to 1960 and helped organize millions of workers nationwide. A museum offers insight into the man, organized labor and the history of local coal mines. **4.** Popular for hikes under fragrant flowering trees, a trail circumnavigates Red Haw Lake with picnic sites by water's edge. **5.** The Cinder Path Trail, Iowa's first Rail-To-Trail conversion, offers excellent wildlife watching overlooking the Shelton Marsh and views of wildflowers, prairie areas, native timber and wildlife along its 14 miles. Cyclists with skinny tires may find the crushed limestone challenging. **6.** Red Haw Lake is one of Iowa's top panfish lakes. **7-8** While camping at Red Haw State Park, take a side trip tour of an Amish farm and enjoy an old-fashioned lunch prepared and served in an Amish home or visit an Amish general store, woodworking shop and school.

totaling more than 15,000 acres. Though the main goal is to serve as an example of active forest management, the public reaps the additional bonus of fishing, rustic camping, hunting, hiking and more than 30 miles of equestrian trails.

"This place is for someone who likes a more primitive experience," says area forester Jessica Flatt, whose well-worn hiking boots show the mileage of managing the whole gargantuan place. "We've got a lot of wildlife—deer, turkey, bobcat, woodcock, fox, coyote—so we get mainly birdwatchers and hunters."

Stephens is a dedicated Bird Conservation Area, and a sanctuary for pileated woodpecker, scarlet tanager, ruffed grouse and songbirds. In spring, in addition to robust mushroom hunting, Flatt has found rare wildflowers such as the yellow ladyslipper, showy orchid and green dragon.

"The folks in Lucas County are really friendly," says

Flatt, a newcomer to the area. "People are pretty involved in their natural resources: the forest, the wildlife areas. They like to get out and hunt and fish—not because it's cool, but because that's how they've always lived."

Fortunately for travelers, they're also happy to share. "There's plenty of land down here for everybody," she says.

UP CLOSE AND PERSONAL

Any camper in Lucas County can tell you: Wild things are stirring here. But whether it's bobcats or pileated woodpeckers or Eastern hog-nosed snakes or coyotes, these creatures rarely show themselves to the casual weekender.

That's where Pin Oak Lodge comes in. The lodge is home to the Lucas County Conservation Board, and visitors can get a good look at the stuff they hear stirring in the woods via a wealth of taxidermied examples in the giant Morton building—plus a few things you won't see around here. Aside

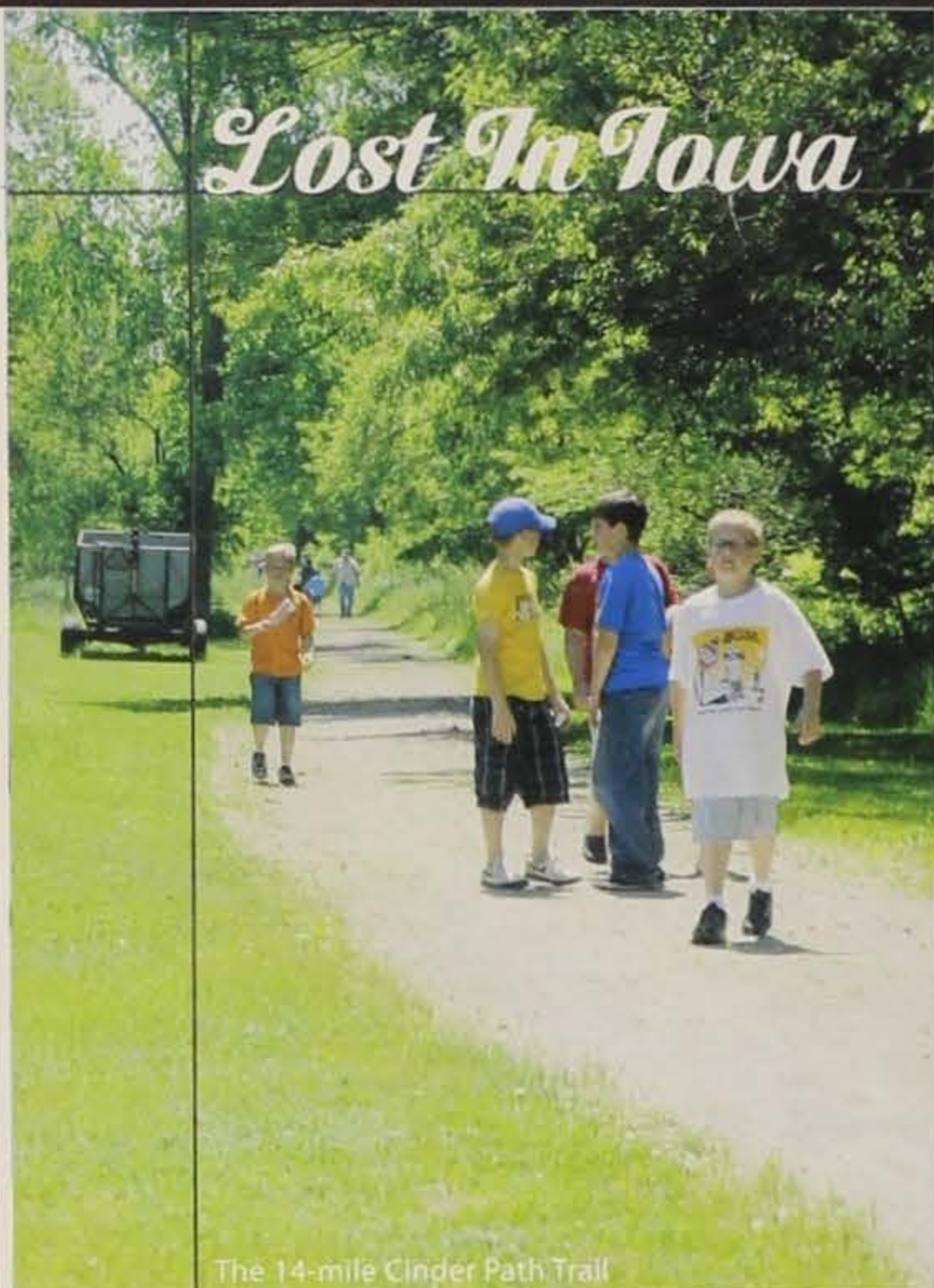


Lost In Iowa

At Red Haw State Park, a hiking trail around the sparkling 72-acre lake fringed with fragrant flowering trees makes a great spring getaway. The park offers 80 campsites, modern restrooms, showers and playground. Popular with paddlers and anglers, reserve a site at 1-877-IAPARKS or www.reserveiaparks.com



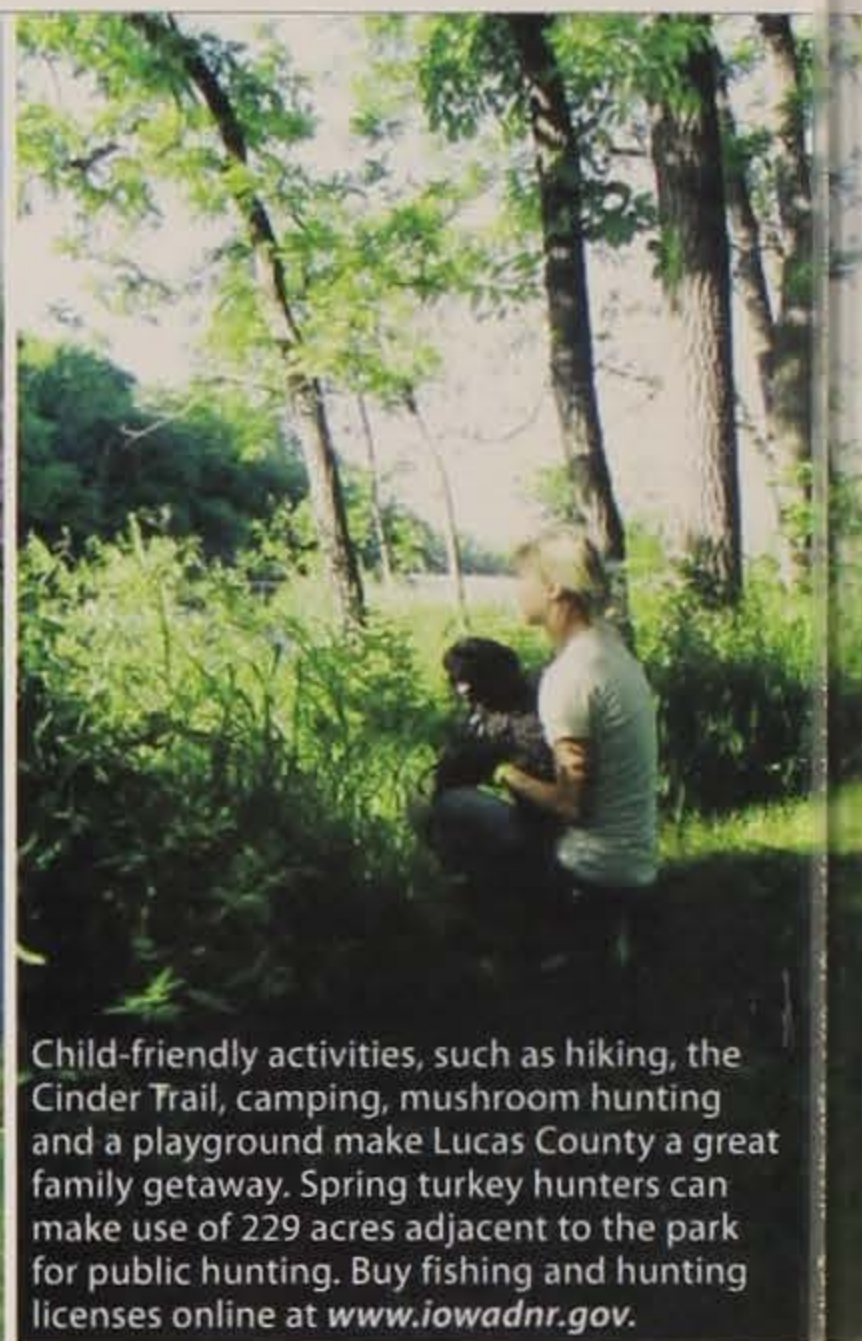
Lost In Iowa



The 14-mile Cinder Path Trail



Red Haw State Park



Child-friendly activities, such as hiking, the Cinder Trail, camping, mushroom hunting and a playground make Lucas County a great family getaway. Spring turkey hunters can make use of 229 acres adjacent to the park for public hunting. Buy fishing and hunting licenses online at www.iowadnr.gov.

from the moose, elk, wild boar, fox, cougar, bobcats, coyote and more, Pin Oak Lodge's collection of furs is impressive. Several tanks hold fish, turtles and snakes. Outside, a two-mile trail traces Pin Oak Marsh, which filters the adjacent Chariton River that drains into Lake Rathbun, the nation's largest rural water district.

The marshland is studded with birdhouses and an accessible fishing pier. Visitors might see otter, muskrat, whitefaced ibis, cormorant and many other critters. (The LCCB and its director, Skylar Hobbs also maintain The Cinder Path, a 14-mile bike/hike trail in Chariton that was Iowa's first rails-to-trails conversion).

Pin Oak Lodge comes to life with Hobbs' wiry enthusiasm from behind wrap-around sunglasses. Interested in snakes? He'll head out to the marsh and catch one by the dock. Like bluebirds? Here are the \$5 bluebird houses Jim Coffey makes that you can set up

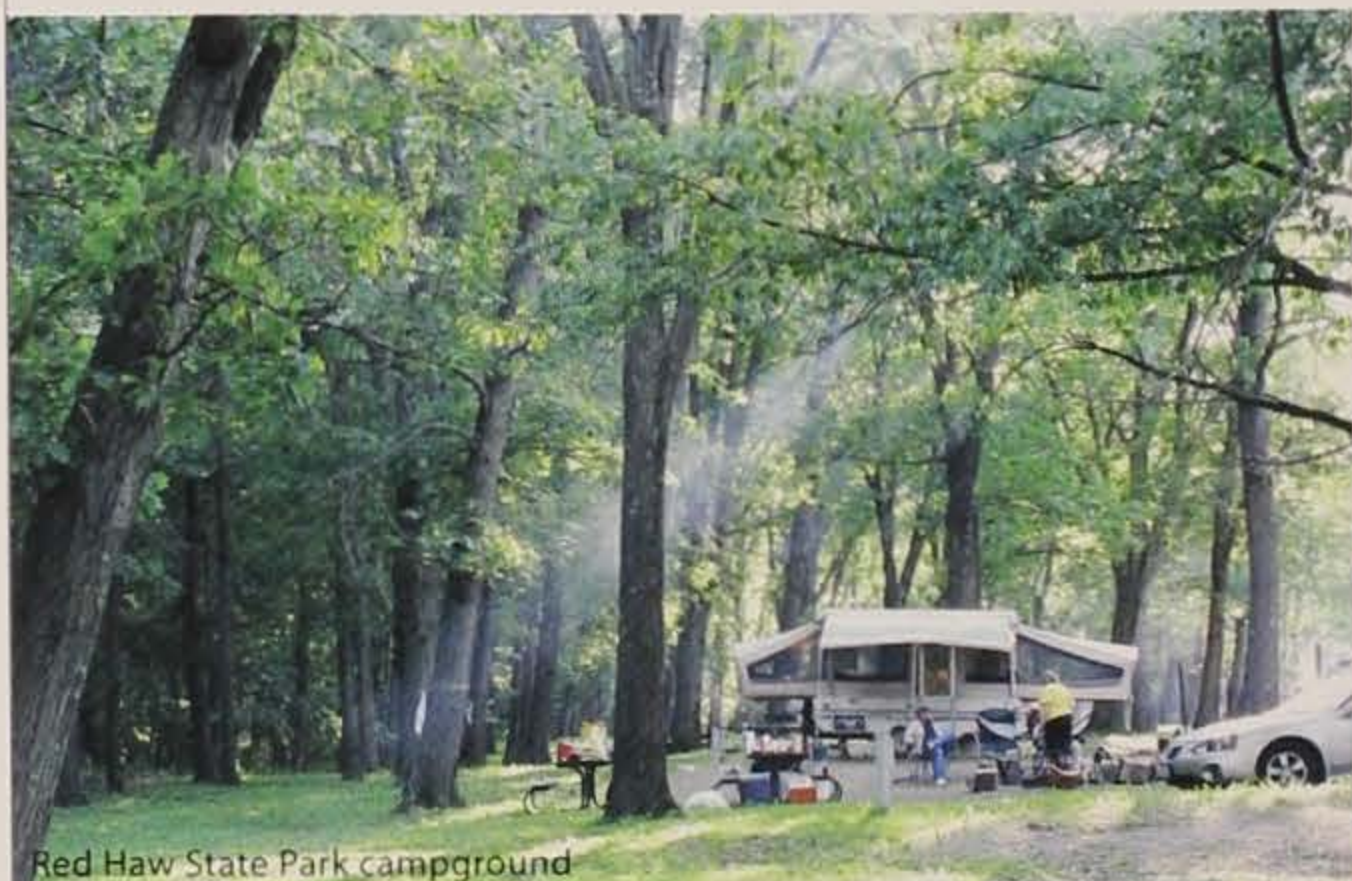
yourself. Wondering what lives in that marsh? Hobbs will scoop up some water and bring it inside, then hook up the 52-inch large-screen TV to a tank scope and let you examine the aquatic invertebrates.

