JULY / AUGUST 2014

IOWA OUTDOORS

THE DNR'S MAGAZINE OF CONSERVATION AND RECREATION

IN THIS ISSUE:

ISLAND COLONY

DISCOVER BIRD-STUDDED RIVER ROOKERIES

"Woodland Guardian" Hand-crafted Sculpture

Hand-cast and hand-painted owls are fascinating from any angle

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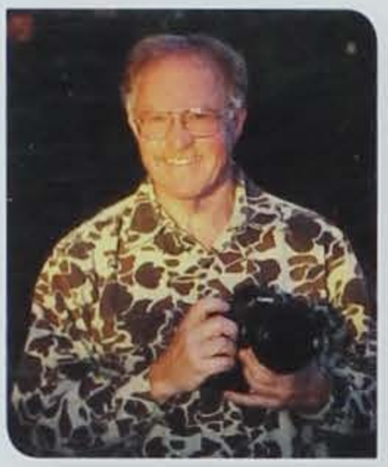
*Plus a total of $10.99 shipping and service. Limited-edition presentation restricted to 295 casting days. Please allow 4-6 weeks after initial payment for shipment. Sales subject to product availability and order acceptance.

Contributors

DIANE MICHAUD LOWRY is an Ames photographer and avid year-round kayaker. She's paddled coastal areas, Lake Superior and most of Iowa. She is a member of The Skunk River Paddlers, The Iowa Whitewater Coalition and Central Iowa Paddlers.



TY SMEDES is a full-time writer and photographer from Urbandale. Ty is published in dozens of nature magazines and teaches photography. His second edition book, *The Return of Iowa's Bald Eagles*, has new statistics, new action sequences and 70 new photos. Sold at *iowan.com* or *1-877-899-9977 ext 211.*

JEN 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*. Her book, *Running Away to Home, is* available at *www.jennifer-wilson.com.*

Des Moines writer **SANDY FLAHIVE** likes discovering the hidden gems in Iowa's many nooks and crannies and spending time at her remote cabin near Stephens State Forest in southern Iowa.

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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.

MAKE A DIFFERENCE

DNR volunteer programs help Iowans give back to lands, waters and skies. *515-242-5074* or *iowadnr.gov/volunteer*

HOW TO DONATE

Charitable giving of land, funds, goods and services greatly enhances Iowa's outdoors. Call Kim Rasler at *515-281-7122*.

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Contents

JULY / AUGUST 2014

FEATURES

ABOUT THE COVER
A male cattle egret in spring breeding plumage flies along Pool 13 of the Mississippi River. Named for their habit of following cattle and other large grazers, they forage ticks and flies off cattle and eat insects and small vertebrates stirred up by animals. Their Latin name, *Bubuicus Ibis*, or "herdsman," refers to their association with cattle. Native to Africa, they've colonized much of the world in one of the most rapid and widespread expansions of any bird species. They found their way to the U.S. in 1953. Egrets nest in colonies, usually near water, often with other wading birds.
PHOTO BY TY SMEDES.

ABOUT THIS PHOTO
Patience and time went into capturing the vivid reflection of a gray-headed coneflower, also known as a drooping coneflower, in a morning dewdrop at Green Meadows West Prairie in Johnston. "I had to check—dewdrop to dewdrop—to find one that worked. It was one of my most difficult photos to capture," says photographer Ty Smedes. Gray-headed coneflowers are a native perennial forb growing to roughly 4 feet tall. They bloom June through August.

DEPARTMENTS

ABOUT THIS PHOTO

No water? No problem! Iowa was getting some much-needed rain when this issue went to press this spring. What Mother Nature has to offer the rest of the year remains to be seen. Hopefully the rivers will be navigable for anglers and paddlers. But last summer, this adventurous and witty group of paddlers poked fun at past drought conditions to "ply" the empty Skunk River near Ames.

PHOTO BY DIANE MICHAUD-LOWRY

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- Classic Farmall imagery from artist Charles Freitag is showcased on a hand-crafted wood cuckoo clock
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- Barn-shaped clock body features hand-painted hay bale, barrel and rooster sculptures for nostalgic charm

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Strong demand is expected for this officially-licensed Farmall first, so reserve your "Farmall Times" Cuckoo Clock now at the attractive issue price payable in five convenient installments of $39.99, totaling $199.95*. Your purchase is backed by our 365-day money-back guarantee. Send no money now. Just complete and return the Reservation Application as soon as possible. Act now or you could miss out!

www.bradfordexchange.com/farmallclock

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Clock with pendulum shown much smaller than actual size of appr. 20½" tall, 11" wide and 3½" deep.

Requires one "AA" and two "D" batteries, not included.

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HALF DAY ON $50

PHOTO BY *KATI BAINTER*

ACTIVITIES, TIPS AND **EVENTS** FOR THE WHOLE FAMILY

8 BOATING TIPS For a Safe Fourth of July

Use these tips to keep a holiday from becoming a tragedy.

- **Alcohol and boating don't mix.** Wind, sun, glare and heat can enhance the effects of alcohol, hindering the operator's ability to make decisions.

- Before leaving the house, **check trailer lights, wheel bearings and hitch.**

- Make sure there is a **charged fire extinguisher and horn/whistle, a wearable life jacket for everyone** and a U.S. Coast Guard-approved throwable device onboard.

- **File a float plan with a friend:** include your destination, time of return and type of boat.

- **Wear your lifejacket—** it floats, you don't.

- **Inflatable lifejackets** are light weight, comfortable and USCG approved. Wear it.

- **Take a boater education course.** It has valuable information and many insurance companies offer a discount on boat insurance. Learn more at *iowadnr.gov* and search boat safety.

- **Iowa's top two safety violations** are having inadequate life jackets and operating too fast and too close to other vessels. *(See page 15 for more.)*

Red, White AND Blue Shotgun Shell Crafts

PHOTO BY *BEN CURTIS*

Kick off Independence Day weekend camping with festive red, white and blue lights to decorate your tent, RV or cabin. Use a strand of clear bulb holiday lights and red, white and blue spent 12-gauge shotgun shells. To repurpose shells, first clean with soap and water, then drill a hole in the bottom with a bit slightly larger than the base of the light bulb. Insert one bulb into bottom of each shell.

The light string shown here needed no glue to hold the bulbs as the snug fit and tapered flare of the bulb base was enough. Depending upon the shape of various bulb bases, a dab of glue with a hot glue gun or other adhesive may be needed.

Together

BY *BRIAN BUTTON* PHOTOS BY *BEN CURTIS*

Lose Yourself AND Find Your Flow

Take yoga out of the stuffy studio and onto a standup paddleboard to enjoy sun, fresh air and to lay back and dip your hand in the water. This emerging craze complements the focus on breathing and controlled movements instilled in yoga, says Ann York, a paddleboard yoga instructor who teaches classes on Gray's Lake in Des Moines.

"Try it. It is so much fun," she says. "It can be adapted to any age or ability." It can also be a good workout. "It is not easy. You are firing a lot of muscles, engaging your core. It is a workout," she says. And it is excellent cross-training for cyclists, runners and triathletes. "The combination of balance and coordination are a great complement to other activities," says York.

Yoga on a board "really takes you into the combination of steadiness and ease; you can't power your way—it doesn't work. You must fine tune each movement. Rapid movements fail," she says. "Slow, steady, controlled movements are key. Go with the flow of the board and water. It builds core strength like crazy—the tiny movements and postural adjustments."

Deep Six those Yoga Myths and Get Started

"There are myths about yoga," says York. "First, this isn't

GET INVOLVED

GRAY'S LAKE, Des Moines. 2101 Fleur Drive. Find class schedule and register at nocoaststandup.com or contact Katie Gilbert at *515-371-0418*. Cost $20 per person with gear rental or $10 if you bring your own board. Session lasts 50 minutes. Meet at boat ramp on northwest side of lake.

MCCOOK LAKE, Sioux City Area. Classes vary from intro to advanced; $20-$45 and 60-90 minutes. *supsiouxcity.com* Contact Amy at *712.259.0873* or *info@SUPSiouxCity.com*

LAKE OKOBOJI, Arnolds Park. Sheena Schreck *sheena@supiowa.com* 394 Okoboji Grove Road. *424-278-IOWA info@supiowa.com*

CEDAR FALLS AND DAVENPORT. Kathy David, Cedar Falls, *563-484-9572* and Davenport *309-236-8988* *solhotyoga.com*

just for young, skinny people. Second you don't have to be flexible—you practice yoga to become more flexible. It is something for all stages of life."

Getting started is easy. First, board rental is included in the session, or people can bring their board and get a discount. Those new to paddleboards start on sand or in shallow water to get a feel for the board. "We paddle starting on our knees. People don't have to stand if they aren't comfortable. A lot of people don't fall in. If they do, they just laugh and climb back on board," says York. A number of seated poses using hands and knees are done before moving on to lifting a leg, arm or doing seated twists. Sitting and kneeling progress to standing, the downward dog, headstands—people can go as far as they want to go. "Those that push themselves can fall in" for a refreshing dip. "People are exhilarated when they come off the water smiling. It is savasana lying back on the board."

Kids love yoga on the board, naturally drawn to the water and board, and SUP yoga is a hit with families, too, says York. "Folks keep coming back. We want them to get hooked and buy a board—hoping that they like it all so much."

"The next time you are on your board, try a downward facing dog. It gives you a whole new perspective."

Together

BY *SANDY FLAHIVE* PHOTOS BY *BEN CURTIS*

Crew with Lewis and Clark for the Day

Relieve the greatest adventure in North American history—the epic 8,000-mile, nearly-three-years-long journey up the Missouri River from St. Louis and into the vast new Louisiana Territory, to the Pacific Ocean and back—at the new Lewis and Clark Visitor Center.

The two early-1800s explorers, commissioned by President Thomas Jefferson, were wide-eyed at some of the unfamiliar geography and strange-looking inhabitants they observed as they wended their way—300 species of plants and animals such as prairie dog, pronghorn and coyote.

What they couldn't have imagined, more than 200 years later, is today's Lewis and Clark State Park Visitors Center just outside Onawa. Springing from the very earth the two leaders camped on as they hunkered in for a spell to investigate the region that is now Monona County, the imposing many-windowed, wood-sided, stone-accented structure is devoted exclusively to telling the story of the Corps of Discovery Expedition and showcasing the boats used to get the travelers to their destination.

On the shores of 250-acre Blue Lake, the oxbow created by the zigzagging of the Missouri River, the center opened last August, marking the end of a decade-long endeavor that received funding from a variety of sources, including the Lewis and Clark Friends of Discovery organization and the DNR.

Built on two levels, the impressive boat museum is the magnet for most guests. From the mouths of delighted folks come instinctive "oooh!" and "wow" and "awesome" mutterings as they gaze upon magnificently constructed watercraft standing ready for their viewing pleasure. On display are precise replicas of the expedition's keelboat, a freight-carrying, barge-like vessel; two pirogues, plank-and-frame rowboats smaller than the keelboat; and a dugout canoe.

The wonder and beauty of the vessels is due to the expertise and creativity of Butch Bouvier, the park's longtime historian and programmer. Known far and wide as Mr. Keelboat and renowned for his attention to accuracy and detail, Bouvier painstakingly researched and designed the boats and, assisted by volunteers, built them.

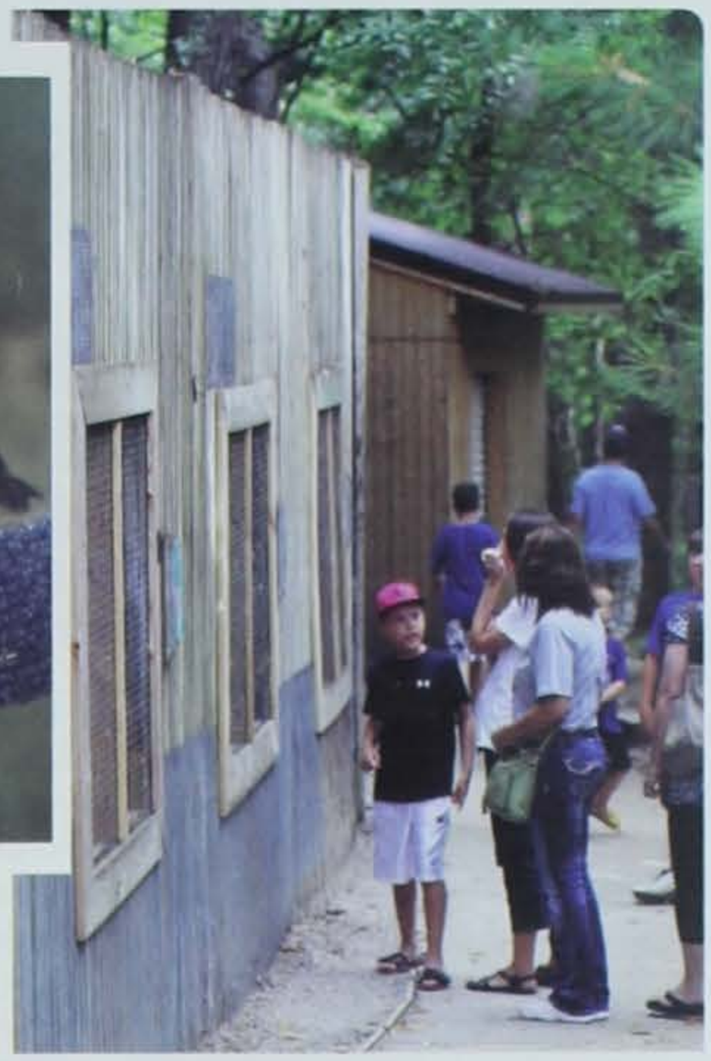
On the upper level, the center features the journey of the explorers—especially as they experienced it in the Monona County area—through interactive exhibits, educational displays, workshops, classes and a Lewis and Clark reference library, all popular with young and old alike. Visitors can practice river knots, view animal displays, touch furs, test their boat-pulling strength on a simulator and spin President Jefferson's secret code machine.

According to Frank Rickerl, DNR parks district supervisor, "The Center is largely complete but will always be a work in progress as we plan future exhibits and displays. We continually are updating, so there is always something new for visitors to experience."

Anticipated additions to the boat museum include a bull boat and an iron-frame boat. On the wish list are expanded displays and gift shop.

During the summer season, the visitor center is open Tuesday through Sunday, 10 a.m. to 4 p.m. Closed Mondays. Open by appointment in winter.

Lewis and Clark State Park
21914 Park Loop, Onawa, IA 51040
712-423-2829 • Lewis_and_Clark@dnr.iowa.gov



Lake MacBride Raptor Exhibit

BY *ALAN FOSTER* PHOTOS BY *BEN CURTIS*

Eagles, peregrine falcons and osprey are some of the most powerful and beautiful birds around. Their flesh-tearing beaks and sharp talons, amazing flight speeds and sleek appearance have inspired songs, books and airplane designs. But even these American icons have their run-ins with power lines, windows and other mishaps. That's when they turn to the Macbride Nature Recreation Area and the Macbride Raptor Project.

The project has taken care of eastern Iowa's sick and injured birds of prey since 1985—eagles, hawks, falcons, owls, ospreys and vultures. Broken wings are reset, lead poisoning is tended to and other maladies are treated. Some make it back to the wild to once again soar above Iowa lakes, rivers and forests. Some that don't call the Macbride Raptor Project home. And that's where visitors can get up-close-and-personal looks at these majestic birds.

The project cares for close to 200 birds a year. Sick and injured birds come in almost daily. All are tended to by project staff and students at the University of Iowa and Kirkwood Community College—evaluated, treated and prepared for a return to the wild. About half are released. The rest are placed in zoos, nature centers and other licensed facilities—including Macbride—to provide valuable educational opportunities to both students and the public. Biology and ecology students routinely use the facility for course work, as do nature writers from the U of I Writer's Workshop and students of the physics of flight.

The project gives roughly 350 programs a year, highlighting the birds and explaining their story, characteristics and life cycle. Visitors are welcome 6 a.m. to 8 p.m. April through October and 9 a.m. to 6 p.m. the rest of the year. Guided tours can be arranged by calling *319-398-5495*—the same number to call to report a sick or injured bird.

Make a weekend of it and explore the 480-acre Macbride Nature Recreation Area. Take advantage of the trails, picnic and shelter areas and archery pavilion. Spend an hour or two at the wildlife viewing platform, where food is put out to attract deer, turkey and songbirds. Learn to sail on nearby Lake Macbride through the University of Iowa Sailing Club. Spend the night at one of 13 primitive campsites.

The Macbride Nature Recreation Area is located about 15 miles north of Iowa City, near Solon, at 2095 Mehaffey Bridge Road.

Together

HAZARDOUS DUTY

BY *TIM LANE*

When I was a boy, we played games—tag, baseball, basketball, football. We spent hours throwing a ball over my parents' house. That may sound like a waste of time, but it was mere child's play. Last year the video game *Call of Duty: Black Ops* registered sales of more than $1 billion. On the day of release, the accumulated time spent playing it totaled 1,700 years. According to the gaming company Activision, on average, gamers spent 87 minutes a day in virtual combat. Since its inception in 2003, all *Call of Duty* versions have engaged millions of users and racked up 25 billion hours of playtime, or the equivalent of 2.85 million years.

At this point, the behavior is light years ahead of the research. Although there is not a wealth of research, studies exist indicating correlations between gaming, aggression and depression. Some research is even contradictory. Girls, for example, are both more depressed and less depressed. Even if such activity is benign, it is still 87 minutes not spent being social, outside or physically active.

In 2011, the Centers for Disease Control and Prevention reported a 400 percent increase in antidepressant use in the United States between 1988 and 2008. On the heels of that rather disturbing fact came a report in 2012 that poisoning had become the number one cause of accidental death in the United States, replacing vehicular fatalities. This bump tied directly to the increase in deaths related to opioid painkillers.

In both cases, it is evident Americans are dealing with pain and depression by taking pills. They are quick and easy ways of masking symptoms. Much of the use is highly appropriate. But I am going out on a limb here (another favorite pastime of my youth). I doubt current rates of depression are up 400 percent or that pain is significantly more present today than a decade ago.

Video games and gaming may not be connected to those two shifts in behavior. But participation at these levels is still alarming. In any emergency, it's appropriate to use resources judiciously, and we are now in an era where physical activity is an endangered concept. As the value of activity becomes more evident, we continue to both individually and institutionally eliminate it from our daily lives. That downward trend coupled with the skyrocketing use of pharmaceuticals is troubling. I understand and appreciate the value of pharmacological treatments, but I also appreciate efforts to prescribe a regimen of activity either before or with such interventions.

Study after study indicates regular physical activity and immersion in nature has a useful track record for treating many chronic forms of pain and depression. If ever there was a time to ignore a call of duty...it is now. This reminds me of another game I played when I was a kid, we would go outside and "play war"—but with real running.

TIM LANE is a nationally recognized authority on public health and physical activity. He is president of the Iowa Association for Health, Physical Education, Recreation and Dance.

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.

JANE, AGE 8, IOWA COUNTY ASKS:

Do frogs eat fish?

It's not common, but if a frog has the opportunity, it will gladly chow down on a fish.

Most frogs will eat anything they can fit in their mouths. But since they generally don't go looking for food underwater, they don't eat fish often. It's usually insects, worms and other invertebrates, since they're small and there are a lot of them available for frogs.

But if a right-sized fish, say a minnow, just happened to be flopping around in front of a frog's mouth—or even a toad or salamander—that fish will become dinner. Bullfrogs are a large frog with a big appetite. They may consume small frogs most commonly of a different species.

While frogs eating fish isn't an everyday thing, it is very common for fish to prey on frogs. Pike, bass, muskie, gar, bowfin and walleye often put the bite on a frog.

Knowing what a frog eats can help if you're an angler looking to catch one. Bullfrogs are especially hungry critters, even known to eat small snakes and turtles. Baiting a hook with a worm or a red cloth might get them to bite. Just be aware that the crawfish frog is endangered in Iowa and is not legal to take. You also need a valid fishing license to catch frogs.