Pin Oak Lodge was built with private donations and grants, and many of its mounts and exhibits are donated. "The community has really taken ownership in this place," says Hobbs. "Which they should, because it's theirs."

Like Jim Coffey, Hobbs makes a living connecting people with the creatures that live among them. It's a Lucas County thing.

"People come to Pin Oak Lodge to learn the truth about something they see when they visit. The biology of it. The look and feel of it and what role it plays in our environment," says Hobbs. "People need and want to know about the wildlife around them."

"And they can come here to find out." 🐾



Red Haw State Park campground



Mine Pond in Lucas Unit of Stephens State Forest



TRIP NOTES

John L. Lewis Museum, Lucas. In this small town with two city parks and an ice cream shop, one mile west of Stephens State Forest, an impressive collection of mining history exhibits and films commemorate the geological past of this area, of mining in the state and the national organized labor movement.

Open April 15-Oct. 15, Monday through Saturday 9-3. Group tours by appointment year-round. \$2 adults, \$1 kids. (641-766-6831; 102 Division St.; coalmininglabormuseum.com).

Piper's Candy, Chariton. Everyone likes the chocolate, but they make a mean soft mint here, too. They take online orders (641-774-2131; 901 Braden Ave. piperscandy.com).

Red Haw State Park, Chariton. If you don't get here when the redbuds bloom in spring—and you should—there's still plenty to make this 649-acre park attractive. A mown-grass lake trail is easygoing and romantic at dusk when the 72-acre reservoir (with a sand beach and good panfishing) is a mirror. Eighty shady sites overlook the lake (60 with hookups). This is a good picnic site, too, with many tables overlooking the lake (641-774-5632; iowadnr.gov).

Amish meals, Lucas. The Gingerich women serve groups of 10 or more only. Contact the Chariton Chamber of Commerce to arrange a dinner for \$20 per person. Area tours that include a cabinetmaker's shop are also available for \$25 per person, which includes a meal. (641-774-4059; charitonchamber.com).

Stephens State Forest, Chariton/Lucas. Hiking is easiest on any of the trails in the Lucas Unit, especially around Hidden Pond, near the middle campground entrance (641-774-4559; iowadnr.gov).

Shoemaker's Business 34 Steakhouse, Chariton. The owner, Rick Shoemaker, roams the tables checking on guests. With a nice bar, steaks and burgers and seafood, you'd never guess this place is connected to a convenience store on the other side of the building. (641-774-8898).

Pin Oak Lodge. Off Highway 14 south of Chariton. Skylar Hobbs is here during weekdays, and weekends by appointment. Call in advance if there's a specific wildlife topic you or your group would like to learn more about and he'll be there to help. (641-774-2438; charitonchamber.com/tourism/tourism.pinoak.htm).

Benjamin's Casual Dining, Chariton. A Sunday buffet with several scratch-made offerings such as chicken and noodles, mashed potatoes and two kinds of gravy, lasagna and many desserts. (641-774-2771).

WHERE TO TRACK A BOBCAT

It's likely you won't find one; these are very shy creatures. But here's to trying:

- **BOBCATS** are active all day, but head out at dusk or dawn when prey is at its greatest disadvantage to bobcat night vision.
- **FOLLOW COUNTRY ROADS**, paying close attention to pastures, riparian corridors (a big block of timber connected with another piece of habitat by a corridor, such as a stream).
- Keep an eye on small patches of very **DIVERSE LANDSCAPE**, such as where woods, field and stream meet. In fact, bobcats have been sighted in the Red Haw campground several times over the past few years.
- **ANYWHERE SMALL PREY IS ABUNDANT**, you may see bobcat. Think rabbits, mice, voles or squirrel.

Gliders of the Night

*In Search of
Flying Mammals*

BY KAREN GRIMES
PHOTOS BY CLAY SMITH

The last widespread inventory of the state's wildlife occurred during the 1940s, showing that flying squirrels were present throughout all but northwest Iowa. Today, students at the University of Dubuque have confirmed they are still present in east central Iowa. Flying squirrels are one of 296 species of greatest conservation need in Iowa. Discovering more about their distribution, abundance and ecological needs can help researchers learn the role of each species and how they are interconnected in an ecosystem. **RIGHT:** Mature white oaks are the preferred habitat for these little night gliders. Collecting and radio collaring them is a challenge for researchers.

While the rest of humanity is anchored by gravity, Frances Eggers flits effortlessly up the 120-foot bluff. Skimming the earth like a butterfly, or maybe, since her feet do touch the ground, a young mountain goat, she emanates joy in her daily search for an elusive night-gliding squirrel. While she is tireless, graceful and agile, the rest of her field partners feel the weight of gravity, and, perhaps, of years. Tethered to the wet ground, they slip and slide as they hike steadily above the Mississippi River.

At 6:30 a.m. the sun has been up nearly an hour; its rays muted as dappled light filters through the lacy sanctuary created by huge white oaks. From yellow green to viridian to deep olive green, a myriad of emeralds encase the bluff. Under this mass of shade, it is not yet hot. But it is humid.

A senior at the University of Dubuque, Eggers makes this upwards trek early each morning, weekends included. She is checking her 32 traps for *Glaucomys volans*, the southern flying squirrel.

Although found throughout most of the eastern United States and as far west as eastern Kansas and Texas, few Iowans know flying squirrels can be found in all but northwest Iowa. Even fewer have actually seen one.

In appearance, its huge eyes are the main clue this smallest of tree squirrels spends its nights foraging and its days curled up inside a tree cavity or leafy den. Preferring dens in dead trees perhaps 20 to 30 feet above ground, the squirrel can escape predators with a leap into the air and a sustained glide to the next tree. It measures a mere eight to 10 inches long, tail included, and may weigh only two to four ounces.

For Eggers, this morning starts out on campus like other days, but it's destined to have a different ending. At 6 a.m., she meets her assistant of the day, professor and mentor, Gerald L. Zuercher, Ph.D. They load equipment into the university's red SUV. Within a few minutes, they are wheeling their way south along a winding ridge road. Eventually they meander down to Catfish Creek, at the

northern edge of the Mines of Spain State Recreation Area, which is both a National Historic Landmark and a National Heritage Site. The area is rich in birds and wildlife, and includes a state preserve and an urban wildlife sanctuary.

They park at the first parking lot on the right, unload and cross a small ditch suffused in the hazy early morning light. As they start up the steep bluff, they brush through prickly ash, sumac, hackberry and bass wood saplings. Further into the woods, the understory thins out, the result of heavy shade and a planned burn to set back invasive species like garlic mustard.

Eggers knows where to find her 32 live traps, nestled into white oak branches about 15 feet off the ground. The trapper trees are staggered up the sun-facing slope and a west-facing slope on an adjacent bluff. This July morning is the ninth day of trapping. And, so far, the traps have yielded only one angry grey squirrel—safely released on the ground. Not a flying squirrel to be seen.

She carries her trapping gear: three 5-foot-long metal fencepost-like contraptions with odd D-shaped metal extrusions welded on alternating sides (the ladder), a long rod with mirror attached and three long nylon belts with ratchets.

When she finds a trap door down, Eggers uses the mirror to check for squirrels. Her goal is to determine if flying squirrels still soar in the bluffs of northeast Iowa. Dubuque residents have complained that they no longer see the small rodents at their winter bird feeders, sparking the curiosity of Zuercher and his environmental science students. Eggers is specifically trying to find out if suitable habitat for the squirrels exists at Mines of Spain.

The two researchers are soon joined by Wayne Buchholtz, DNR park ranger. Interested in the research, he often hikes over from the E. B. Lyons Interpretive Center on the Mesquakie and Calcite trails, part of a trail system recognized as a National Recreation Trail—a





prestigious designation from the National Park Service.

Whenever the group pauses, mosquitoes, gnats and a tiny bee or bee-like fly buzz around their heads. The air is pungent with a wet-earth, musty smell.

In the second year of the study, Eggers has placed traps only in white oak trees after last summer's trapping failed in a red oak stand. Buchholtz says the squirrels seem to prefer white oaks with a trunk diameter of about 2.5 feet. He hypothesizes that the squirrels have a sweet tooth—preferring white oak acorns to red oak acorns, which have higher tannin levels.

For safety—and out of necessity—it takes two people to check traps. The size of a shoebox, they are simple wire contraptions. A trigger at one end holds the bait, generic chunky peanut butter. Enticed in to feed, the squirrel trips a trigger and the trap door shuts, keeping the night-feeding squirrel captive until the trappers arrive in the morning.

They zigzag up the steep slope, slipping in the wet grass and mud. Eggers defies gravity, but the rest feel its pull. It seems as if it will be another day without a catch. The trap doors are up on tree after tree. It would be easy to think, “a week or two of this and I’d give up.” It’s like fishing and getting no bites, but a lot sweatier.

Near the top of the ridge, they stop to check the

eightth tree. This is the same tree where Eggers caught at least one squirrel in 2007. Even though the trap door was down, “I was so sure we didn’t have anything,” says Zuercher. “I sent a student up the tree to reset the trap, and he opened the door and the squirrel leaped out.”

Again today, the door is down. As Zuercher is talking, Eggers peers into the trap with the mirror. She sees something—a ball of fur?

“Holy crap,” she says as she sees a puff of fluff curled up in a corner. Zuercher stops talking and peers up at the mirror. The mood is excited with Zuercher laughing expansively. Then Eggers tells him there are two squirrels in the trap. Unbelievable.

“There’s two something in there,” he says in amazement. “There’s another ball of fur curled up on the other one. Oh, my god, there are two!”

“Two in one trap, that’s a first,” he exclaims and laughs exuberantly.

Eggers’ voice squeaks as she says, “Oh my gosh.”

Excitement builds as the sections of ladder are strapped to the tree trunk. Eggers quickly climbs up the ladder, then peers into the trap as she delicately unhooks it from its perch.

Yes. Two squirrels in the trap. Curled up together in fist-sized balls.



Park ranger Wayne Buchholtz and Gerald Zuercher, Ph.D., were night netting for bats a few years ago when they thought they saw a flying squirrel high above the Mississippi in the Mines of Spain State Recreation Area. That sighting and comments from Dubuque residents about the rarity of flying squirrels sparked their interest in studying the creature.

In just one tree, they've made history—the first recorded trapping of two squirrels in one catch. As Eggers carries the trap down the tree trunk, a wide grin splits her face. She is beaming.

Zuercher looks into the trap. "There's a male and, I think, yes, there's a female."

The squirrels have soft brown backs and sides with a white underbelly. Compared to their faces, their eyes are huge, with large black pupils. Staring out at us, they are wet and their fur is bedraggled.

"Too cute for words," says Eggers as another huge smile breaks out.

"How are we going to get one out without the other one?" Zuercher muses. "This is the magic tree," he expounds.

Checking the next eight trees and traps, they find another female squirrel. With this rich catch, they descend the cliff, loaded traps in hand.

By 7:30 a.m., the crew of three has set up a temporary lab on a picnic table. First they scan the large lactating female for a passive integrated transponder, or PIT tab, to see if she's been caught before. She hasn't, so they inject the tiny, electronic device under her skin. They quickly weigh, measure and then release her so she can return to her pups.

Separating the two squirrels caught in one trap proves more difficult. Wet and miserable, they huddle together

LEFT: Frances Eggers, an undergraduate at the University of Dubuque, became the primary investigator of the squirrels. High up in a white oak tree, she retrieves a live trap with two squirrels in temporary residence. History is made when two flying squirrels are caught in one trap, leaving researchers amazed and ecstatic.

and neither can be moved. Eggers gently shakes the trap. She tries blowing on the squirrels. Finally, she resorts to the highly scientific tool, a dead stick, to gently prod one animal into a large canvas bag labeled "Snake Bag."

Once separated, the male squirrel goes into a clear plastic knockout box. Zuercher dons rubber gloves and begins to fill the box with isoflourane gas, an anesthetic. Once the squirrel is unconscious, it will be easy to put a radio collar on, less traumatic for squirrel and handlers.

While the gas fills the box, Zuercher and Buchholtz quickly assemble the radio collar, PIT tab, ointment, iodine for disinfection and a needle for the PIT tab. "Once they are sedated, you want to get them out quick," Zuercher explains.

We watch as the squirrel appears to relax and close its eyes. That's the theory. This little squirrel, however, is still bright-eyed and wide awake.

As we wait, Zuercher relates the story of a trip to Paraguay where Eggers had a run-in with a toucan.

Toucans have very stout serrated bills and it bit her.

"Frances," he says reverently, "is really, really gifted in handling wild animals. We call her the 'bird whisperer,'" he says, "because she took a toucan out of a net with her bare hands.

"I told the students I'd give them 100 bucks if they could catch a toucan in a net," he says. "I thought it was unlikely because toucans would normally be nesting during the netting. So, when the students thought they saw a toucan in the net, I cried out, 'No, it's not. It's a woodpecker—the only other bird with red on it.'"

Eggers says the students were excited to see a toucan and they wanted the \$100. "I just grabbed it with my bare hands not thinking about it having a really large bill made for cracking nuts. I did get bitten a little bit. The funny part was it bit my finger, but a biologist put a mechanical pencil near it and it cracked the pencil."

"The down side of this, guys, is that toucans have so much skin, you just can't grab them," she adds. "In that respect, they are a lot like flying squirrels."

Flying squirrels don't really fly. They glide. They have a loose flap of skin on each side of their body, running from the wrists on their forelegs to their hind legs. Highly muscled, when spread out, this flap of skin or patagium allows the squirrel to sail through the air. They

can glide up to about 90 yards depending on their starting altitude. From the top of a 60-foot oak tree, the squirrel can sail about 55 yards before landing.

The squirrel stretches the loose skin until it is taut, then glides through the air, twisting and turning to avoid trees. As the squirrel lands, it raises its densely furred tail, allowing it to glide upwards while it loosens the muscles in the patagium to create an air brake. Once landed, the squirrel scrambles quickly to the other side of the tree.