KIDS PLAYING VIDEO GAMES PHOTO BY ISTOCKPHOTO.COM; FROG PHOTO BY JOE WILKINSON

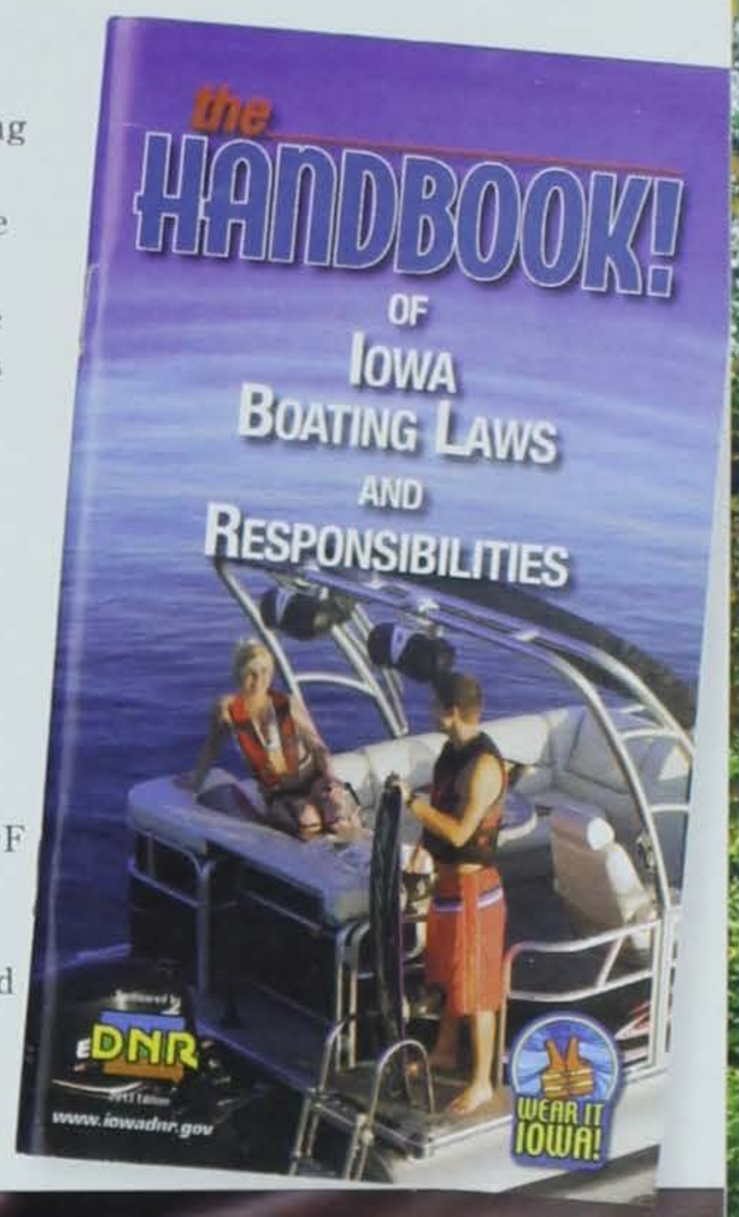
TIPS, TRICKS AND **MUST-KNOWS** TO ENHANCE YOUR OUTDOOR FUN

Frisbee Plate Holder

Put an end to soggy, flimsy paper plates and messy food spills by repurposing a popular camping toy. Standard size flying discs add stability and strength to ordinary paper plates for loading the plate with chow or when untimely wind gusts pop up. After lunch, burn off those calories with a game of disc golf, Frisbee tag or catch.

Speed and Distance

Iowa's most common boating violations are related to speed and distance. Use the length of your boat to help gauge safe distances on the water. For example, vessels traveling at greater than 5 mph must keep at least 50 feet of separation distance. (That is two boat lengths for a 25-foot vessel.) See all the speed and distance rules in the official Iowa boater safety handbook at *iowadnr.gov* (search boating handbook). Available in PDF and e-book formats online. Best yet, stop by your county recorder's office and get a copy or call the DNR at *515-281-5918* for one. **FREE.** Keep it in your boat.



Hey Kid, Go Outside!

Kids glued to electronics and can't seem to get outside? A small padlock (especially useful when parents aren't around to monitor screen times) puts the kibosh on overused televisions, DVD players, computers and video games. If numerous kid-magnet devices are plugged into a powerstrip, just one lock can force them to find alternative entertainment, such as taking a hike!

Secrets to Healthy, Grilled Fish

Grilled fish is a tasty, healthier alternative to fried. Heat the grill as hot as you can. To prevent sticking, oil grate or both sides of the fish. Sear both sides of fish over high heat to seal in moisture and cook eight minutes per inch of thickness; 10 minutes if grilling whole fish. Glazes or sauce should be applied only after each side has been seared for at least two minutes. For smaller fish, make an aluminum foil "boat" so filets won't fall through grate.

PHOTOS: LOCK: BEN CURTIS; FRISBEE: STUDIO 7; GRILLED FISH: LOWELL WASHBURN

Myth Busters

GOT A QUESTION?
SEND TO: *AskTheExperts@dnr.iowa.gov*

Immersion in ICY COLD WATER is best for treating heat-related illnesses?

Bodies are heaters, according to MercyCare Community Physicians in Cedar Rapids, keeping us at 98.6 degrees Fahrenheit. We cool ourselves by sweating and passing heat through our skin. But with summer heat, high humidity or intense exercise, our natural cooling system can fail. This raises body temperatures to dangerous levels, causing heat cramps, heat exhaustion or heat stroke.

CRAMPS

Athletes may notice heat cramps during or after exercise on hot days. Heat cramps are usually short but severe in the legs, arms or stomach. Salt and fluid loss from sweat can cause muscles to cramp. Not drinking enough fluids makes you more susceptible to heat cramps. For relief, seek a cool place or massage the muscle.

EXHAUSTION

Heat exhaustion is more serious and occurs when it's hot and you're not drinking enough fluids. Symptoms include dehydration, fatigue, headaches, clammy skin, nausea, hyperventilation, irritability and weakness. When symptoms arise, go indoors or seek shade immediately. Loosen clothing and drink fluids. Bathe in cool (not cold) water. If symptoms continue, call your doctor.

STROKE

Heat stroke is the most serious of all heat illnesses, and is a life-threatening emergency. During heat stroke, the body cannot regulate its own temperature, and core temperatures can reach 106 degrees or higher. This can lead to brain damage or death if untreated, so seek immediate medical attention. Heat stroke is usually caused by overdressing or extreme exercise in hot weather without proper fluid intake. Symptoms include flushed, dry skin (no sweating), high fever, intense headache, confusion, dizziness, weakness and fatigue. Heat stroke can also lead to seizures and loss of consciousness. Do not give fluids to someone suffering from heat stroke. Seek shelter, lightly sponge or douse them with cold water and seek emergency assistance.

To prevent these illnesses, drink plenty of fluids and wear light-colored, loose clothing that reflects the sun's rays and allows skin to breathe. Exercise early morning or evening hours to avoid the hottest parts of the day. Lastly, go inside if you begin to feel overheated.

Ask The Expert

BY *SHELENE CODNER*

Adam in Independence asks: ***When is the best time of day to go fishing?***

Anglers may argue until they're blue in the gills about the best bait to use in procurement of our fine, finned friends. But most are in agreement that, above all else, weather distinguishes a good day of fishing from a bad one. Not unlike most humans, weather conditions affect the behavior of our aquatic acquaintances.

In addition to the logistical challenges of casting or boating in wind or rain, and population migrations revolving around water temperature and barometric pressure, prepared piscators must be meticulously mindful of natural light conditions.

According to DNR fisheries bureau chief Joe Larscheid, fish tend to be most active during crepuscular times (dawn or dusk), which is when fish are feeding and subsequently when fishing is best. As light levels in the water diminish, prey fish tend to stray from cover to feed and predators follow their prey. In addition, and as Larscheid confirms, "Some predators have evolved special ways to exploit predation in low light conditions. For instance, walleyes have evolved a special light gathering layer in their eyes called a tapetum lucidum, which enable them to see well in low light conditions giving them an advantage over prey fish." This is why walleye fishing is always best during low light conditions.

For additional fishing tips, including Iowa fishing reports and destinations, visit *www.iowadnr.gov.*

, CLOUD PHOTO BY STUDIO Z; WATER BOTTLE PHOTO BY ISTOCKPHOTO.COM

BY BRIAN BUTTON PHOTO BY BEN CURTIS

Find Emerald Coolness

Step into the hidden emerald realm of Peas Creek and feel the surrounding coolness on a scorching day. Explore the creek, which helped carve a sandstone gorge, before it empties into the broad, open valley of the nearby Des Moines River. Find it all at Ledges State Park, one of Iowa's first parks, designated in 1924.

Hike 13 miles of forested park trails, then cool your sweaty toes in the clear water and take in verdant views of moss, liverwort and lichen-covered sandstones that tower 50 feet above in some spots. Those sand grains were laid down nearly 300 million years ago—remnants of an inland seaway as it withdrew from across the present day Midwest. As the most recent glaciers began their retreat north, 13,000 years ago, meltwater cut the land, forming the park's dramatic ledges, valleys and cliffs. Peas Creek continues to carve the rocks, exposing the reddish-brown, iron oxide-stained lower sandstone layers where ancient carbonized plant fragments can be viewed.

When cooled and rejuvenated, hike the park trails to discover that the drier south and west facing slopes of the surrounding hills host oak and hickory trees while cooler, moister north and east slopes are predominantly maple and basswood forest.

Although the popular park has attracted millions of visitors, those seeking solitude can take advantage of 12 walk-in campsites nestled in the calm, shady forest or use the 95 sites in the main campground. Learn more or make reservations at *iowadnr.gov.*

Ledges State Park
1515 P Avenue
Madrid, IA 50156 • *515-432-1852*

Lost In Iowa

BY *JENNIFER WILSON* PHOTOS BY *BEN CURTIS*

An Urban Sanctuary

The state's fourth most populated county, Black Hawk, is also the home of one of its finest and most interconnected nature scenes.

Ask park manager Lori Eberhard what George Wyth Memorial State Park has to offer travelers, and you'd better settle in for a long answer.

You're standing on the banks of the Cedar River, after all, and in the summer it's a very pleasant place to have a listen. The Cedar flows lazy and slow and sparkling, except when it doesn't, and today it's made even nicer by a slight breeze that rustles towels drying on a makeshift clothesline by a riverside tent. A nearby tree stacked with kids' bikes stands as evidence that this is a family hotspot in Black Hawk County.

"Well, we have boating. We have camping right on the Cedar River, as you can see," Eberhard splays a freckled hand toward the flood-prone waterway that defines this park both in recreation and construction—no cabins, sturdy and well-built trails, outbuildings that can withstand flooding. This park staff

has learned from experience.

"We have four lakes. Shelters and playgrounds and a lodge with a fireplace for rentals," she continues. "Bird watching. More than three miles of paved multipurpose trails. Eight miles of multipurpose soft trails. People love them all for cross-country skiing."

Eberhard takes a moment to let the laundry list sink in, scanning an expanse of the 1,200-acre park, blowing a piece of white-blonde hair from her eyes. It'll be hot today. The sand swimming beach will be packed.

Perhaps none of this would be particularly notable about an Iowa state park, except that George Wyth is smack in the middle of the Waterloo-Cedar Falls urban center.

Eberhard has to tell disbelieving travelers this stuff all the time, because nobody can fathom that there's a park like this, in the city. As in, the main highway crosses over one of the lakes, and you can see it from the beach.

"We have really good wildlife viewing. Brinker Lake has the only boating in the county where people can jet ski. We have events here all year long, a few of them nationally recognized. A guy in from Kenya competed in last week's Park to Park half marathon."

Funny thing about Iowa: When you want to find the most well-tended nature, you look to the city. The country is mostly gone to farming, but in town, the woods are often protected.

Two guys on mountain bikes make their rugged way along a soft trail. Around 110 miles of paved trails interconnect the county.

"Lots of biking," Eberhard adds. "People come into the park and stay for the weekend—you can take a different loop every day."

Yes, when you visit George Wyth State Park in Waterloo, you get this impressive list of nature-based recreation. But you'll also reap the benefits of its urban anchor, especially in Cedar Falls, a city devastated by the 2008 floods that emerged more vibrant and entertaining than ever before.

The Park

Of the four lakes in George Wyth, three are borrow pits for roadbuilding dredge material. Don't let it put you off: This is a prime example of the well-oiled workings of urban-wilderness give-and-take. The industrial aspect isn't intrusive; in fact you probably wouldn't even know about the dredging if it wasn't written here.

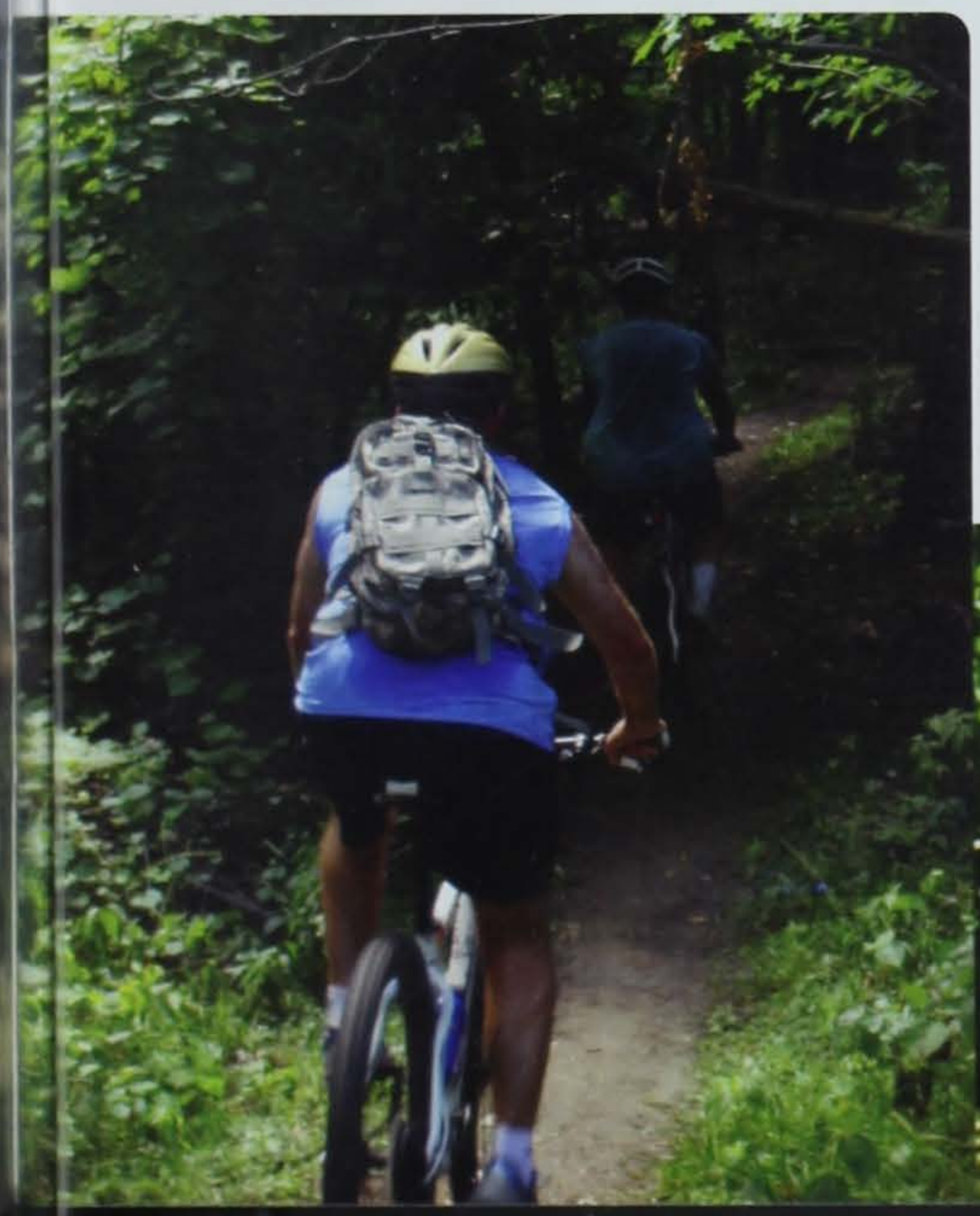
"You can hear the airport. You can hear the traffic. You're still in the city," says Eberhard. "It's a hybrid life."

Visitors motor around on 134-acre Brinker Lake, fishing or zipping by on waterskis in cool water on a hot day. Like all George Wyth lakes, you'll catch anything that's in the river: black crappie, bluegill, channel cat, largemouth and yellow bass, and walleye. Though 75-acre Wyth Lake is no-wake, its sand beach makes it equally popular, and includes a floating pier that's ADA accessible. In winter, the lake is scattered with icehouses.

When the 2008 floodwaters rose above the concession building roof, the park was forced to shutdown, and this summer construction of a new facility will occur. The park itself held up in the flood—campground and trails remained intact—but older buildings were ruined by water.

"We flood on a regular basis. If we want to build something, we keep that in mind," Eberhard says. "If you learn to work with the river, it's not as devastating as it could be."

Perhaps for that reason, the water features are the prettiest here. They're the timeless elements that nature tends itself. The surface of 40-acre Fisher Lake, an oxbow to the Cedar River, is covered in water lilies that bloom



Lost In Iowa

white in spring.

"It doesn't get fished because of the lily pads," points out Eberhard. "But there are some nice-sized bass in there."

Fisher is the take-off point for the Cedar Valley Paddlers Trail, the first trail to open under the DNR Water Trail grant program and its first looped path. It includes the lakes, the Cedar River and two lakes at Hartman Reserve Nature Center in Cedar Falls. Fisher, along with 60-acre Alice Wyth Lake (electric motors only, good for shore fishing and bullfrog heaven) are nature-lovers' dreamscapes, ringed with oak, maple, ash, dogwood and willow among the lowland timber.

It's an exceptionally pretty place to explore wildlife, with 250-plus bird species spotted so far, including the teeny saw-whet owl, about the size of a human hand when fully grown. Turkey, fox and deer also call this riverside woodland park home. Its roads are crowded by deep woods and fringed with brown-eyed Susans.

The City

Probably the last time you heard news of Cedar Falls, it was about the flooding in 2008. When those devastating waters receded, Cedar Falls put its collective head down and worked for a comeback. The city has become a solidly fun place to visit for a weekend.

"We had sandbags on the flood levee," remembers Kim Manning of Cedar Falls' tourism. "I was down there until two in the morning. I think the whole town was sandbagging that night. We had the football team. We had buses running from the university carrying neighbors, students. If the river had gone over that wall, we would have lost downtown, and then the water supply right after that."

She pauses, thinking about that night, June 10, 2008. "It was touch and go."

Cedar Falls' Main Street didn't flood, but that's due to a combination of community spirit and luck. The Cedar Falls Historical Society's Ice House Museum, boat house and everything north of the river, including hundreds of homes, were lost. The Ice House has since been restored with assistance from FEMA and an I-Jobs grant.

These days, they're raising the floodwall to avert future disasters. Main Street is hopping with fun storefront businesses, from good restaurants to lots of pubs to interesting shops—including a cupcake bakery and brewery. Here, the Blackhawk Hotel is the historic centerpiece, across the street from a well-stocked bike shop, a running store and a solid coffee house.

They're developing that powerful river—though only

MORE OLD-SCHOOL CONSERVATIONISTS. Hartman Reserve Nature Center also inhabits a patch of land originally protected by an old-school businessman-conservationist, John Hartman, publisher of the *Waterloo Daily Courier*, who originally helped the YMCA purchase 56 acres, and later deeded to the county conservation board in 1976.

new condos are complete, water features, plaza areas and a hotel are on the list, plus possibly a kayaking/whitewater course with spectator seating right by Main Street. From the current park benches and trails, all are being built with flood-friendly construction, taking advantage of what they've got, taking it for the good and the bad.

"If you kayak or bike or hike, you will never be at a loss for something to do here," says Mary Jones, chair of the local trails patrol group that hands out maps, helps fix bike tires and generally watches over well-tended loop trails.

Jones rides her bike alongside Mike "Mac" McCallum, a retired area police officer and founder of the patrol. The two of them are part of a fleet of post-flood volunteers who were inspired to make this city even better.

"You feel like you're out away from the city, but you're really just five minutes from downtown, at the most," Jones says, skimming past prairie and woods and river.

The trails all conveniently lead back to downtown Cedar Falls, with the help of good signage, a well-designed trail map and pedestrian bridges over the Cedar River, where this writer came within a very weak stone's throw of a hunting bald eagle.

"You can kind of choose your own adventure," says Manning. "Cycling clubs would have a great time here."

The Wild

Hartman Reserve Nature Center in Cedar Falls is the most vivid example of urban wilderness in Black Hawk County.

The drive to get there is almost eerie, in fact.

First you're cruising past residential homes, following the reserve's signs, when you begin to get the feeling that the trees are crowding the car. Next thing you know, you're in a forest, then a parking lot canopied by mature timber.

In the woods, some of the downed logs look just a little bit odd, or maybe intentionally placed.

Rocks are stacked just so.

Piles of trimmed brush lay here and there almost artfully, attracting all manner of twittering birds that fall hushed with the slam of your car door.

Someone lurks in these woods.