"They are hard to hold because they have so much skin," says Eggers. "Other rodents you can just grab onto, but you get the skin on these."

After the anesthesia fails to have an impact, Eggers and Zuercher decide to go ahead and process both squirrels without sedation. They don gloves and pick up the small female. They quickly inject a PIT tab with a needle.

"She's kind of squirmy; kind of squirrely," says Eggers as she holds the squirrel, trying to record her weight and length.

"You're doing really good handling her," says Zuercher as they attach the specially made tiny radio collar. After a short break to make sure the anesthesia is gone, the team takes the squirrels up the bluff to release them, where they quickly glide perhaps 20 feet to a nearby tree.



"The battery should last in to the fall," Zuercher adds. "We're hoping to find some kind of communal nest and recapture them in the fall." By then the acorns and other mast crops will be plentiful and peanut butter won't look nearly as attractive, making the squirrels impossible to trap.

Today's work is done for the moment, but the researchers return at dusk with headphones, antennae and radio telemetry equipment to get a directional location on the squirrels they've collared and released.

Zuercher's truck sports a Texas Tech license plate frame, California plates and a Kansas State University trailer hitch cover. Clearly this is a man who likes to travel.

While Eggers rigs the antennae, Zuercher talks about his graduate research where he first encountered northern flying squirrels in Alaska. He started pre-veterinary school straight out of high school, but his work in a laboratory quickly taught him that he had a penchant for dirt, not white lab coats, anxious customers and squeaky clean, sterile surfaces.

Zuercher likes to get his hands grubby and find answers that can only be found through protracted fieldwork: dirty, exhausting and exhilarating. For grad school he wanted to go as far from Mississippi as he could get, so he applied in Alaska. When he flew up

to stay at a research station, it was 41 degrees below zero. Although his dreams of working with bear, moose and caribou turned to voles and squirrels, he loves the romance of field biology. He loves teaching, too.

The University of Dubuque environmental science program provides unique opportunities for field research—opportunities many students don't have until graduate school. Zuercher had nine local research projects that summer focused on community ecology, ranging from studying river turtles on the Mississippi to frogs to comparing stocked vs. unstocked trout to fish spawning activities.

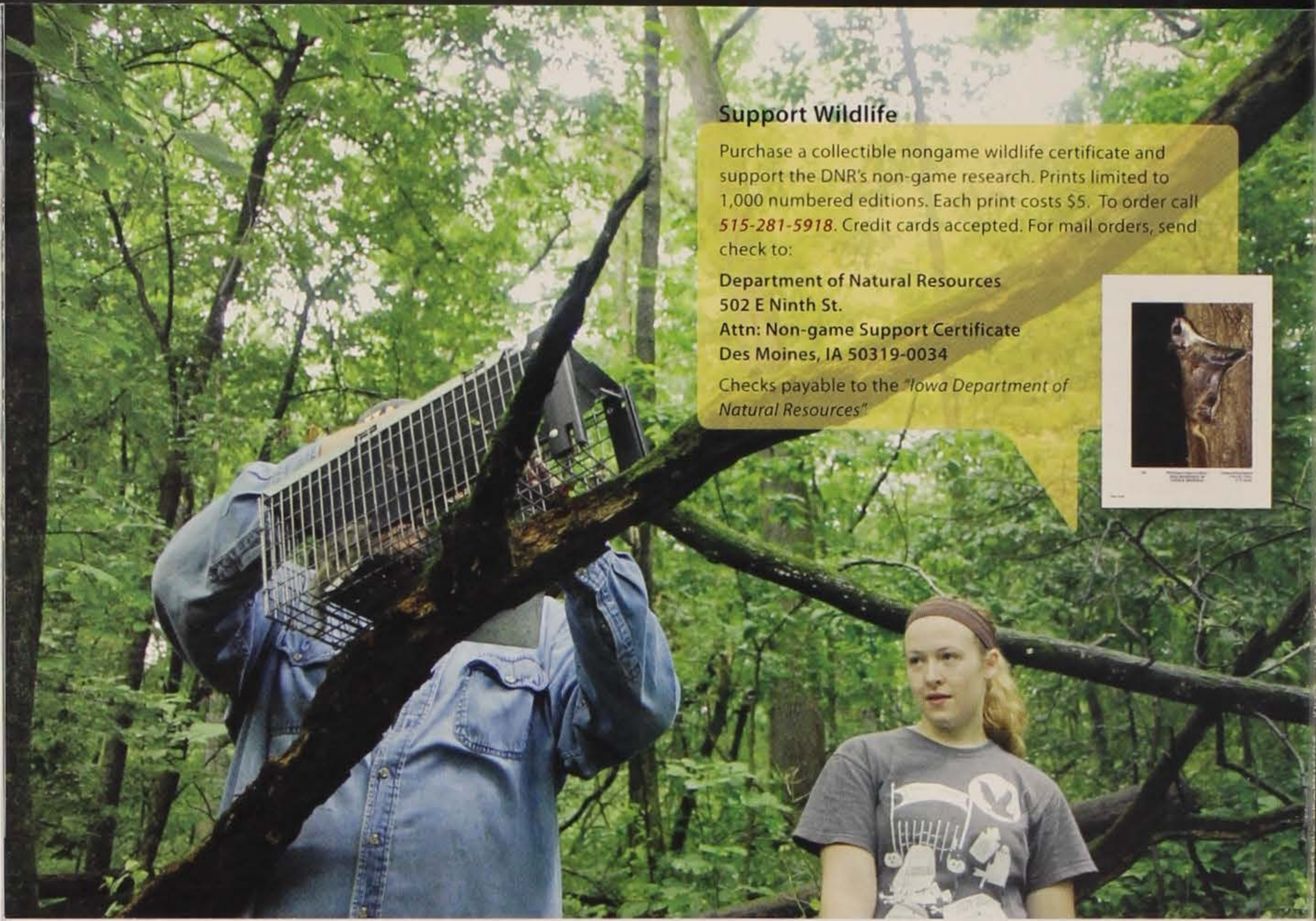
Zuercher tries to recruit students who will take ownership. Eggers is a prime example.

"This is not my project," he says. "I'm just here to help. It's her project, not mine. I'm her assistant."

"I can't believe I'm here and there are so many opportunities to do your own research project," says Eggers. "People ask why I would do it (for free) and, I ask, 'Why wouldn't I do it?'"

Each squirrel is weighed and measured, then a passive integrated transponder or PIT tab is injected under the skin. Like identification tabs used for family pets, it will tell researchers that the squirrel has been caught before. The ID allows them to track changes in weight, length and health. A radio collar, below, helps researchers track movements.





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"It's a unique experience being at UD," she adds. "It's so small. We all know the professors and students really well. They're really neat resources." Eggers recalls catching an enormous soft shell turtle on one project. On another she boated into Mississippi backwaters at night to set light traps made of glow sticks, attracting larval fish to see what species spawn in that area.

Now working at Swiss Valley Nature Center and at the National Mississippi River Museum and Aquarium in Dubuque, Eggers has fond memories of UD, but regrets that they weren't able to answer all her research objectives.

Despite the auspicious beginning to the 2008-trapping season with seven squirrels caught and three radio-collared in just three weeks, the students were unable to recapture any squirrels that fall. Some questions they started with remain unanswered.

"With those huge eyes, pupils so large, when are the squirrels most active? Are they out all night or do they forage for just a few hours? We wanted to look at where they were most active, geographically in the area and at what heights in the trees," says Eggers. "Their main predators are owls. Their young would also be vulnerable to snakes, which can climb into the nest cavities, like the black rat snake."


Eggers did trail three squirrels from July 23 to Sept.

22, but the battery in the telemetry equipment died and there was no tracking for two weeks. "We did get some records of movement," she says. But, once they'd lost trace of the squirrels, it was difficult to pick the signals up again. Because of the deep cuts and high bluffs, the signals simply bounce off the bluffs, making it hard to follow squirrels that drop down into a valley.

Part of their goal was to find out if the squirrels were doing communal nesting during the winter. Although they weren't able to observe that, their habitat analysis showed that mature white oaks and shagbark hickory are really important food sources because of the mast (nuts) they produce. "Dr. Z read an article about diet analysis where they placed different nuts in front of flying squirrels and they went mainly to white oak acorns and shagbark hickory," Eggers says.

The problem for flying squirrels and other wildlife is that red oak is more shade tolerant and grows faster than white oak, meaning there will be few white oaks in the future.

Robert Honeywell, state forester at Yellow River State Forest, says Iowa's oak-hickory forests are rapidly being replaced by a maple-basswood community. "Before settlement, there was a history of burning; after settlement there was heavy cutting," he says. White oaks are pioneer species that need more sunlight



Zuercher and Eggers open the trap door to release the radio-collared male squirrel. Leaping for freedom, it glides to the nearest tree. Later that night, Eggers uses the radio antennae to locate the squirrel and detect his movements. Learning more about the night glider's preferred habitats and habits is the key to understanding its importance in Iowa's forest ecosystems. Knowledge, too, may help researchers ensure its continued abundance.



Researcher Frances Eggers radio tracking flying squirrels. White oaks are the preferred food for the tiny species. Since 1954, Iowa's 933,000 acres of oak forest is declining by 5,800 acres per year. They will be gone in 160 years, replaced by shade-tolerant trees. Learn more about Iowa's oak forests at www.iowadnr.gov/forestry/pdf/Oakdoc.pdf.

than red oaks.

"If you have a big, mature white oak-hickory forest that's been there for 150 years, even on one acre, it will produce millions of acorns, but no young oak seedlings," he says. The seeds germinate and grow, but there's not enough light for seedlings to survive once the nutrients in the acorn run out.

White oaks thrived under pre-settlement conditions, because they store more energy in the root system. When a fire swept through the forest, the white oak sapling burned, but re-emerged quickly from the ashes, outcompeting its red oak cousins.

Eggers' look at habitat confirms what Honeywell says. "We saw a lot of red oak saplings around large white oaks; there will be no white oaks in the future," she says.

"I think biologists, especially in northeast Iowa, are starting to get more interested in forest management," says Honeywell. Some are creating brushy areas and aspen thickets to benefit ruffed grouse. At Yellow River State Forest, Honeywell says they are working diligently to regenerate oaks.

That may be crucial to the flying squirrel's future. The first year of Eggers' project they had one plot with hackberry, red oaks and walnut trees. "Flying squirrels have been known to eat walnut, but we didn't catch any

squirrels in that habitat," she says.

"They really like the mature forest with decaying matter on the forest floor, because they eat fungus, too. They've been found to eat baby birds and even eat adult nesting birds. "They've also taken over bird nests to use for respite," she says.

Eggers found a strong correlation between the white oaks and the number of flying squirrels they trapped, with more squirrels caught in the plots where the trees were higher and had a larger diameter. These trees produce more mast and could support more flying squirrels.

"The big thing from the first year was to find out if the squirrels actually lived in Mines of Spain," Eggers says. "We were all pretty ecstatic when we found 18 squirrels in two years. We sort of concluded it was because of the white oaks."

In the end, whether the flying squirrel merely survives or thrives here is up to the people of Iowa, most of whom have never seen this small, gliding rodent. If tied to the future of the oak-hickory forest—the squirrel's future is in the hands of the public, with foresters, parks staff, conservation specialists and wildlife biologists to help. "It's the managers and citizens who have to decide," says Zuercher. 🐿

GO FISH

A Species by Species Guide For Hot Action

BY MICK KLEMESRUD PHOTOS BY BRIAN BUTTON



BLUEGILLS

PRE-SPAWN: Look for trees or rock piles in 6 to 10 feet of water. Use a 1/32- to 1/80-ounce jig tipped with a wax worm or piece of night crawler. If shore fishing, use a bobber. From a boat, either straight line fish or use a bobber. Fishing slowly in cool water, give the bait a twitch to spark a strike.

TIP: Bluegills have a small mouth, so use small bait and hooks.

During spawn (*mid-May to mid-June*) look for spawning beds in bays or near shore in areas out of the wind. Beds will be in water 2 feet deep or less with sandy or gravel bottoms with dished-out depressions that look like elephant footprints. Use small jigs tipped with small bait. Add a small split shot to help cast. Set a bobber about the size of a thumbnail, 18 to 20 inches above bait. Cast beyond the bed and slowly pull it through. This will likely produce a fish per cast. A 6-foot rod can help when casting light tackle. Stay as far from the beds as possible to avoid spooking fish.

FISHERIES BIOLOGIST FAVORITE: Use black marabou jigs. They float in 2 to 3 feet of water and imitate a variety of insects.

TIP: During spawn, quickly set the hook as bluegills are removing foreign matter to keep their nests clean and not usually feeding. Use a 1-inch piece of night crawler with a size 8 hook, which is large enough to allow easy unhooking.

Many reconstructed lakes have added spawn areas to attract bluegills in 2 to 5 feet of water. Often 40 feet long, some rock reef with gravel tops can be as long as 200 feet. Locations are identified on new lake maps available on the DNR website.

In summer, bluegills move back to pre-spawn areas. As water temperature rises, they move to open water which makes fishing challenging for shore anglers. Drift open water areas with small baits with a slip bobber or straight line in the upper 10 feet of water. When a fish is caught, toss out a marker and work that area. When fishing slows, move on.

LARGEMOUTH BASS

Early spring (*March-April*), largemouth frequent structure like rocks, brush piles, pallets, vegetation, trees, bushes, reefs, stake beds, sunken islands, docks, creek channels or points in a lake near deeper water. Increase your chances by finding a light-flowing current, like snow

melt. Fish slowly. Try a jig tipped with an artificial worm.

As water temps warm in *late May and June* move to shorelines and fish shallow. Bass actively feed before the spawn. Look for rocks, trees, vegetation or docks. These fish are hungry and will hit spinners or worms. When the water is warm, add crankbaits. Once the spawn begins, bass are inactive feeders, but it is possible to catch one defending a nest.

From *mid-June through August*, bass are actively feeding. Fish when the water is cooler in early morning or late evening. Use top-water baits, crankbaits or rubber worms. Bass will move to flats and shallows. When the water is cooler, they will move right to the shoreline to ambush prey. Kiss a top-water lure off the bank, and work it away. Or get the bait in among lily pads or other vegetation.

BASS TIP: Don't forget live bait. Frogs are killer for bass. Hook a night crawler just like an artificial worm. Creek chubs work well. Use crawdads on rock reefs.

CHANNEL CATFISH

Channel catfish do not actively feed in the winter. After ice-out in mid-March through late April, channel catfish move to 2 to 6 feet of water where wind has blown in fish that died during the winter. Use a fairly small hook and a chunk of stinky cut bait that can fit into their mouth. For tackle, have 8- to 10-pound test line, heavier gear, and a split shot with an egg sinker above it. Let the catfish have the bait for a short run, then set the hook.