Chris Anderson, to be exact. And his assistant, Katie Shelton.

They help run the programming at Hartman Reserve Nature Center, sited in an old 1940s YMCA, on what has grown to be 300 acres of city forest. Naturalist and program coordinator Anderson is a ginger giant in dusty Red Wings, with a beard that gives the impression that tiny woodland creatures might be nesting within it.

Anderson's wilderness classes are not of the usual "Appreciating Raccoons 101" ilk. Weekends, you'll find

WHAT'S IN A NAME: George Wyth Memorial State Park is named for the founder of Viking Pump, a Cedar Falls businessman and conservationist who helped secure this land. Originally it was a drive-through destination in the 1940s called "Josh Higgins Parkway," named for a popular radio character, then renamed in 1956.

Lost In Iowa

ENDANGERED: Black Hawk and Linn are the only two Iowa counties that serve as home to the blue spotted salamander, a forest-dweller with skin like blue campfire enamelware, loyal to its breeding ponds and endangered due to degraded water quality and loss of woodland habitat. It's illegal to kill or collect them, but if you find one under a leaf at George Wyth State Park, count yourself among the lucky few.

Naturalist Chris Anderson is a skilled bushcrafter and teacher to the thousands of visitors to Hartman Reserve Nature Center. Bushcrafting is the art and skill of not only surviving, but thriving in the outdoors using old school techniques. Visitors can take classes and learn how to make charcloth, use flint and chert and create fire among other useful skills.

LEARN MORE ABOUT BUSHCRAFT

SOME CLASSIC TITLES

BUSHCRAFT by Mors Kochanski (Lone Pine Publishing, $18.95)

ESSENTIAL BUSHCRAFT by Ray Mears (Hodder & Stoughton, $15)

WILDWOOD WISDOM by Ellsworth Jaeger (Shelter Publications, $14.95)

CAMPING AND WOODCRAFT by Horace Kephart (University of Tennessee Press, $29.95)

WOODCRAFT AND CAMPING by George Sears Nessmuk (Dover, $7.95)

Lost In Iowa

him roving the woods with middleschoolers, teaching them stuff like "Escape and Evasion," and bushcrafting skills via he and Shelton's "Hunger Games" series.

"You're actually standing in the Cornucopia," jokes Shelton in Hartman's well-used nature center. There's a bear, fox and bobcat among its fascinating taxidermy displays, plus a shop with interesting handmade gifts the staff make themselves to further draw visitors into the woods, including pocket-sized watercolor sets and walking sticks crafted by, simply, "Kyle's Grandpa."

"We get kids from the more urban parts of the Cedar Valley, really urban kids, and they're terrified they'll see tigers and leopards out here on a field trip," says Anderson. "But we're working hard to get people to be unafraid of the woods."

Anderson and Shelton say their intent is to repair what scare-tactic shows on the Discovery Channel have broken—a respectful embrace of the wild.

"All those shows talk about is what can go wrong in the woods," he says. "When there are so many things that can go right."

With 32 deer per square mile, there are plenty of chances to brush with nature. Red fox, raccoon, possum, skunk and barred owls abound. Anderson and Shelton present programs that could put you into contact with all of them from the property's former sugar shack—including actual maple syruping in the winter.

"It's a great place to see a warbler," says Shelton. "We have a number of Carolina wrens. And one time, I counted 85 turkey vultures on that tree over there."

When Anderson whips out a piece of steel and some chert, striking sparks on charcloth he and Shelton made in old Altoids tins, he notes that bushcraft is his passion: the artistic side of wilderness survival. It's a common theme in the outdoor classroom here.

Which explains Hartman's artful placement of woodsy debris. Bushcraft goes beyond survival skills, Anderson says, creating clever nature hacks to not only survive outdoors, but to thrive.

"Bushcraft is about leaving positive traces," says Anderson. "Wilderness is not a blank spot on the map. Wilderness is a state of mind. You don't have to drive halfway across the country and waste who-knows-how-many fossil fuels. You can practice these skills right here."

Bikers are drawn past the nature center on trails, and can check the preserve website for upcoming classes. Larger groups can contact Anderson to request a bushcraft lesson too (*http://www.co.black-hawk.ia.us/hartman/about.html*).

Looping back to George Wyth at the end of a full day, travelers can fall asleep to the rhythmic gurgle of the Cedar River from their campsites, many of which are in view of the river itself. The 69 sites were upgraded in 2002.

"The Cedar River is usually peaceful," says Eberhard. "But it can come up with a vengeance and wreak havoc a few times a year. You have to learn to work with it. I think we've done that at George Wyth State Park."

Just ask the birdwatcher, beachcomber, biker, angler, water skier, nature-lover—they'd probably tell you that all of Black Hawk County has done just that, and more.

TRAVEL NOTES

Rent bikes from Europa Cycle & Ski (4302 University Ave.; europacycle.com) or across the street from the Blackhawk Hotel at Bike Tech (122 Main St.; *biketechcf.com*).

Reserve a campsite at George Wyth State Park at *iowadnr.gov*.

Visit Hartman Reserve Nature Center to pick up a woven bracelet or a carved wooden medallion necklace from the gift shop, or sit in on a class with Chris Anderson. (*co.black-hawk.ia.us/hartman/about.html*)

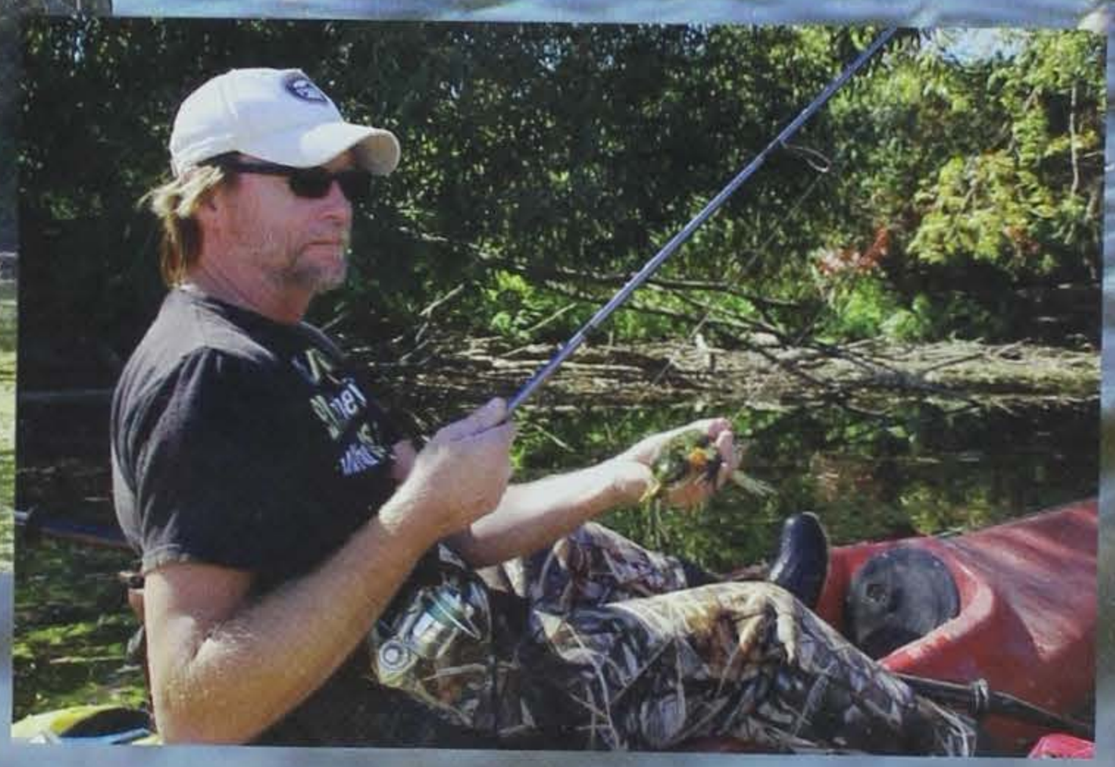
Book a room at the restored Blackhawk Hotel, Iowa's oldest continuously operated hotel, with solid accommodations of varying degrees of fancy, including a motor lodge out back and cottages in the city (rooms start at $105; *Blackhawk-hotel.com*).

Dine and shop Main Street, especially fine-dining at Montage (*montage-cf.com*), Bourbon Street and Voodoo Lounge (*barmuda.com*), the original Scratch Cupcakery (*scratchbakery.com*) and the small-batch beers at Singlespeed Brewing, where they're both crafted and poured (*singlespeedbrewing.com*). It's worth the short veer off Main Street for Mulligan's Brick Oven and Pub (*mulligansbrickoven.com*), a trailside standby, with toasted subs, pizza, burgers and bike groups meeting here on Wednesday night for organized rides you're welcome to join.

While the extensive, 100-plus miles of paved bike trails in Waterloo and Cedar Falls is a huge draw and connects to George Wyth State Park, the park also attracts mountain bikers to 10 miles of single-track dirt trails. Organized mountain bike races here are popular, too.

finesse Froggin'

STORY AND PHOTOS BY *JOE WILKINSON*



I KEPT LOOKING. I couldn't see it. "There, between those two willows... 6 inches out in the water," encouraged Brian Bristow, pointing from his kayak into shore. Still nothing. So again, he flipped the tube jig past his target and slowly retrieved it. This time, the water erupted when his fake crawdad crossed the nose of the big bullfrog.

Sure. Now I saw it.

Bristow kept the line taut as he reeled in another fat 1.5-pounder. The rich yellow chin told us this was another male. He was halfway to his dozen frog limit, and we had only been floating on this shallow northwest Iowa lake for a half-hour.

If your vision of frog gigging is slipping quietly through the shallows after dark and spearing your catch, get ready for a 180 degree turn. About the only thing in common is the water...and how they eventually taste on the plate.

It was a great day for floating, or frogging, on Pleasant Lake, a shallow 77-acre natural lake in the Spring Run wildlife and wetlands complex in Dickinson County. With clear skies and 75 degrees, the shoreline trees blocked a stiff south breeze. Without them, the wind would have been shoving our 9-foot kayaks out of position.

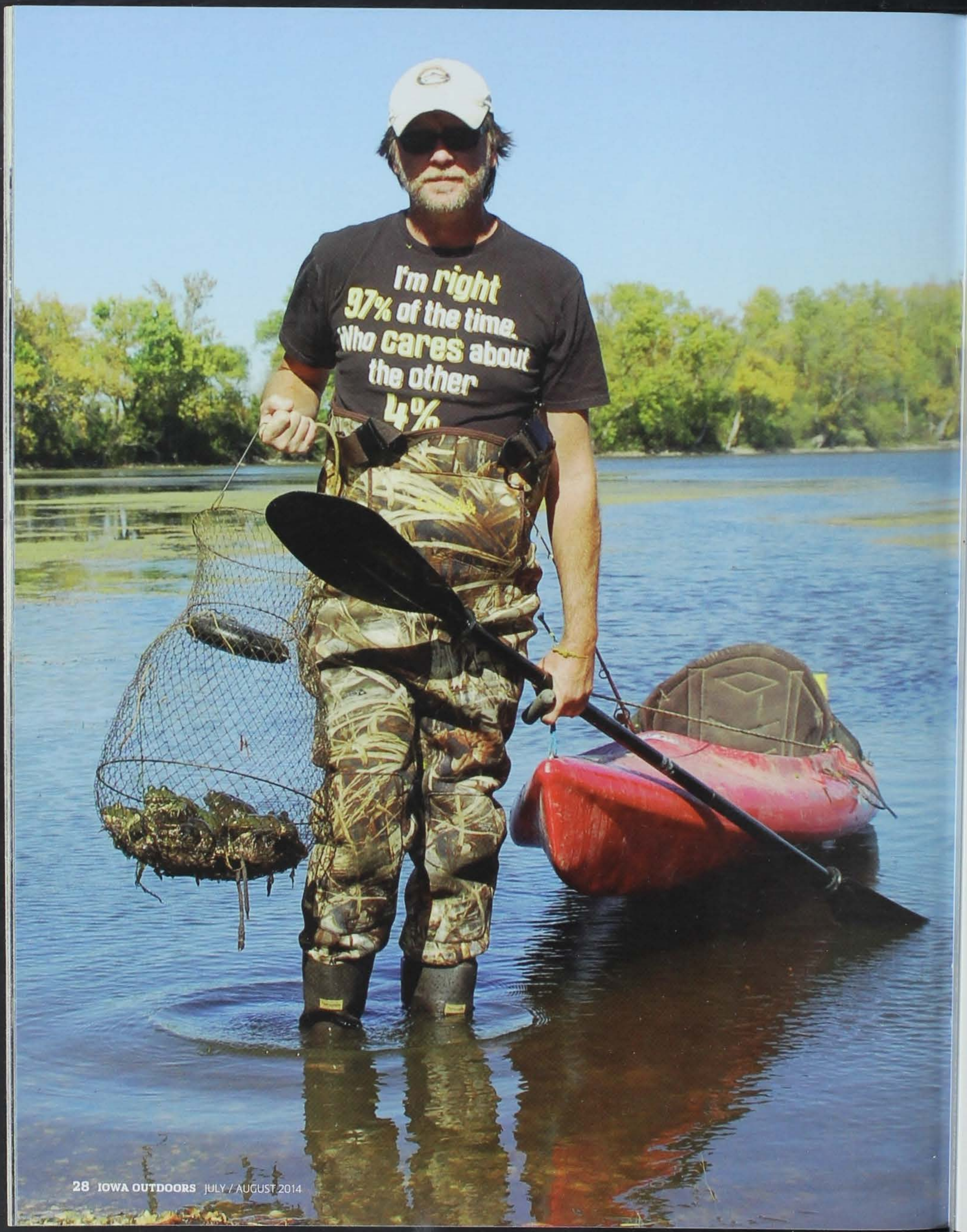
Like many of the natural, shallow lakes dotting north-

central and northwest Iowa, this one was just a few feet deep, with heavy late summer vegetation. A thick layer of coontail (northern water milfoil) slowed our progress—sort of like paddling through a salad. But it helped keep us in place during our slow, steady pursuit.

Bistrow hooked his first one before we hit the water. The big frog was blocking the shallow gravel launch, so he became the first one in the basket. From there, we paddled slowly, deliberately along the north bank. We were watching for the distinctive bulbous eye-sockets and wide upper jaw, resting just above the surface.

I had envisioned an expensive 9-foot fly rod, whipping a small jig under frog chins. Instead, Bristow was flipping 6-pound line out of a closed faced reel on a 7-foot medium action pole. It could have come straight from the budget rack at the hardware store. The bait? Nothing delicate, that was for sure. The thumb-sized tube jigs—white, dirty gray or reddish-brown—could have simulated a crawdad or 3-inch cigar.

These aggressive warm weather bullfrogs only saw a meal, as they chomped down and were dragged through the water to Bristow, atop his 9-foot Hobie kayak. A couple times, they weren't even hooked. They just wouldn't let go.


I'm right
97% of the time.
Who cares about
the other
4%

The trick is to cast past those bulging eyes, then bring it back over the frog's head. If you throw a little wide, maneuver the boat. With the shallow ledge, you can drop your legs to the lake bottom and walk it over. With a free arm, a dip of the paddle works, too. Then, drag the line across the frog's face.

"Bring it as close to the nose as you can," suggests Bristow. "Some will jump when it is within three or four feet. Normally, it's a couple inches." As the frog jumps, set the hook and wrestle it back to your slightly wobbly craft.

Froggin' came early for Bristow. "I was 6 or 7 years old. I saw an old guy at Willow Creek golf course in Des Moines. He had three frogs on his stringer," he recalls. "He was using a short cane pole and a fly and showed me how to do it. Ever since then, if I got close enough to frogs, I'd catch them somehow."

Through his working career, he's never been too far from water...or frogs. Early on, he was a contract worker with the DNR's Spirit Lake hatchery. He managed fish farms in Missouri. He is now an associate professor of biology at Iowa Lakes Community College in Estherville.

Besides a supply of frog legs in his freezer, he saves on his lab bills. Students in his general biology class dissect the frogs, learning about them and their shallow water habitat.

"About 60 to 70 percent of stomach contents are crawdads, a variety of dragonfly larvae, small fish," lists Bristow. "They've found baby ducks, mice, even a marsh wren. I have an honors student who may begin a project looking at frog numbers. It doesn't seem to be a problem on the lakes I fish."

The professor can land a dozen on a two-hour trip, and still be picky, tossing back smaller ones. And these are not the backyard marsh leopard frogs I pounced on as a kid. His largest?: 17 inches, stretched from nose to toes. Even our smaller ones this day pushed past a pound.

That's right, "our smaller ones." After his tenth, Bristow turned the gear over to me.

By then, I could pick out the telltale frog head from 30 yards.

"Develop that 'search image,' like when you're mushroom hunting," he suggests. "When you see the shape, that's what you keep looking for." Heeding another tip, I held back at about 13 to 15 yards to avoid scaring my nearsighted quarry.

My first cast? Payday! One big bullfrog in the basket. As we slowly worked the west side of Pleasant Lake, I noticed it took me six or eight casts to lay the line over the back of most frogs, something Bistrow did in one or two. Repeated retrieves and the overall commotion spooked a bunch of them. Still, in an hour, I had four in the basket, with a few other non-hooked green gluttons that did not let go until boatside.

By now, I was hooked, too. I like being able to see my prey on the water, targeting those "twin peeks" of eyeballs and getting ready for a tug-of-war. The tough part is getting the cast down. Control that, and on a hot day, you are practically guaranteed a frog leg feast.

There were plenty of frogs this sunny Sunday on Pleasant Lake. Anglers? Not so much. We had the place to ourselves. "I've been here five or six times. I never have seen another fisherman," declared Bristow, noting it was common on other shallow lakes, too.

Maybe they wanted more water and more variety. Fishers, not froggers? As the saying goes, "More for me." Besides, if the fishing is slow...you're still kayaking on a sunny day.

The Taste Test

Okay...but how would they taste? We split up our catch before parting ways. I had enough for a couple meals, but no guarantee my wife would sit down for a full helping of frog legs.

No, an evening "taste test" would be good. I invited a few neighbors over and went online for a recipe. They ranged from a half page from Emeril Lagasse, with minced shallots, peeled and seeded fresh tomatoes—to the basic "bread 'em and fry 'em." I went for the middle of the difficulty scale.

I separated the eight pairs of legs into 16 "singles," resembling slender chicken wings. After blanching them in water and lemon juice for 60 seconds, half were brushed with olive oil, salt and pepper and broiled. The other half received the Frog Legs ala Parisienne treatment. Even that was a basic dip in egg batter and roll in bread crumbs. Creating a separate onion cream sauce was a first for me. However, there was no explanation of what to do with the cream sauce. We used it as a dip.

The reviews? All "thumbs up," or the amphibian equivalent.

"These are excellent. I like the broiled ones more," proclaimed Joel Miller. "That first bite, I could taste the lemon; it was like shrimp. Iowa shrimp?"

I thought the meaty drummettes tasted a bit more like chicken. But it was great. Ala Parisienne? Tasty as well, though the Panko bread crumbs seemed to hide the taste a little.