When spring stream fishing, look for shallow stretches in pools below riffles to hold feeding fish. Target cut banks or wood structures as places where cats ambush prey. They frequent near tributaries where water is warmer. In lakes, look for 6 to 8 feet of water and use cut bait or a big gob of night crawlers.

Late June to mid-July, catfish will move to rocky shores, rock reefs and log jams in 2 to 6 feet of water to spawn. Use cut bait and night crawlers.

Summertime brings out stink bait, cheese bait and liver. Use heavier tackle when fishing cut banks and snags to pull fish out. As the summer days get hotter, fish deeper water at night.

CATFISH TIP: To catch large channel cats, use live bait, like creek chubs or 3- to 5-inch green sunfish. When channel cats reach 16 inches, they become aggressive predators, seeking prey. In general, fishing is better from evening into the night. With only basic gear needed, channel cats are a great starter species for kids. Found statewide, the tenacious fighters are a thrill for children.

CRAPPIES

In early spring, find crappies in deeper water near brush and high banks. Use small minnows on a jig no larger than 1/8 ounce. The fish are not very active, so try to keep the bait still and allow the minnow to work. Change depths to locate fish. As the spring moves on, the fish will seek shallow water.

Crappies gather early in the spring before spawning in quick-warming bays. Use a 1/32 to 1/64 ounce jig near shore.

As the spawn begins, fish shallow waters, usually 2 to 3 feet deep, although they can be found up to 6 feet deep. Look for habitat nearby, like armored banks, stickups, brush, dam faces, fishing jetties, rock reefs or vegetation. Crappies will be nearby. The presentation should be strictly a jig and bobber technique. Try different colored jigs to see what's working. Favorite colors are red and white, and yellow and white. Set the bobber 12 to 18 inches above the bait. Add a small split shot, if necessary. Use an extremely slow retrieve. Fishing is better without a minnow. Use a 1/32 or 1/16 ounce jig. If using a hair jig, try trimming the hair a little. Crappies will defend an area and are more spread out than bluegills.

After the spawn and into the summer, look for crappies suspended in deeper open water, near structure, hanging just above the cooler water below the thermocline. To find fish, drift or troll slowly with a small minnow or artificial bait set 8- to 10 feet down either under a slip bobber or tight-lined. Add a small spinner if the bite is slow. This is the time to use a two jig technique, 1 to 4 feet above the other, to cover two depths.



WALLEYE

In the Mississippi River from *January to March*, walleye fishing is done in tail waters below locks and dams vertical jigging leadheads or twister or paddle tails, or a jig and minnow. Fish swift waters but don't anchor to avoid interfering with other anglers. It is a simple way of fishing but may be difficult for novices.

In spring and early summer, troll wing dams with night crawlers, artificial worms, three-way rigs with half of a night crawler, or toss crankbaits off dam faces. Stay on the top side and drop the three-way on the bottom. Walleyes will be on the bottom. Tip the hook with worms or use leeches or minnows in cool water. Troll medium diving crankbaits parallel to wing dams. The tip of wing dams are most productive.

TIP: Increase your odds by making sure the bait is on the bottom to catch walleye.

On interior streams in early spring, look for walleyes in deeper holes, sand pit areas or deep bends. As water warms, they move to shallows below riffles and feed early mornings, especially in clear water. Later, they stay deep until early evening. Use night crawlers, crankbaits or a jig no larger than 1/4 ounce.

LAKES

During the spawn in *late March and early to mid-April* when water temps are 45 to 50 degrees, walleyes are found in 2 to 5 feet depths near rocky shorelines, where the wind is blowing into or across, like the face of a dam. Walleye are sensitive to light. The prime feeding time is the last hour of daylight and into the night.

Use 1/16 to 1/8 ounce jigs or heavier in current, 4- to 8-pound test line and a medium weight rod. For jig colors, chartreuse or pink head with a white twister tail body work well. A shallow running crankbait 3 to 5 inches long is a good choice. A jig and minnow is also popular. Use a slow approach either with a slip bobber or deadline and let it get picked up.

After the spawn, walleyes move to 4 to 10 feet of water and begin to actively feed around *mid-May*. Back trolling or drifting with live bait rigs with night crawlers or leeches works well. June can be the best month for walleye fishing. Walleyes school in 10 to 20 feet of water. Troll or drift a jig and minnow, or pull a crankbait. If the bite is slow, change speeds to entice a strike. If water clarity is poor, go with brighter colors. Add a rattle to help the predator locate the bait. In clear water, use white or silver. Fish old roadbeds and rock reefs. By summer, try the points and drop-offs into old creek channels. After





THE BIG DEAL

Lake Rathbun is returning to form with two good year classes of crappies. The 2007 year class is the largest in the past 15 years, providing excellent numbers of 8- to 10-inch fish, with most measuring 9 inches. The 2006 year class is significant and will be larger in size than the 2007 year class. While not as plentiful, there are 14-inch crappies available.

The third week of May is peak for fishing if water levels are stable. Fish along flooded vegetation.

Twelve Mile Lake is hitting its peak after a major 2006 renovation. Fishing is excellent for crappies up to 10 inches, bluegill fishing is phenomenal. Walleyes, largemouth bass and channel catfish are also excellent.

Yellow Perch at **Spirit Lake** had a record harvest in 2009, primarily from the 2007 year class, which is measuring 9-plus inches. There is another strong year class from 2008 coming on, but they are smaller, so some sorting is necessary for larger fish.

Perch are a schooling fish. Look for boat flotillas on the lake to indicate hotspots. Yellow perch fishing is kid-friendly. It is also a social fishery, as anglers do not get disturbed if others fish nearby.

Yellow Bass at **Clear Lake** provide a harvest of 50,000 to 200,000 fish annually. A short lived, prolific spawner, the species consistently replaces the harvest. In 2010, yellow bass will measure 8 to 9 inches in Clear Lake. An expanding fishery on East Okoboji Lake provides good fishing from mid- to late-summer.

Storm Lake walleye fishing has improved tremendously over the decade, peaking recently with a record harvest. A protected slot requires releasing all 17- to 22-inch walleyes alive. Fishing starts in April tossing jigs from shore. May and June provide the best action trolling shad raps which also produces 12- to 17-inch white bass.

Walleyes in the Mississippi River: Find higher than average spawns in pools at Bellevue, Guttenberg and Dubuque. Anglers should see lots of walleyes at 20 inches and an occasional sauger up to 17 inches with huge numbers of smaller fish. Walleye populations larger than 27-inches are increasing. Fishing will be excellent in Iowa's southern Mississippi River pools as well.

Walleyes in northeast interior rivers were tripled in 2000, when DNR staff stocked 2- to 3-inch fingerlings. The populations are holding steady with lots of trophy sized fish. Catching a 25-inch or 30-inch walleye is not uncommon.

Farm Ponds: Mainly scattered across southern Iowa, farm ponds are the best places for exceptional largemouth bass and bluegill fishing. The small ponds heat up first, stimulating good fishing before large lakes. More bass and bluegill that qualify for the DNR's big fish registry come from ponds than all other sources combined. Most ponds are on private land and permission must be obtained to fish, but the Shimek State Forest ponds in Van Buren County are noted for their access and opportunities.

dark, work shorelines with crankbaits. Use a small lip with a rattle—nothing deep—and fish aggressively.

TIP: Don't be afraid to try different size jig bodies, from a 3-inch to a 2-inch body. Doing so may trigger a strike by moving to a size of prey they are seeking.

FLATHEAD CATFISH

Look for current breaks, log jams and areas below falls. Flatheads here will be looking for prey, so use live bait—bullheads are a flathead favorite—and bait up to 12 inches is not too big for trophy-sized fish. Generally, 5- to 8-inch chubs or bullheads are used to catch eating-size flatheads. Most fishing is done from dusk into the night, but they can be caught during the day, especially in cloudy water.

WIPERS

An open water species not likely caught from shore, use spoons, spinners, crankbaits or jigs—something with flash—to mimic shad, a primary food source. Wipers are anywhere from just below the surface to 15 feet deep. Likely chased by wipers, watch for shad breaking the surface or troll crankbaits away from shore to find schools.

Wiper or white bass? Wipers are thicker-bodied and have two tooth patches resembling half moons on their tongue (white bass have one) after reaching 16 inches. Their horizontal lines may be broken on the back half of the body.

NORTHERN PIKE

These aggressive, coldwater fish are found mainly in natural lakes, northern interior streams and the upper Mississippi River, and spring is the top time to catch them. Pike move along shoreline, looking to spawn right after ice out. Look for inflow from a slough or marsh in the backwaters of the Mississippi or Wapsipinicon rivers. Fish during mid-day when the water is warmest. Use live bait, like a large minnow, golden shiner, sucker or chub under a slip bobber and cast into weedy areas. Large spinners, spoons or crankbaits are also effective. Use fairly heavy-duty tackle such as a large rod, steel leader and heavy line.

After the spawn, pike are active along weed lines. Use active lures—spoons, spinners or plastic baits. On rivers, use the same techniques in areas leading from backwaters out to the river.

In summer, look for the coolest water in lakes and

streams. In streams, fish along tile line outlets or in northeast Iowa, confluences of trout streams to rivers. By mid-summer, pike seek cool water where tributaries enter larger streams. A good location would be where trout streams enter larger rivers or near underwater springs. These areas can easily be fished from shore. Use frogs, spoons or crankbaits.

TIP: Many shallow, natural lakes in northern Iowa have hot action for pike.

SMALLMOUTH BASS

Fishing starts right after ice out when fish gather over rock reefs on calm, sunny days. Use a small jig and make long casts to the reef. They spook easy so don't get too close. The prime time for smallies is around Memorial Day when they spawn. Look for rock areas or reefs. Males are aggressive. Throw plastics or jerk baits.

In June, use live bait, like night crawlers or leeches. Crawdads or crawdad lures work well, too. The fish will be near rock reefs so either back troll or anchor and fish with a slip bobber. Smallmouth use weeds as cover mid- to late-June through July. Pull a jig through weeds or run a crankbait along the outside. In early mornings and evenings, they chase minnows or young fry to the surface, making surface lures attractive.

In streams, May and June is the time to use inline spinners, casting to rip rap or rocky points with current or into riffles. June to August, smallmouth move to deep river holes if water levels drop. Fishing can be difficult at that time.

If stream fishing smallmouth in the summer and





fall, look for backwaters, rock or gravel, limestone outcroppings or any riffle with a back eddy. Use a spinner or crawdad lure, and if the water is deep enough, add a crankbait. Smallmouth bass caught in streams are generally plentiful, yet smaller in size, although fish up to 18 inches are available. Use smaller tackle, 6- to 8-pound test line, with a medium action rod. Float the stream, wade or both.

TIP: Use a 1/8 ounce black-bodied jig.

YELLOW PERCH

While perch spawn at the same time as walleyes, they are inactive in the spring. Perch fishing starts in mid-summer through the fall, especially September and October, and winter. They feed just off the bottom on insects that hatch and rise, bloodworms and small fish. Keep bait within one foot from the bottom. Use small jigging spoons, tube jigs or mini-jigs tipped with a couple of wax worms or silver wigglers, fished vertically over the side of the boat.

Look for boat flotillas anchored up. Once perch are located, you can catch a lot in a short time. Use light equipment, 4- to 6-pound test line, small lures and bobbers.

While a finicky biter, perch are a good fish for kids—no casting, inexpensive equipment and minimal technical expertise required. Perch are also excellent table fare.

YELLOW BASS

A popular panfish across northwest Iowa, yellow bass are aggressive, hard-fighting fish that are fun to catch. The smallest true bass (largemouth and smallmouth are in the sunfish family), yellow bass are prolific spawners and

available in high densities, so don't feel bad about taking buckets or baskets full of fish. Good to eat with a firm, white flesh and mild flavor, there is no red meat, unlike white bass.

While found in larger, natural lakes, they are not a good fit in smaller southern Iowa impoundments.

Yellow bass spawn around Mother's Day in shallow rocky areas. Use a 1/16 to 1/32 ounce jig. If they are really finicky, downsize to a 1/64 ounce. Small spinners work well. Wade fishing is an effective way to catch lots of fish.

FRESHWATER DRUM

Drum bite all summer long in the Mississippi River. An excellent fish for novices, use a slip sinker, hook and a piece of night crawler. Drum hang just off the current in main channels, side channels, wing dams and tail waters. In summer, fish off wing dams with worms or spinners. Good to eat, drum grow to large sizes and are good fighters. Use similar equipment as smallmouth bass. Plan to keep 8- to 9-inches to eat.

TROUT

The first step should be to pick up a trout guide. Streams are stocked with one-half pound sized rainbow and brook trout April 1 through September, but fish are in streams all year. In winter, there is less fishing pressure and all streams have trout. Many Iowa trout streams boast naturally reproducing wild brown trout and even wild brook trout. Use light tackle and small jigs and tiny hooks. If the stream allows live or scented baits, they are a good option. Bait works well for beginners.