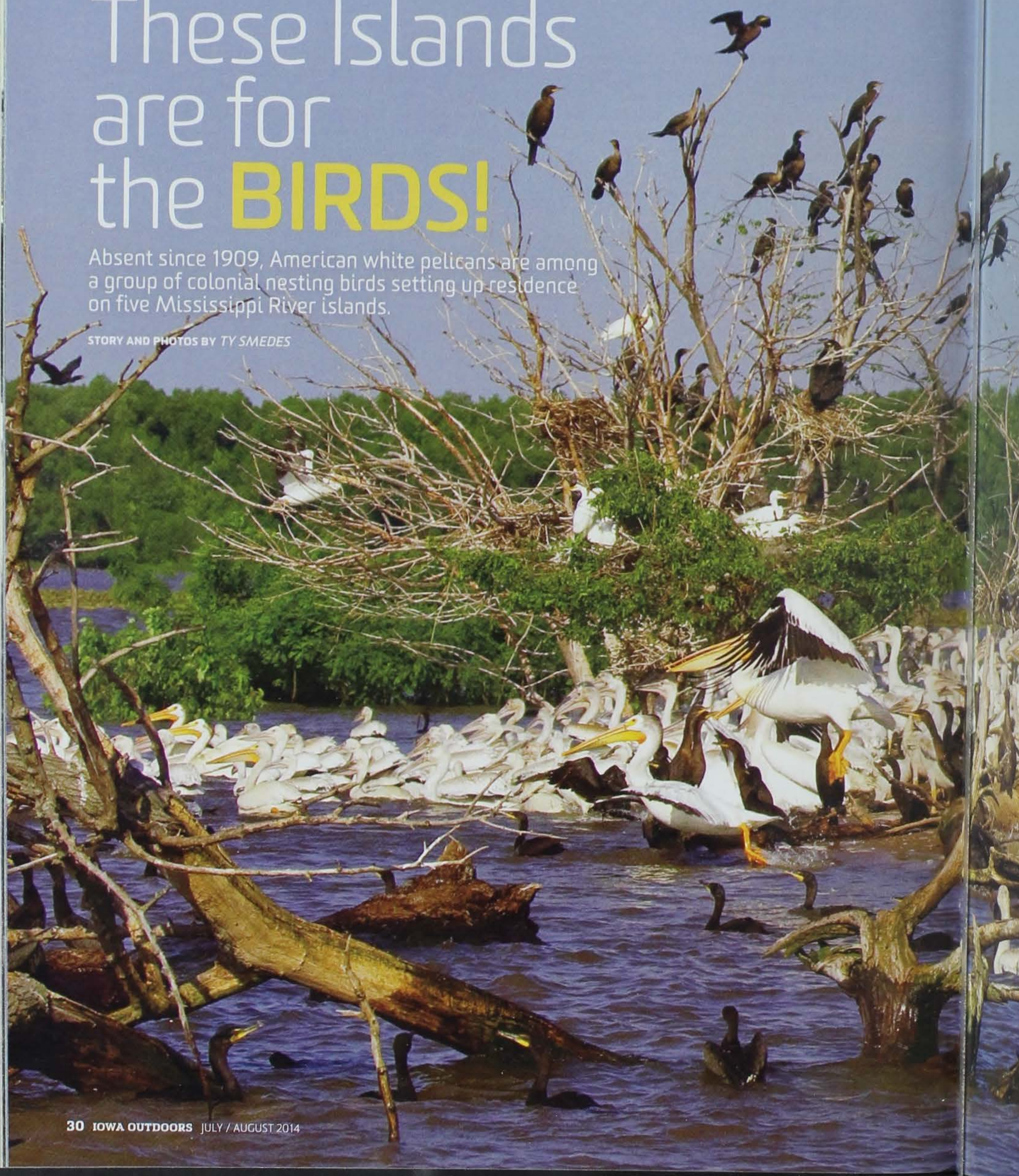
The vote of confidence, though, came from my daughter. Claiming to have been raised on squirrel, rabbit and deer, Kaitlin simply deadpanned, "I really could survive in the wild now." I noticed, though, she finished both of her samples.

A great time catching them. Great on the plate. I'm ready to go kayaking back for more.

These Islands are for the **BIRDS!**

Absent since 1909, American white pelicans are among a group of colonial nesting birds setting up residence on five Mississippi River islands.

STORY AND PHOTOS BY *TY SMEDES*



Double-crested cormorants and American white pelicans nest in the trees of Cormorant Island, along with great egrets. Worldwide, one out of every eight birds are colonial nesters. Some colonies are hard to miss—large and noisy with hundreds, sometimes thousands, of birds.

Young great blue herons

Cattle egret

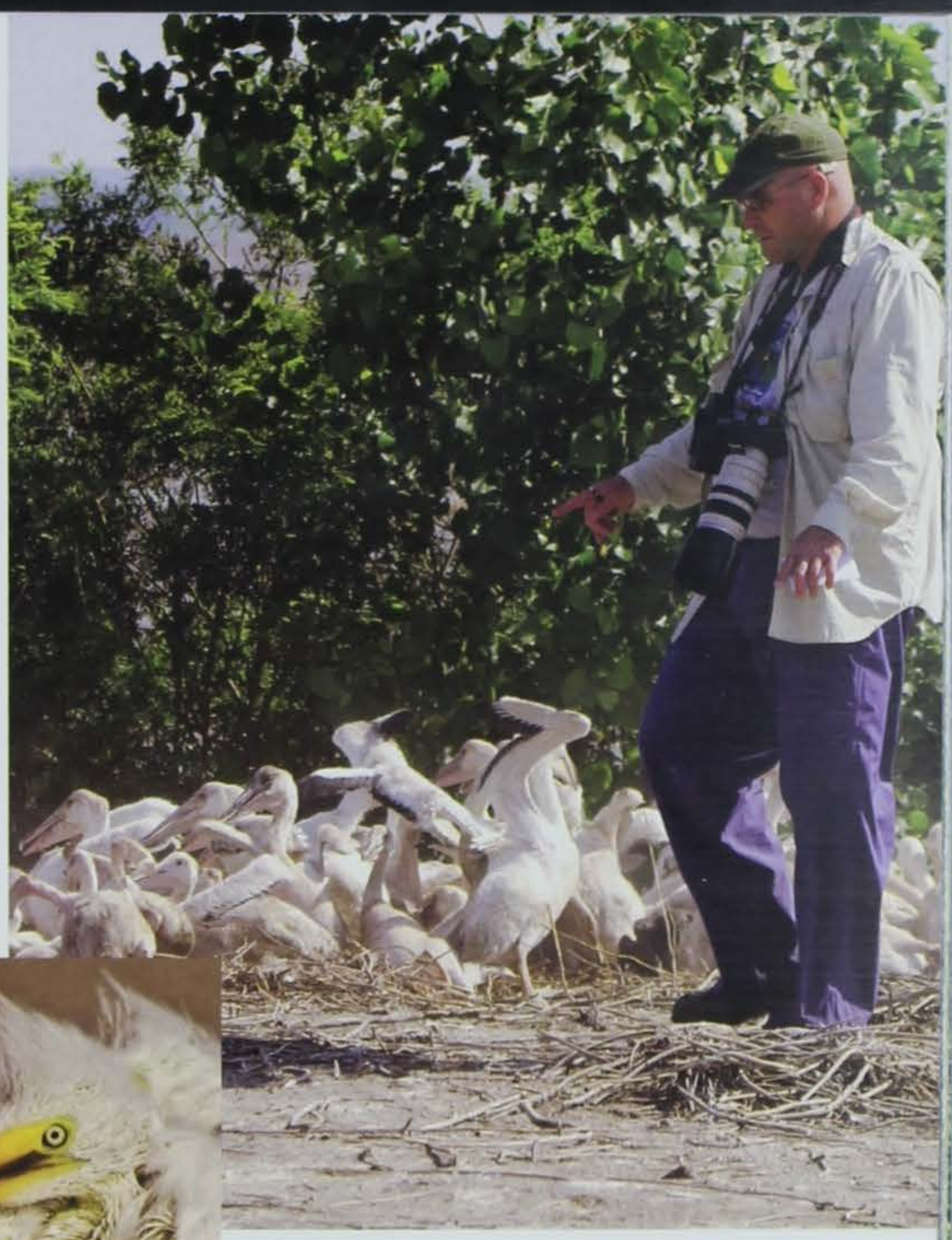
As we set foot upon the island, birds are everywhere—under foot, swimming away, running away and screaming. It's like a scene from Alfred Hitchcock's movie *The Birds*. A team of research biologists has arrived, and their task is to complete an annual count of the nests, young and adults of several colonial nesting water bird species.

During nesting season, these birds gather in large groups, often consisting of several species, in colonies called rookeries. They have sought islands in the Upper Mississippi River Wildlife Refuge to raise young the past several summers, and by gathering together, they increase the likelihood of chick survival. American white pelican, double-crested cormorant, great blue heron, great egret, cattle egret and ring-billed gull are among the species nesting here.

Nesting in dense colonies safeguards against predators, since a large number of defenders can confuse and intimidate. Colonial nesting birds may also be more successful in finding food because dense numbers are often more successful in locating concentrations of fish or other prey. Despite these advantages, colonial-nesting waterbirds are still of conservation concern, with eight species listed as endangered in the United States. This reinforces the need to inventory and monitor nesting colonies.

"Great blue heron, great egret and double-crested cormorant began colonizing several pool 13 islands as rookeries more than a decade ago," says United States Fish & Wildlife Service biologist technician Eric Tomasovic. "The pelicans followed suit in 2007, with usage by about 50 to 120 birds. By the time I began

Cormorant chicks



Ring-billed gull chick

Great egret chicks

Steve Dinsmore, animal ecology professor at Iowa State University, counts young American white pelicans, one of several colonial nesting waterbird species nesting along islands in Pool 13 of the Mississippi River. These young pelicans have formed a pod—or créche—which moves about the island. Cormorants, great egrets, great blue herons and a small number of cattle egrets also nest there. Cattle egrets, originally from Africa, found their way to North America in 1953 and quickly spread.

participating in the surveys (about five years ago), usage was up to 700 to 800, with a population of approximately 1,500 pelicans now."

The last island we visit supports a large colony of nearly 1,000 ring-billed gulls, along with several other waterbirds and numerous mallard nests. Additional rookeries are located along the upper Mississippi River, from pool 4 through 14, along a 261-mile stretch of the river, including an 81-mile stretch of the Upper Mississippi River Wildlife Refuge.

Island Hopping and Counting Birds

The first island we visit is named "Cormorant Island," says DNR Mississippi River biologist Mike Griffin, and true to its name, cormorants are everywhere. The inharmonious sounds of the adult waterbirds and their young fit the definition of "cacophony" perfectly. Nests are everywhere—on the ground, in the bushes, at eye-level and in the trees. Like mushroom hunting, we watch where every foot is placed for fear of stepping on just what you are looking for.

American white pelican nests on the ground are numerous, with young of various sizes, some of which are nearly adult size and moving away from researchers in a pod or crèche. Ring-billed gulls and mallards are also ground-nesters while cattle egret, great egret and great blue heron are tree nesters. The versatile double-crested cormorant nests on the ground as well as trees. Some cormorant nests contain eggs just beginning to hatch, while other eggs are split in two, with newly emerging youngsters just venturing into their new world. Other nests hold young of various sizes, while the nearly

Although one of the last islands visited by the author was under water, tree nesting great egrets (pictured here), great blue herons and cattle egrets were largely unaffected. Colony nesting birds use these river islands to minimize predation by raccoons, fox, skunks and owls, as well as disturbance by humans.

adult-sized left their nest confines to move freely about the island.