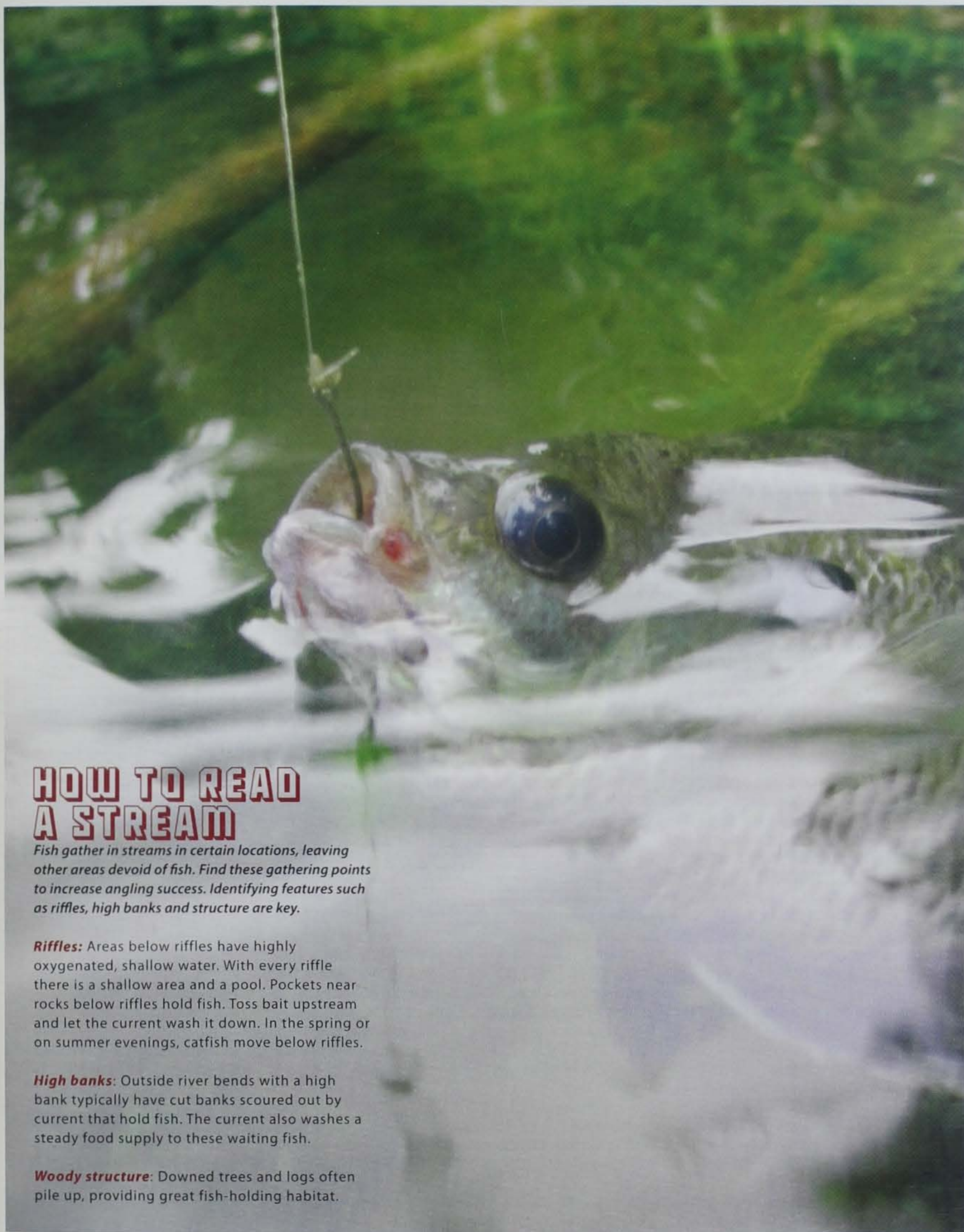
Trout stream clarity often recovers quickly after heavy rains or flooding. Anglers should call ahead to check stream conditions.

Trout streams offer consistent fishing year round. Consider trout fishing in the heat of summer when other fish are not biting.

In June, use a 1/64 ounce white or yellow hair jig and fish bank hides bounced in the riffles and current. Spinners work well through summer, but beware of snags and casting into trees.

An easy time to learn to fly fish is in early March when blue wing olives hatch. In April, the Hendrickson mayfly hatches. As water warms, more hatches occur. Try to fish the riffles a little more with sinking spoons. Look for boulders or half logs in the stream and cast around those.

TIP: Cast upstream, working hole-to-hole going upstream. Approach streams cautiously to avoid spooking trout. Try to blend in to the surroundings.



HOW TO READ A STREAM

Fish gather in streams in certain locations, leaving other areas devoid of fish. Find these gathering points to increase angling success. Identifying features such as riffles, high banks and structure are key.

Riffles: Areas below riffles have highly oxygenated, shallow water. With every riffle there is a shallow area and a pool. Pockets near rocks below riffles hold fish. Toss bait upstream and let the current wash it down. In the spring or on summer evenings, catfish move below riffles.

High banks: Outside river bends with a high bank typically have cut banks scoured out by current that hold fish. The current also washes a steady food supply to these waiting fish.

Woody structure: Downed trees and logs often pile up, providing great fish-holding habitat.



FAMILY FRIENDLY FISHERIES

These waters feature easy access, bathrooms, wooden fishing piers and other amenities made for memorable getaways.

Lake of the Hills, near Davenport, has abundant bluegill populations. Kid-friendly with a snack shop, parking lot, beach, fishing pier, great shoreline access and other features.

Kent Park Lake, near Iowa City, is a small lake with excellent bluegill and channel catfish populations. Shore access is excellent, with a beach, hiking trails, playgrounds and conservation education center to explore.

Three Mile Lake, near Creston, has a playground, campground, fishing jetties and bathrooms. It holds strong bluegill and bass populations, as well as crappie and channel catfish.

Lake Anita, near Atlantic, has excellent bluegill, crappie, bass and catfish populations. A nice playground, good shore access, large campground, restrooms, trails and fishing jetties make for fun-filled weekends.

Lake Pahoja, Lyon County, near Sioux Falls, S.D., is a small impoundment with lots of easy-to-catch bluegills and crappies. A playground, beach, bike trails, boat and paddle boat rental and campground will keep families active for days.

Beeds Lake, near Hampton, has lots of bluegills and crappies, good access, a causeway, campground, bait for sale and boats for rent. The nice largemouth bass populations and good numbers of catfish will keep rods and reels in action.

Swan Lake, near Carroll, has large populations of bluegills and crappies. A fish house, fishing jetties, picnic shelters, camping, beach and nature center with bison will keep the entire family busy.

The Turkey River at the Big Spring Trout Hatchery near Elkader is stocked three times per week from April through September. The hatchery has a public fishing pond at the entrance. For those 12 years old and younger, a kids-only trout pond is a must.

A new handicap accessible site at **Sny Magill Trout Stream**, near McGregor, was completed last fall. **Decorah's Trout Run**

has a recreation trail parallel to the stream with four universally accessible sites. **Lake Meyer** in Winneshiek County has a fishing jetty and universally accessible dock and a trail around half the lake with bathrooms and playground. Other family-friendly areas in northeast Iowa include **Bailey's Ford**, **Swiss Valley Nature Center**, **Richmond Springs** and **Casey Lake**.

The Mississippi River has new shoreline access areas near **Harpers Ferry** and **Nobles Island**. **Guttenberg's sidewalk access** below the lock and dam is next to the public visitor aquarium. **Mud Lake Park**, in Dubuque County, has sidewalk shoreline access.

Mitchell Lake, at Waterloo's Riverview Recreation Area, underwent a major improvement to greatly enhance shoreline access to the 50-acre lake.

TIPS FOR FISHING WITH KIDS

- Bring spare fishing rods rigged up so if one gets tangled, there is a replacement at the ready.
- Kids can have short attention spans. Bring things like books or toys if they get bored.
- Don't plan all-day trips. Keep it at three hours or less.
- Use bobbers for kid-friendly fishing.
- If shore fishing, find routes that avoid head-high grass.
- Ensure equipment is child-sized, but avoid ineffective toy fishing rods. Kids strong enough to handle regular sized rods will have less frustration and better success.
- Pack along sunblock and mosquito spray.
- At home, hone casting skills with a practice plug on the fishing rod.
- Species that are easier to catch for kids include bluegills, suckers, white bass, drum and redhorse.
- Take lots of photos to remember the day. Put them around the house for the kids to see and entice more fishing trips.
- Bring home those 5- to 6-inch bluegills for supper. Your neighbor may not think much of it, but your child will be proud.
- Choose a nice day so everyone is comfortable. Fit the fishing activity to the attention span of the child.
- Have a Plan B if the fish are not biting to do something else outdoors.
- Bring plenty of snacks that kids can look forward to.
- Target a species that is readily biting. Bluegills in late May through mid-June. Catfish after ice out.
- Be flexible on species. If one is not biting, switch to another.



FISHING HOLE FINDER

SOUTHWEST

- 1) LAKE ANITA
- 2) LAKE AHQUABI
- 3) BIG CREEK
- 4) HICKORY GROVE
- 5) TWELVE MILE LAKE
- 6) THREE MILE LAKE
- 7) FOGLE LAKE
- 8) HACKLEBARNEY EAST
- 9) GRADE LAKE
- 10) LAKE OF THREE FIRES
- 11) LAKE ICARIA
- 12) WEST LAKE OSCEOLA
- 13) DON WILLIAMS LAKE
- 14) VIKING LAKE
- 15) PRAIRIE ROSE LAKE
- 16) DESOTO BEND
- 17) HOOPER WILDLIFE AREA
- 18) NINE EAGLES LAKE
- 19) LAKE MANAWA
- 20) ROBERTS CREEK
- 21) LAKE RED ROCK
- 22) WINDMILL LAKE
- 23) EAST LENNOX
- 24) SAYLORVILLE

NORTHWEST

- 25) WEST OKOBOJI LAKE
- 26) EAST OKOBOJI LAKE
- 27) SPIRIT LAKE
- 28) STORM LAKE
- 29) BLACK HAWK LAKE
- 30) CLEAR LAKE
- 31) SILVER LAKE
(DICKINSON)
- 32) LOST ISLAND LAKE
- 33) BRUSHY CREEK LAKE
- 34) ARROWHEAD LAKE
- 58) LOWER PINE LAKE
- 59) BRIGGS WOODS LAKE
- 60) NELSON PARK LAKE
- 61) BEEDS LAKE
- 62) LITTLE WALL LAKE
- 63) LAKE PAHOJA
- 64) MILL CREEK
- 65) CENTER LAKE
- 66) FIVE ISLAND LAKE
- 67) INGHAM LAKE
- 68) SWAN LAKE
- 69) BROWNS LAKE
- 70) RICE LAKE

SOUTHEAST

- 35) BELVA DEER LAKE
- 36) LAKE KEOMAH
- 37) LAKE GEODE
- 38) LOWER ALBIA
RESERVOIR
- 39) LAKE SUGEMA
- 40) LAKE MIAMI
- 41) BIG TIMBER (POOL 17)
- 42) LAKE MACBRIDE
- 43) DIAMOND LAKE
- 44) LAKE RATHBUN
- 45) CORALVILLE RESERVOIR
- 46) LAKE OF THE HILLS
- 47) LAKE ODESSA
- 48) PLEASANT CREEK LAKE
- 72) KENT PARK LAKE

NORTHEAST

- 49) LAKE HENDRICKS
- 50) LAKE MEYER
- 51) CASEY LAKE
- 52) SOUTH PRAIRIE LAKE
- 53) SILVER LAKE
(DELAWARE)

54) VOLGA LAKE

- 55) LAKE DELHI
- 56) MITCHELL LAKE
- 57) BRINKER LAKE
- 71) MARTENS LAKE
- 72) BIG SPRING TROUT
HATCHERY

TROUT STREAMS

- T1) SWISS VALLEY
- T2) RICHMOND SPRINGS
- T3) LITTLE TURKEY
- T4) SNY MAGILL
- T5) BLOODY RUN
- T6) TURTLE CREEK
- T7) WATERLOO CREEK
- T8) BEAR CREEK
- T9) GLOVER CREEK
- T10) OTTER CREEK



DNR Conservation Officer Burt Walters not only patrols the waters of the Mississippi River to aid boaters, but works to protect declining rattlesnake populations in his native McGregor area of northeast Iowa.

Snake Sentry

Officer Works To Halt Rattlesnake Decline

Although Timber Rattler Populations Have Dropped By More Than Half In 30 Years—***The Venomous Reptiles May Offer More Public Benefit Than Realized***

STORY AND PHOTOS BY LOWELL WASHBURN

McGREGOR—It's the end of October and air and ground temperatures are cooling rapidly. For the cold-blooded reptiles that inhabit the rugged bluff country of northeastern Iowa, it's time to head for underground denning areas.


Prowling the winding back roads of Clayton County, DNR conservation officer Burt Walters is observing the slow speed migration. Today's skies are mostly clear, a somewhat rare event this autumn, and snakes are on the move. So far this morning, Walters has spotted more than 50 snakes—mostly red-bellied, little brown and a handful of garters, all enroute to the safety of limestone fissures that will offer winter protection.

But the species Walters hopes most to encounter is the timber rattlesnake, a formidable creature most folks choose to avoid. Walters is a native of the McGregor hill country, and has been actively studying these intriguing pit vipers for more than 20 years. Alarmed by the rattlesnake's dramatic decline, he conducts an ongoing crusade aimed at educating the public on the biological importance of what he considers to be a desirable member of the Iowa outdoors.

"It's alarming," says Walters. "At the denning sites that I know of, rattlesnake populations have been reduced by at least 50 percent since the 1980s and are still declining."

The scenario is the result of a complex chain of events, and no single factor is solely responsible for the decline.





Make a Difference

If you are lucky enough to see a rattler, observe it, then walk away. Timber rattlesnakes are surprisingly calm when encountered in the wild. Many sit motionless hoping to avoid detection or they may hide under a rock or crevice without rattling, unlike other species which are more apt to stand their ground. As a last resort of evasion, rattlesnakes elevate the tail high in the air making them extremely obvious. The last fatality from a timber rattlesnake in Iowa was in the 1800s. For more on Iowa snakes visit www.herpnet.net.



THE
SNAKES
OF
IOWA

By J. L. Chittenden & B. M. Baker



THE IOWA DEPARTMENT OF NATURAL RESOURCES
NATURAL SCIENCE DIVISION
DES MOINES, IOWA 50319
WWW.IOWADNR.GOV

Learn more about Iowa's snakes
with **The Snakes of Iowa**, a 6-page
color guide for \$4 available
at www.iowanaturestore.com
or 1-866-410-0230



Stop Poachers

Help protect rattlesnake den sites by reporting poachers to the *Turn-In-Poachers Hotline* at 1-800-532-2020. Poachers are thieves who are stealing our fish and wildlife resources. You, as a concerned reader, can take an active role in helping the DNR put these wildlife thieves out of business.

Officer Burt Walters captures a snake at Guttenberg City Park where onlookers kept it at bay and notified him. He released the snake at a den site. Too often killed on sight, the onlookers did the right thing, helping to save a species in decline. "Incidents like that give me hope," he says.

Habitat destruction is listed among the culprits, says Walters. As more and more homes are built atop scenic bluffs and ridgelines, there are less and less places for timber rattlers and other wildlife to live. Also included among habitats in decline are the so called "goat prairies" that once flourished along the near vertical slopes of bluffland ridges and are now vanishing as cedars and other invasive shrubs take over. Historically, landowners would set fire to the goat prairies, hoping the flames would destroy snakes, says Walters. Quite to the contrary, the fires enhanced prairie growth which attracted native mice, voles and insects which provided an ample food source for rattlers, skinks and other Iowa herpetiles.

There is also a problem with snake poachers. In spite of being legally protected, rattlesnakes are still being harvested by poachers who supply the exotic pet trade—mostly for people who still think it's cool to have something dangerous in their home.

"Collecting can have a very serious and rapid impact on populations," says Walters. "Timber rattlers have a low reproductive potential and it takes a male anywhere from 5 to 7 years to mature. It takes a female from 7 to 11 years to mature and after that she'll only bear young every third year. When people take snakes from communal den sites it doesn't take long to have an effect."

Those effects became painfully apparent this spring as Walters inspected an Allamakee County den site. Trails leading to the site had been marked with strips

of blue plastic flagging, certain evidence that rattlesnake poachers had already paid a visit to the den. Look as he might, Walters could only find two surviving rattlesnakes at a site that should have held dozens.

Although scenes like that are disheartening, Walters hasn't given up the crusade to educate Iowans on the virtues of this venomous reptile. Since the late 1980s, he's traveled up and down the Mississippi River showing live reptiles and giving "snake talks" to countless school groups (more than 65 on the best years), service and conservation organizations and just about anyone else willing to listen to his message. One of the biggest days, he says, is the annual EMS Venomous Bite Day. Held at Calmar, the public program never fails to pack the house.

"One of the things I stress is that timber rattlesnakes just want to be left alone," says Walters. "They are not highly aggressive, and most people will never see one. They are, in fact, a very valuable and desirable member of the wildlife community. Their venom is currently being used in experiments with heart disease, arthritis and other human ailments. At this point, their benefits to humans may even surpass what people currently realize."

There are encouraging signs that the education is beginning to pay dividends. One of those was the overwhelming public support for legislation that has now protected timber rattlesnakes in their northeastern Iowa strongholds. By contrast, similar legislation aimed at protecting remnant populations of timber rattlers in Central Iowa failed miserably due to profound lack of public support.

Earlier this fall, Walters was notified that a 4-foot timber rattler was causing something of a stir among users of the Guttenberg City Park. When he arrived sometime later, the hefty reptile was being held at bay by a group of onlookers. Walters promptly captured the snake and safely returned it to a nearby den site.

"Incidents like that give me hope," says Walters. "Until recently, people would have immediately killed that snake on the spot. Today, I think more and more people are beginning to realize that that isn't the thing to do anymore and that timber rattlers are a natural part of the wildlife community." 🐍

Get Involved

Readers can help protect fragile species, shorebirds, raptors, songbirds, small mammals and bats, amphibians, reptiles, fish, and butterflies; and support landscape and ecosystem management, statewide wildlife monitoring and species reintroduction. This tax season, donate to the DNR non-game fund. Every cent is given to the Wildlife Diversity Program without any administrative or processing cost. The gift is tax deductible on the following year's tax form. Still generally called the Chickadee Check-off, today's Iowa 1040 tax form refers to the term "Fish/Wildlife" fund on a line near the end of the tax form.



Spring Ritual

STORY AND PHOTOS BY LOWELL WASHBURN




There is no mistaking that spring is on its way. Iowa's hardwood forests have already begun echoing with the distinctive, staccato gobble of the eastern wild turkey. Blood stirring and primitive, it is a sound like no other. For hunters, the deep resonant rattling is a woodland call to arms. It is an annual summons that cannot be denied.

As is the case with any world class concert, choice seats do not come easy. Obtaining your ticket will mean losing some sleep and may even include a night on the

ground. But once the show begins, these petty sacrifices will seem small indeed.

In reality, spring gobbling was not designed for entertainment. For mature toms, it is serious business and the most effective means of attracting potential female mates. Clear mornings incite peak gobbling activity. The most aggressive toms begin advertising their presence as the very first hints of light begin to color the eastern sky. As dawn approaches, the gobbling intensifies as the symphony is joined by birds from surrounding



LONELY HEARTS CLUB—Etched against the backdrop of a spectacular April sunrise, a group of five gobblers simultaneously sounds off in hopes of attracting nearby hens.

ridgetops. Gobbling often peaks by sunrise and may cease altogether as hens fly down to assemble around vigorously strutting males. Strutting is most likely to occur in forest openings or along field edges where displaying males feel most visible.

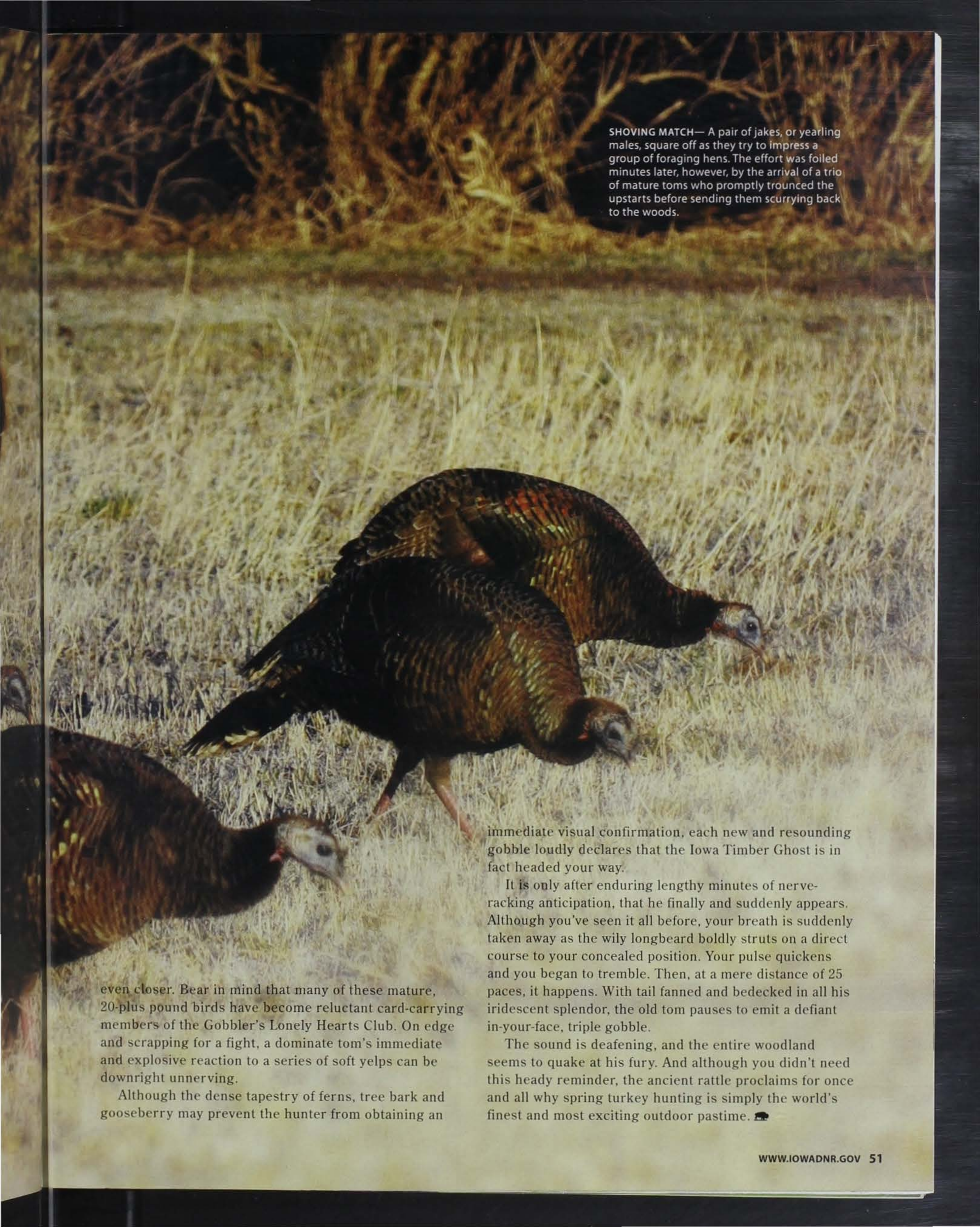
During the early segment of the spring ritual March through mid-April, the woodland concert is heavily punctuated by the cutts, cackles and incessant raspy yelpings of inquisitive hens. By the end of April, most hens will have become more subdued as they engage in

nest site selection or commence laying eggs.

Once a majority of those hens have begun to incubate, hunters still in the woods will frequently encounter a distinct and final spike in the annual gobbling cycle. By now the forest will have achieved full canopy. For hunters, the lush greenery provides a much needed catalyst for gobbler encounters that give new meaning to the phrase “up close and personal.”

If conditions are just right, gobbling toms can now be approached to within 40 or 50 yards—sometimes





SHOVING MATCH— A pair of jakes, or yearling males, square off as they try to impress a group of foraging hens. The effort was foiled minutes later, however, by the arrival of a trio of mature toms who promptly trounced the upstarts before sending them scurrying back to the woods.

even closer. Bear in mind that many of these mature, 20-plus pound birds have become reluctant card-carrying members of the Gobbler's Lonely Hearts Club. On edge and scrapping for a fight, a dominate tom's immediate and explosive reaction to a series of soft yelps can be downright unnerving.

Although the dense tapestry of ferns, tree bark and gooseberry may prevent the hunter from obtaining an

immediate visual confirmation, each new and resounding gobble loudly declares that the Iowa Timber Ghost is in fact headed your way.

It is only after enduring lengthy minutes of nerve-racking anticipation, that he finally and suddenly appears. Although you've seen it all before, your breath is suddenly taken away as the wily longbeard boldly struts on a direct course to your concealed position. Your pulse quickens and you began to tremble. Then, at a mere distance of 25 paces, it happens. With tail fanned and bedecked in all his iridescent splendor, the old tom pauses to emit a defiant in-your-face, triple gobble.

The sound is deafening, and the entire woodland seems to quake at his fury. And although you didn't need this heady reminder, the ancient rattle proclaims for once and all why spring turkey hunting is simply the world's finest and most exciting outdoor pastime. 🦃

SPRING RITUAL—A mature gobbler displays before an apparently disinterested hen along the edge of a northeastern Iowa timber.





First Time Turkey Hunt Brings First Time Success

It's always a unique privilege to be on hand when an exuberant first-time hunter returns to camp with their first ever goose, deer or wild turkey. If that hunter happens to be a family member, the moment escalates even higher.

My daughter-in-law, Renee Washburn, is a good example of what I'm talking about. She enjoyed the good fortune of bagging her first gobbler during her first spring turkey hunt. The 3-year-old, 24-pound longbeard was taken in the hardwood timbers near Marquette in northeast Iowa's Clayton County. She was accompanied on the outing by her husband (my son), DNR Conservation Officer Matt Washburn.

"It was an absolute perfect morning, and the gobbling was really loud," she recalls.

"It was still pitch black when we entered the woods, but as soon as it started to get light the birds began to sound off. A big tom flew down right away, but he started walking in the wrong direction. Pretty soon a second turkey began gobbling, and those two birds really started going at each other. It was incredible."

Deciding to take a risk, the hunters cautiously moved closer to the dueling toms. The tactic paid off. Following a series of soft yelps on the call, Renee spotted one of the gobblers coming up the ridge in full strut. Carefully shouldering her 20 gauge shotgun, she took aim and bagged the bird from 25 yards.

"I was really shaking, having trouble breathing, and all that good stuff," she laughed. "That hunt was definitely one of the most exciting things I've done in a long time, and it all happened in such a beautiful part of the state."

Washburn's memories aren't likely to fade anytime soon. She had her bird mounted, and the gobbler now struts above her living room entrance.





When warranted, in this case to reduce bird to power line collisions, *NextEra Energy* takes mitigation efforts—in some cases relocating entire projects. In this case, that wasn't necessary. NextEra hired Haverfield Aviation of Pennsylvania, a specialty aviation firm, to complete the difficult and time-consuming task of installing diverters on wires near trumpeter swan nesting areas in Hancock County.

Saving Our Swans

BY ALAN FOSTER PHOTOS BY TIM ACKARMAN

Neither trumpeter swan 5F1 or his young cygnet saw it coming. The pair were returning to Mallard Marsh in Cerro Gordo County after morning breakfast when tragedy struck. Both most likely died instantly.

Like the double mortality, "tragedy" came in pairs in the form of high winds and unseen obstacles. In this case, a power line.

"It was a windy day in February, not unlike many days up here in wetland country," recalls wildlife biologist Ron Andrews. "That's when the birds get in trouble."

Andrews knows. As leader of the DNR's swan restoration program, he has seen his fair share of success, overseeing the return of swans from just one modern-day Iowa nesting pair in 1998 to 39 this year. He's seen reproduction grow from zero prior to 1998 to more than 100 cygnets this year.

But he's also seen his fair share of setbacks. More than 250 Iowa swans have died. Topping the list of causes, right alongside poaching (57), is collisions with power lines (56). Another 100 died from unknown causes, which likely adds to the

aforementioned tallies.

But one national energy company is taking steps to reduce power line bird mortality. NextEra Energy Resources, which constructed a large wind farm near Crystal Lake in Hancock County, installed bird diverters on power lines in the heart of trumpeter swan nesting territory. The devices—either steel coils or "flappers"—enhance power line visibility.

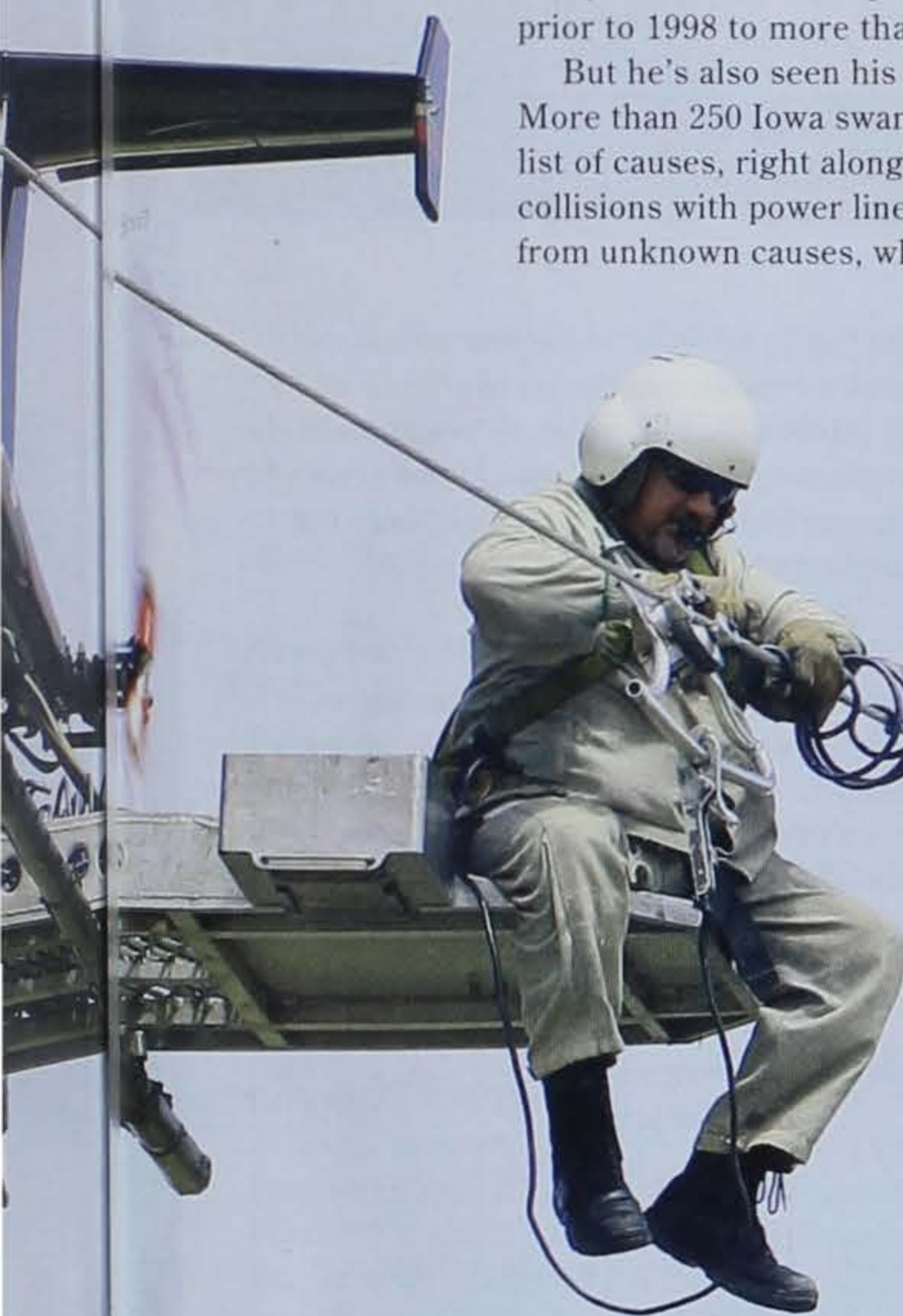
The diverters are installed after the wires are in place, making the process expensive and time consuming. But after reviewing significant research documenting the effectiveness, NextEra was willing to make the investment.

Although not 100 percent effective, "they do reduce power line mortality," says Dave Hoffman, who works alongside Andrews in the restoration program.

"Along with trumpeter swans, the diverters are expected to reduce mortality rates of bald eagles, pelicans, herons, raptors, and to some extent, Canada geese," says Andrews.

"Any large-winged bird tends to be more vulnerable to power line collisions. And diverters are a step in the right direction." 🦢

Power line diverters help protect a variety of large birds.



Eastern Tiger Swallowtail

Butterfly Gardens to Beautify Your Yard

*Low Maintenance Native Plants
Create Habitat and Pleasing Landscapes*

Butterflies aren't just pretty to look at, although that certainly doesn't hurt their general appeal. They play a vital role in the environment as pollinators, which affects the life cycle of not only insects and plants, but also birds and mammals. The environmental benefits of planting a butterfly garden are endless—plus the vibrant plants and flowers will be attractive, easy-care additions to your yard.

WHERE TO PLANT YOUR BUTTERFLY GARDEN

Your garden can be any size you'd like. You can turn your whole yard into a butterfly garden, use just a corner or make a window box. The decision is yours. Wherever you choose to plant your garden, though, has to be a sunny spot. Not only do the plants do better in sunshine, but so do butterflies. Because they're insects, they don't produce their own body heat and must rely on their surroundings. They do best with body temperatures between 82 and 102 degrees Fahrenheit. If too cold or too warm, they aren't able to fly.

NECTAR AND HOST PLANTS

All butterfly gardens need two different kinds of plants: nectar plants and host plants. Nectar plants, obviously, provide nectar, which is the primary food source for

butterflies to sip through their long, tube-like tongue. Host plants, on the other hand, are the main source of food for caterpillars. Butterflies lay eggs on host plants and when the caterpillar emerges, it feeds off the plant. Caterpillars are extremely picky eaters and will only eat a particular kind of plant or die from starvation.

MATCHING BUTTERFLIES TO PLANTS

Because butterflies are particular, only certain plants attract specific butterflies. To know which plants to put in your garden, first decide which kinds of butterflies you'd like to attract. In the table below, you'll find the name of the butterfly and its host plant.

BUTTERFLY	HOST
Monarch	Milkweed
Pipevine Swallowtail	Pipevines
Painted Lady	Hollyhocks
Cabbage White	Garden Nasturtium
Cloudless Sulphur	Wild Senna
Spicebush Swallowtail	Spicebush and Sassafras
Pearl Crescent	Asters
Great Spangled Fritillary	Violet
Grey Hairstreak	Clover



Butterfly Garden along Neal Smith Trail near Saylorville Reservoir, Polk County

For nectar plants, butterflies are attracted to bright colors like yellows, oranges, purples and reds. Try planting butterfly milkweed, cup plant, New England aster, wild bergamot, Joe Pye weed, lupine, purple prairie clover, blazing star, purple coneflower, and black-eyed Susan for a wide variety of brightly colored, nectar plants.

GARDEN EXTRAS

Aside from plants, add large flat stones on the ground. Rocks retain heat much better than plants do, and butterflies like to bask in the sun to raise their body temperatures. Butterflies, particularly males, are also greatly drawn to puddles. Fill a shallow dish with moist sand and dig it into the ground. Add a variety of attractants to entice butterflies like rotting fruit, sugary drinks or even stale beer.

GARDENING DON'TS

Avoid using pesticides in your butterfly garden. Butterflies and caterpillars are extremely fragile and the chemicals will likely kill them. If you have unwanted pests (and be sure they're truly unwanted and not just a hungry caterpillar munching on its host), you can either use natural insecticidal soaps (sparingly and never near a caterpillar or butterfly) or introduce natural predators like ladybugs and spiders.

OTHER GUESTS

Butterflies won't be the only guests who flock to your beautiful garden. Some birds, like the American goldfinch, the state bird of Iowa, like to eat seed heads, and might be spotted perched on your coneflowers. Hummingbirds, like butterflies, eat nectar and will also be attracted to your nectar-bearing flowers.



My Backyard

Give a Living Legacy And Get a Nice Tax Break

Land Donorship and Easements Create
Permanent Protected Public Lands in Your Honor

BY MALLORY GEORGE

NEW VIDEO PUTS FOCUS ON LAND DONATION

If you're looking for another way to learn about land donation, a new video will help.

Agren, Inc., a Carroll company that works on agricultural and environmental issues, recently produced an informational video about the economic and environmental benefits of land conservation through donations.

To hear land donor stories and learn more about state and federal tax incentives, view the video at www.inhf.org/landownermovie/index.html. Also, look for a Landowner's Options book from the Iowa Natural Heritage Foundation at www.inhf.org/landowner.

Land donations ensure the integrity of properties for generations to come, help the environment and provide beneficial tax incentives to donors. In the next 15 years, many of Iowa's acres will change hands, possibly moving away from family ownership.

Landowners have difficult decisions to make about passing their land on to the next generation, often they are concerned about who will care for it and how it will be protected.

The DNR and other agencies, like the Iowa Natural Heritage Foundation (INHF), provide several options for landowners wishing to protect their property. Land gifted to the DNR and INHF will be permanently protected and preserved.

The DNR's goal in land acquisition is to "preserve, conserve and enhance," says Travis Baker with the DNR Realty Services Bureau.

Baker says the donation process is not only environmentally beneficial, but also provides immediate tax benefits to the donor and is economically viable. Both state and federal tax laws reward donors who protect public values like clean water, scenic views and wildlife habitat.

The following qualify donors for Iowa tax credits: conservation easements, land value (through bargain

sales to a conservation entity), and land for conservation, scenic value, open space, outdoor education and/or recreation purposes, or preservation of historically important land or structures.

Easements are common. They include wetland easements, angler and hunter access, trail and portage easements and forest easements to name a few. Ownership of easements is still retained by the property owner.

Qualified donors can get a state tax credit up to 50 percent of the fair market value of the donated real property interest, with a maximum \$100,000. Land donations exceeding the maximum are eligible for an itemized deduction for the remaining value.

So, a landowner could donate land worth \$200,000 and be eligible for a \$100,000 Iowa tax credit. The tax credit can be used to cover state income taxes for up to 20 years or until the full tax is claimed.

The federal tax incentive involves a tax deduction, which reduces the amount of income on which the tax is calculated.

For more information, contact **Heather Jobst**, INHF Land Project Coordinator, at 515-288-1846, ext. 32, or hjobst@inhf.org; or **Travis Baker**, DNR, at 515-281-8068 or Travis.Baker@dnr.iowa.gov.

Venison French Dip Sandwiches

In the home of managing editor Alan Foster, venison French dip sandwiches are requested at all special occasions—by the kids. Best part is, they are so quick and simple.

- | | |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 venison roast or backstrap loin | Pan sear roast and place in crock pot. Add cola, soup mix and any additional seasonings of choice. Cook on low six to seven hours. |
| 1 12-ounce can cola | Slice across the grain. Meanwhile, sauté onions and peppers in 1 tablespoon butter or olive oil. |
| 1 packet dry beefy mushroom or onion soup mix | Place meat on one side of the roll, veggies followed by cheese on the other. Broil on high until cheese is melted and bubbly. Serve with au jus dipping sauce from the crock pot. |
| 1 large onion | |
| 2 green peppers, chunked | |
| 8 slices provolone cheese | |
| 1 package crusty hoagie buns | |





Pheasant breast with raspberry demi-glaze



Chef James Gailey

From breakfast to dinner, Hotel Pattee dishes up traditional favorites along with tempting chef specialties. Start with a simple bruschetta, or dare to sample the bourbon barbecue pork wild wings. Diners will face a tough choice between the 16-ounce cowboy cut ribeye and the pan-seared Irish salmon with sautéed fennel and onions with a garlic cream reduction. Finish with an espressotini martini in the Inter-Urban Lounge before retiring for the night.

Historic Hotel Pattee Dishes Up Midwest Foods With New York Flair

RAISED IN IOWA AND SCHOOLED IN NEW YORK, EXECUTIVE CHEF JAMES GAILEY KNOWS WHAT IOWANS WANT: GREAT FLAVORS AT GOOD PRICES

One of the greatest joys of cooking is plating something that looks and tastes complex but took little time. These recipes epitomize that goal: simple recipes using basic ingredients packed with flavor. Gailey married his Iowa roots with 12 years experience cooking and dining in some of the finest restaurants in Brooklyn and Manhattan, reflected in his menu. He focuses on local products and favorites—like Iowa chops, Midwest beef and walleye. He says the famed Kobe beef has nothing on Iowa beef. "The marbling, color, flavor is better in Iowa than Kobe," he says. "I have never been let down by the products found here."

MARINATED GRILLED PHEASANT WITH RASPBERRY DEMI-GLACÉ

1 pheasant breast

Marinade

2 tablespoons chopped garlic
½ cup canola oil
1 tablespoon lemon zest
1 teaspoon salt
1 teaspoon white pepper
¼ cup water

Mix ingredients and marinate pheasant 2 to 4 hours in refrigerator. Grill over medium heat.

Raspberry demi-glacé

½ pound fresh or frozen raspberries

1 tablespoon shallots
1 teaspoon chopped garlic
1 cup red wine
1 cup beef jus or broth

Sauté shallots and garlic in oil on low heat until soft. Add raspberries. Cook until tender. Add wine and reduce volume by half. Add beef jus. Bring to boil, then reduce on low until sauce thickens.

CAJUN-CRUSTED FISH WITH AVOCADO SEAFOOD SAUCE

Any whitefish will do, but larger fillets like walleye, bass or pike work best.

Cajun crust

1 cup plain bread crumbs

Considered one of the finest boutique hotels in the world, the historic Hotel Pattee has been the focal point in Perry for the better part of the last century. The famed hotel, closed briefly in recent years, is once again the talk of this small community 45 minutes northwest of Des Moines. Enjoy the signature Pattee strip steak au poivre at the adjoining David's Milwaukee Diner, then settle in to one of the 40 individually themed rooms. Make time for the Sunday brunch before you leave.



Cajun-crusted fish with avocado seafood sauce

1 tablespoon cajun seasoning
 ¼ cup parsley
 ¼ cup canola oil

Place dry ingredients in food processor and purée until smooth and incorporated. Slowly add oil until mixture is consistency of sand. Coat one side of fish with bread crumb mixture. Place in oven-safe dish with the half cup white wine and 1 tablespoon butter. Bake at 350° for 10 to 12 minutes until crust starts to brown and fish is flaky.

Avocado seafood sauce

1 ripe avocado
 1 cup seafood base/bouillon
 (available in most grocery stores)

1 teaspoon chopped garlic
 2 cups water
 salt and pepper to taste

Place all ingredients in food processor. Blend until smooth. Do not heat the sauce. It should be served cold.

Check out www.hotelpattee.com for room rates, various packages and deals, special events and other amenities.



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Sunday Brunch Buffet 10:30 a.m.-2 p.m.

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No Sunday evening dining

LOUNGE

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WESTERN CHORUS FROG (*Pseudacris triseriata*)

No spring thaw is complete without the creeee-eee-eee-eeek call of the western chorus frog (think running a finger across the teeth of a comb). A harbinger of spring, it is one of the first frogs to sing, often before the last snow has disappeared.

COOL FACTS

Chorus frogs are one of the smallest frogs around, usually less than an 1.5 inches long. They do not drink water; rather, they absorb it through their skin. Unlike other amphibians, they do not hibernate in water. They hibernate on land beneath logs and leaf litter. Frogs are amphibians, the root "amphibia" means double life. They spend half their life in water, half on land, metamorphosing from a water-breathing juvenile to an air-breathing adult.



actual size

CAN YOU HEAR ME NOW

While both males and females sing, the male has a distinct call to attract mates. Choruses can be heard from as far as a half-mile away. They are incessant, calling as often as 18 to 20 times a minute, depending on temperature. The warmer the weather, the more frequent the calls.



HEED MY WORDS

Western chorus frogs are considered an indicator species. Physical or behavioral changes at either the larval or adult stage, or a reduction in breeding success, could indicate the presence of pollution or other toxic substances.

TOUGH LOVE

Amphibians love water and must lay their eggs there. Female chorus frogs lay an egg mass on underwater grass or twigs, the male fertilizes them, and the two go off separately to the nearby lake, marsh or woods to live alone. Eggs hatch in a few days, depending on the sun's warming of shallow water. The tiny tadpoles, parentless, are left to fend for themselves.

GET INVOLVED

Amphibians are declining globally and are particularly susceptible to changes in water quality. You can help by volunteering to monitor frog and toad populations in our wetlands. The Iowa DNR is currently looking for new volunteers to adopt and run a frog and toad call survey route. Surveys start April 1 and entail driving a 15-mile route at night three times during the summer and recording results. For more information visit www.iowadnr.gov/wildlife/diversity/frog_toad.html. To check route availability, contact Stephanie Shepherd at (515) 432-2823 ext. 102.

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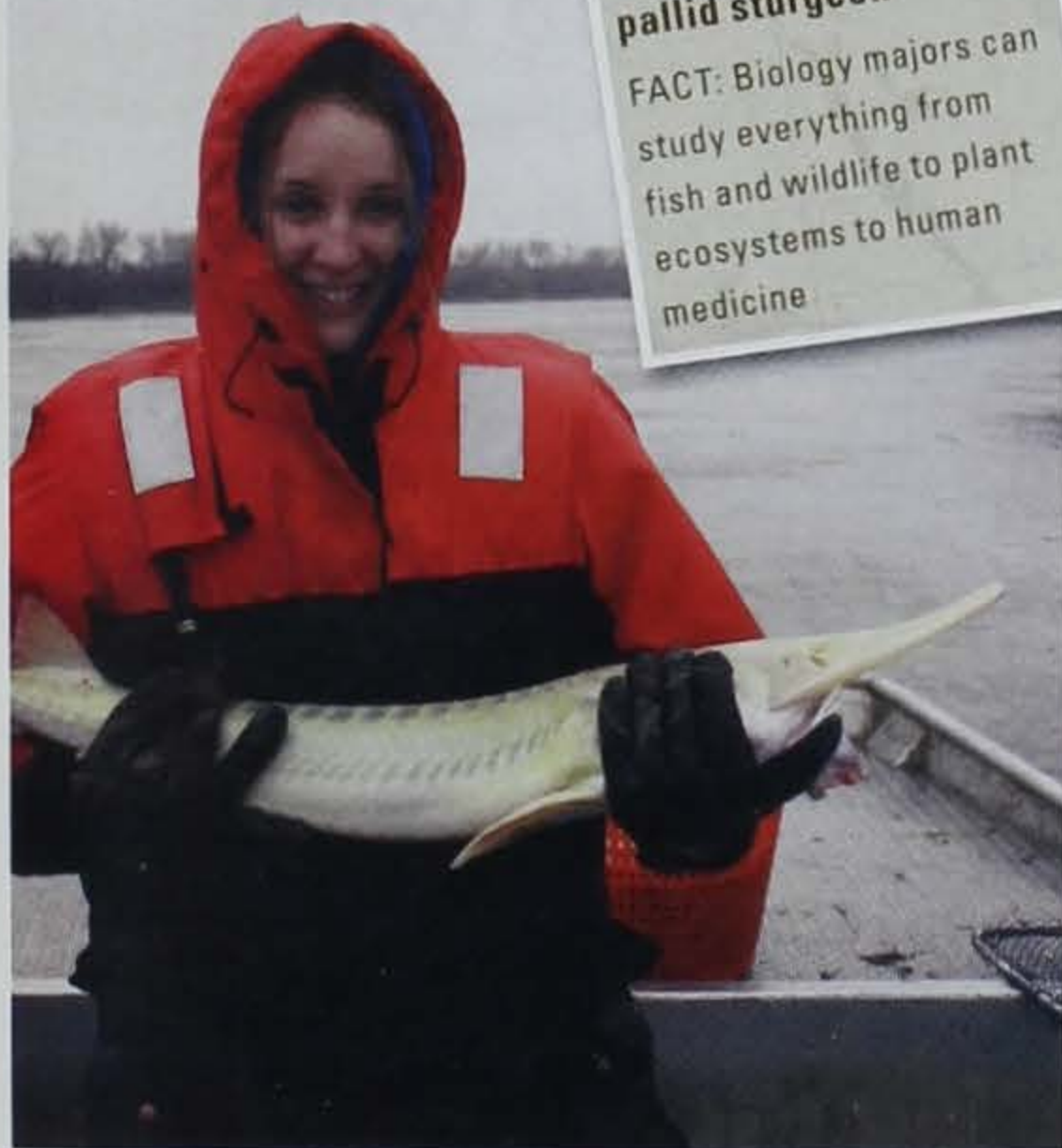
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**Megan holding a
pallid sturgeon**

FACT: Biology majors can study everything from fish and wildlife to plant ecosystems to human medicine

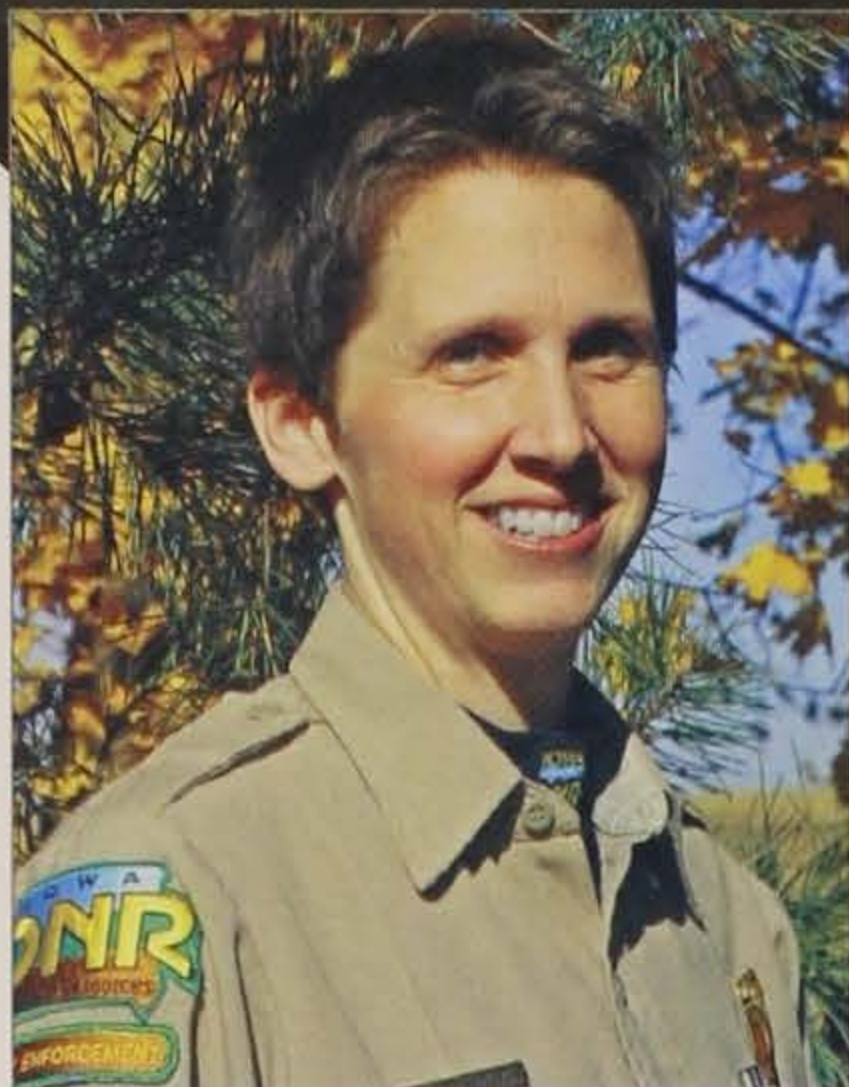
After a snorkeling trip during her freshman year of high school, Megan Thul thought that she might like to study fish. As a Biology student at Iowa State University, she was convinced. With the help of the College of Agriculture and Life Sciences, Megan had the opportunity to study pallid sturgeon in the Missouri River. She worked to re-establish this endangered native species. With this experience on her resume, Megan hopes to begin her career on the water.

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Warden's Diary

BY ERIKA BILLERBECK PHOTO BY CLAY SMITH



Erika Billerbeck is the fourth officer to write Warden's Diary, taking over for Chuck Humeston, who retired from the DNR. She lives in Johnson County and began her career in 2000.

Myra

Almost everyone is familiar with the feeling. The feeling that settles over you the moment something goes wrong and you know there is absolutely nothing you can do to reverse the course.

I experienced that all-too-familiar sensation while patrolling the Hawkeye Wildlife Area in Johnson County not too long ago. Along the south end of the wildlife area, there is a persistently soft, muddy section of road. I was tooling along (ironically on the lookout for off-roaders thrill-riding through the muddy fields) when I saw a giant mud hole on the road in front of me. I had to make a quick decision—go through the hole or attempt to cross the ruts to the good side of the road. I decided to try to cross the ruts. It was a bad decision.

It was a Sunday, late afternoon. I was six months pregnant and nowhere close to a bathroom when I felt the truck sink deep into the ruts and slowly squelch to a stop. My first thought was, "Who will I find to come and pull me out on a Sunday?" My second thought was, "My bladder is very small," and my third thought was, "It would be so nice to work in an office."

After making several embarrassing telephone calls, I finally found a DNR wildlife employee who would be able to come to my rescue within the hour. So there I sat feeling sorry for myself, suffering a swift kick to the bladder every now and then from my baby, when my cell phone rang.

An elderly woman by the name of Myra was calling to report something that her grandson had witnessed below the dam at the Burlington Street bridge. I talked with her for a while about her concern, and when I was about to hang up, she told me that when she heard my name she

was so happy to see that a woman could now be a game warden. Myra told me that growing up in Minnesota, the one thing she really wanted was to become a game warden. She was familiar with the warden in her county and always looked up to him and the work he did. Myra loved the outdoors and had many good memories of

The last thing she wanted to do was to attend a camp with a bunch of boys. She tossed the letter into the garbage and, with that, her dream of becoming a game warden died.

fishing with her father. One day she saw an advertisement in the back of one of her father's magazines that asked, "Do you want to be a game warden?" Myra excitedly sent a letter away to the address given and, several weeks later, received a response. Then her voice dropped as she told me that the letter read, "Dear Myron."

"They thought I was a boy," Myra said with a sense of disappointment drenching her words. The letter went on to invite Myron to attend an outdoor adventure summer camp. The last thing she wanted to do was to attend a camp with a bunch of boys. She tossed the letter into the garbage and, with that, her dream of becoming a game warden died. Myra said she knew that a woman would probably never be considered for a warden's job, but her hopes had soared during the days she had waited for a response from the magazine. She congratulated me for having the guts to go into the field and whispered, "If I could live my life again, that is what I would do."

After I hung up, I sat in my truck for a while in silence. Myra's words continued to reverberate in my head. I felt ashamed that not twenty minutes earlier, I'd been cursing my job and wishing I had just stayed home. It never occurred to me as I went through college that I wouldn't be able to do absolutely anything that I wanted to do with my life. I couldn't imagine wanting something so badly, but knowing deep down that because I was born Erika instead of Eric, I wouldn't be able to achieve it. That is not to say that there still aren't challenges to being a female in a typically male profession, and not to say there still aren't improvements to be made in attitudes and efforts toward equality. We have come a long way from the days when Myra was young, but I will never forget her story and the sincerity with which she told it to me.

Things didn't seem quite as bad as I continued to wait for my rescue. I didn't even get mad as I watched a few old pickups (probably the same ones I was

initially looking for), drive toward my truck, figure out who I was and the situation I was in before doing a quick 35-point turn on the muddy road and high-tailing it back in the direction they came. I just felt lucky—lucky that I had choices when I was looking for a career to enter, lucky that I have a job when so many others are facing layoffs and job losses, lucky that I was stuck in a big, muddy rut in the middle of a dirt road in the middle of nowhere, six months pregnant and far from a bathroom. 🐾

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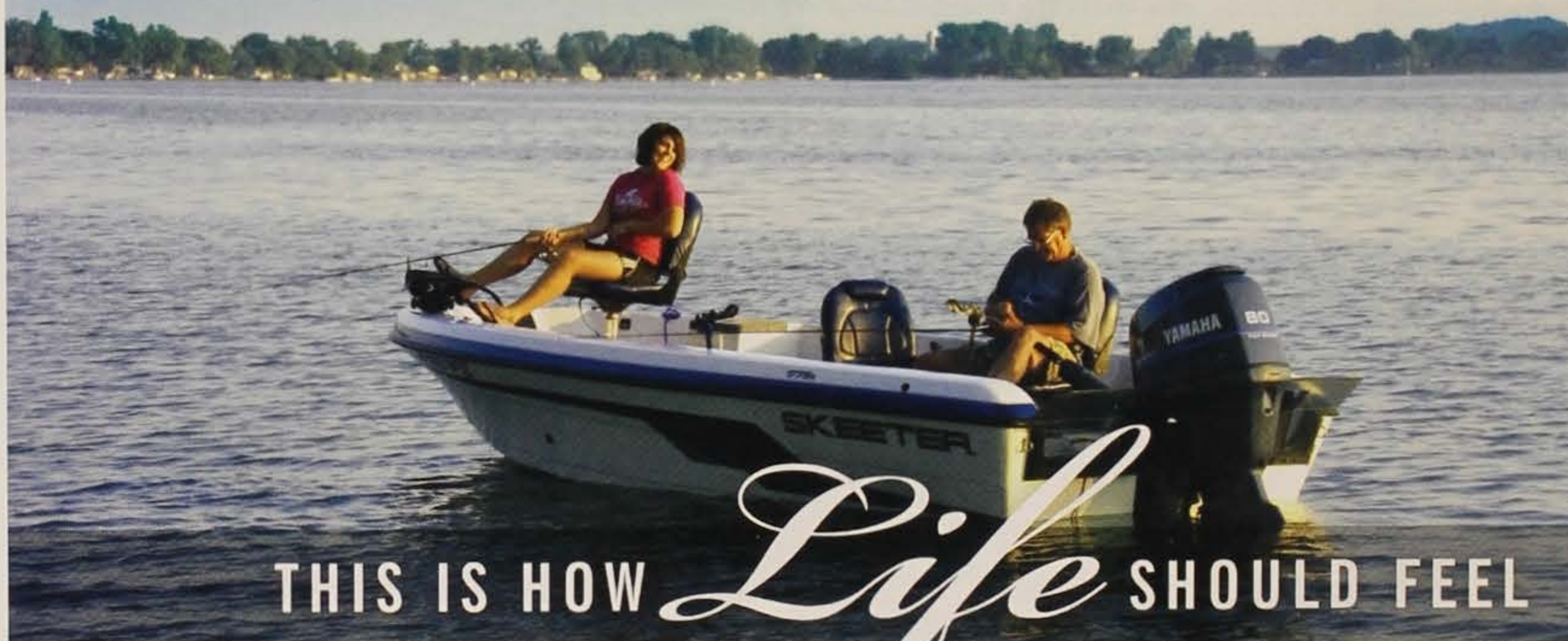
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