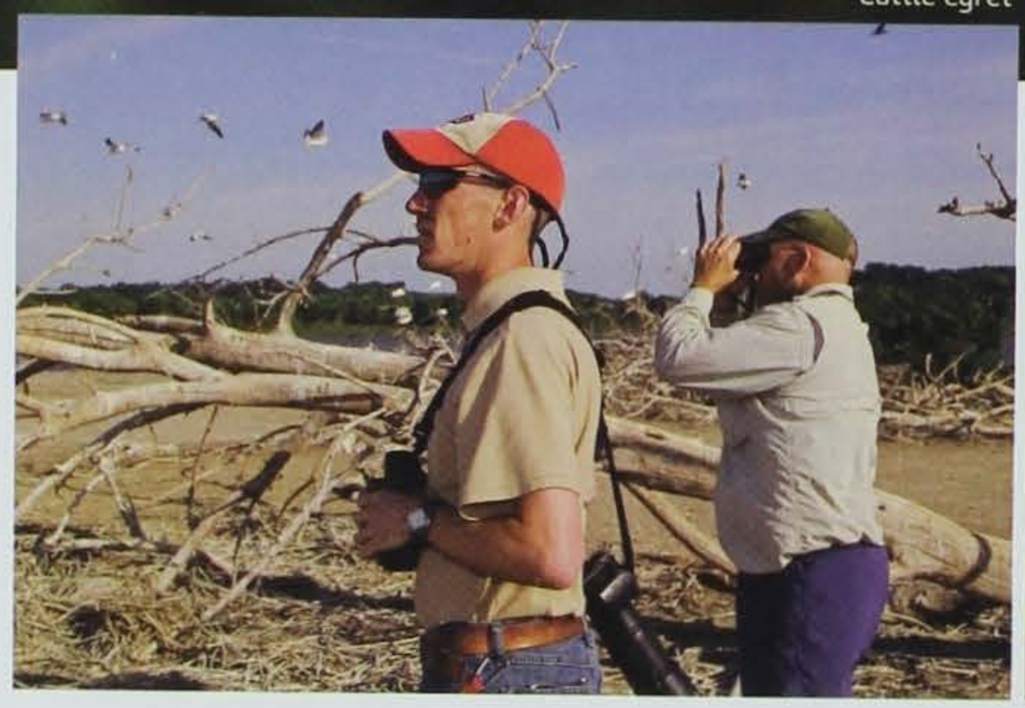
"Years ago, the islands were covered with taller trees. We used to wear rain coats in those days, because you might be showered with a mixture of undigested food as tree-nesting birds bombarded you from above," says Griffin.

As additional researchers Steve Dinsmore, Tyler Harms and Tomasovic methodically tally the birds on land, Griffin wades chest-deep along the island's shoreline, counting nests and young, in the small trees that are now surrounded by high water. Before the morning is over, we will visit five islands, each a little different from the other in terms of size, elevation, vegetative cover and mix of species. The last island visited is fairly barren, although it hosts a few areas of vegetation. Tomasovic goes to work, methodically searching ground vegetation, and locates several mallard nests as well as a number of ring-billed gull nests. Dinsmore and Harms systematically work their way around the island, counting adults, young and nests.

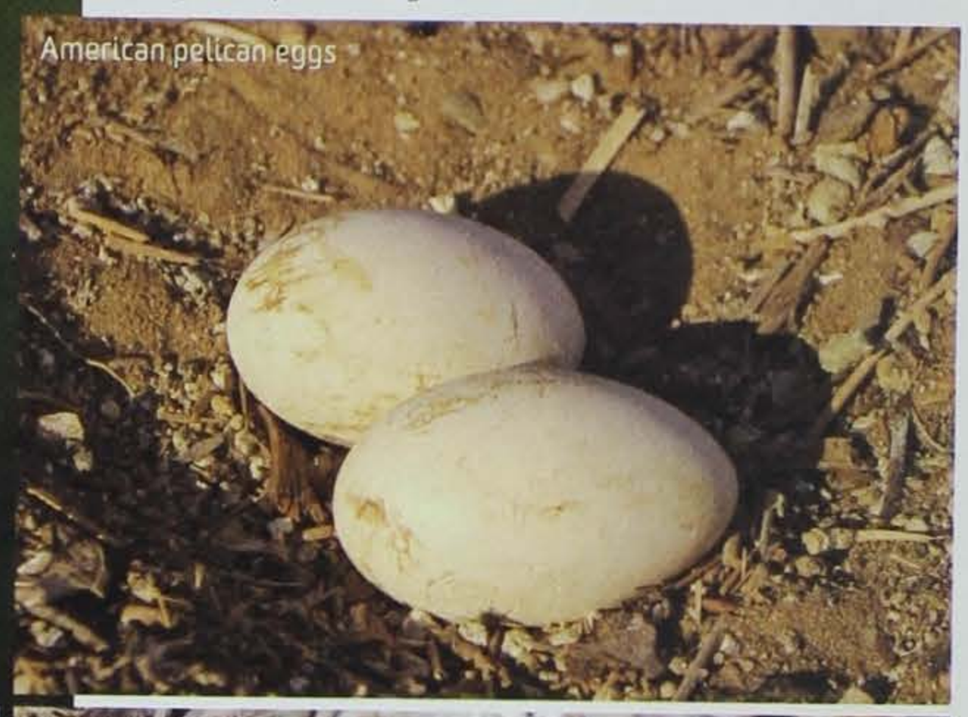
An Unwelcome Visitor

The last island we visit is home to a large colony of nearly a thousand nesting ring-billed gulls. Researchers have nearly completed their count when the colony of gulls erupts in a cloud, screams and moves out and over the water. With their focus and concentration disrupted, the researchers turn their attention to the angry swarm of gulls chasing a larger bird flying low over the water towards shore—a great-horned owl, which likely had been resting on an adjacent island. The opportunistic owl had most likely been conducting night raids on the island nursery, containing hundreds of vulnerable young. The chaotic sound of screaming gulls continues with the pursuit. Great-horned owls aren't long-distance fliers, and the owl eventually tires and ditches into the water, far short of the distant shore. The excited mass of gulls disperse and return to the island. As we turn our gaze back to the owl, he somehow manages to take flight again, continuing his journey towards shore. However, after ditching into the water a second time, we eventually lose track of him.

Cattle egret



BOTTOM LEFT: Multiple Species Inventory Management biologist Tyler Harms (red hat) and ISU animal ecology professor Steve Dinsmore count adults, nests and young on one of five colonial waterbird nesting islands on the Mississippi River. Disturbance of nesting migratory bird species is prohibited by federal law, and nesting islands should be given a minimum 200-yard separation by boaters.



American pelican eggs

Ring-billed gull eggs

Monitoring the Rookeries and Watching for Change

"We do rookery counts to determine the number of breeding adults using the rookeries and the number of offspring per year for each nesting species. We monitor the reproductive rates and watch for changes, calculating the offspring to adult ratio each year. We do physical counts, which are synchronized to aerial surveys," says Tomasovic.

"It helps to do these counts in a formal manner, and this count will supplement the counts that the U.S. Fish & Wildlife Service has been doing for many years," says Dinsmore, an animal ecology professor at Iowa State University who was handling the counts on this trip. "I'm also interested in making sure that we document any nesting by unusual bird species."

In 2012, a single neotropic cormorant nest was documented, which was the furthest north this species has nested.

"They are usually found nesting in Mississippi and the river delta region, hundreds of miles to the south," says Dinsmore.

"The Multiple Species Inventory Management (MSIM) is a statewide wildlife inventory project that has been ongoing since 2007," says Harms, a research associate with ISU. "As biologist for the MSIM program, I assist with coordinating the field logistics and I manage the crews, making sure they have the equipment. I also assist with the analysis and publication of the data and scientific literature. I've always had a particular interest in water birds, and I see this as an opportunity to provide valuable information towards the conservation of colonial nesting water birds."

Challenges and Looking Ahead

"We own the islands, technically, but they are public land. We have a yearly aerial count in spring, where we derive our 'official' numbers," says Tomasovic. "Later in the year, around May, I do a ground check of productivity of young per nest. I incorporate a nest/adult/young count, but I only have to get productivity estimates. The final total productivity of the breeding season is still being evaluated."

Great egret chicks

American pelicans

Challenges from Toxins and Boaters

"All of the eggs we tested contained mercury, historic pesticide chemicals and their break-down products (e.g. chlordane, dieldrin, mirex, DDT), and polychlorinated biphenyls (PCBs). These are ubiquitous enough to make identifying a point source impossible. We did test for DOSS and PAH (dioctyl sodium sulfosuccinate) and polycyclic aromatic hydrocarbons (oil byproducts) but the results are inconclusive," says Tomasovic.

But toxins aren't the only threat. "We've had some non-malicious disturbance of nesting birds by people. Any disturbance of nesting migratory species is prohibited by federal law."

"To avoid disturbance, boaters should give the nesting islands at least a 200-yard berth," adds Griffin.

The Positives

"Pelicans and cormorants are doing well, and it seems like a pair or two of the herring gulls might be sort of regular. The neotropic cormorant nest was probably an anomaly," says Dinsmore.

"Rookery populations are steadily increasing, which is good. That means they are finding what they need, including food and habitat requirements," says Tomasovic.

"Finding interesting nesting species like cattle egret and great blue heron was rewarding," adds Harms.

Looking to the Future

"We will continue monitoring the same way, scientifically, to be consistent, and will monitor for changes. That way the monitoring and study is scientifically valid and new data can be accurately compared with past data," says Tomasovic.

"These colonies are by their very nature dynamic and you can expect change," adds Dinsmore. "The islands are experiencing both accretion and erosion, and aren't going to be occupied by the birds forever, since the islands won't be there forever. But pelicans and cormorants are both doing well."

Horsing Around Shimek State Forest

BY *MINDY KRALICEK* PHOTOS BY *MINDY KRALICEK* AND *LORA CONRAD*

It's already heading to the 90-degree mark this August Friday morning, but a moderate breeze and acres of dappled shade beckon us into the statuesque beauty of Shimek State Forest.

Horses greet with snorts and nickers as the horse trailers are unloaded in the Lick Creek Unit lower campground. Tails swish as saddle pads meet horse backs, cinches are pulled, helmet straps clicked and stirrup leathers adjusted.

Horse flies accompany the heat, so dryer sheets are tied to bridles and helmets, mists sprayed over and under horses and on people to ward off horseflies and their painful bites. One lucky horse has a fly net laid over its rump and attached to the saddle pad.

Biting horseflies drive horses crazy, causing them to buck, bolt, kick and bite to get insects off, which amplifies the need to wear a helmet when riding. It's a six-foot drop if you fall off a horse. A helmet also buffers a horsefly's piercing buzz as it flies by. Horseflies bite people too.

Like their owners, Mystic, Chester, Cash, Bud and the

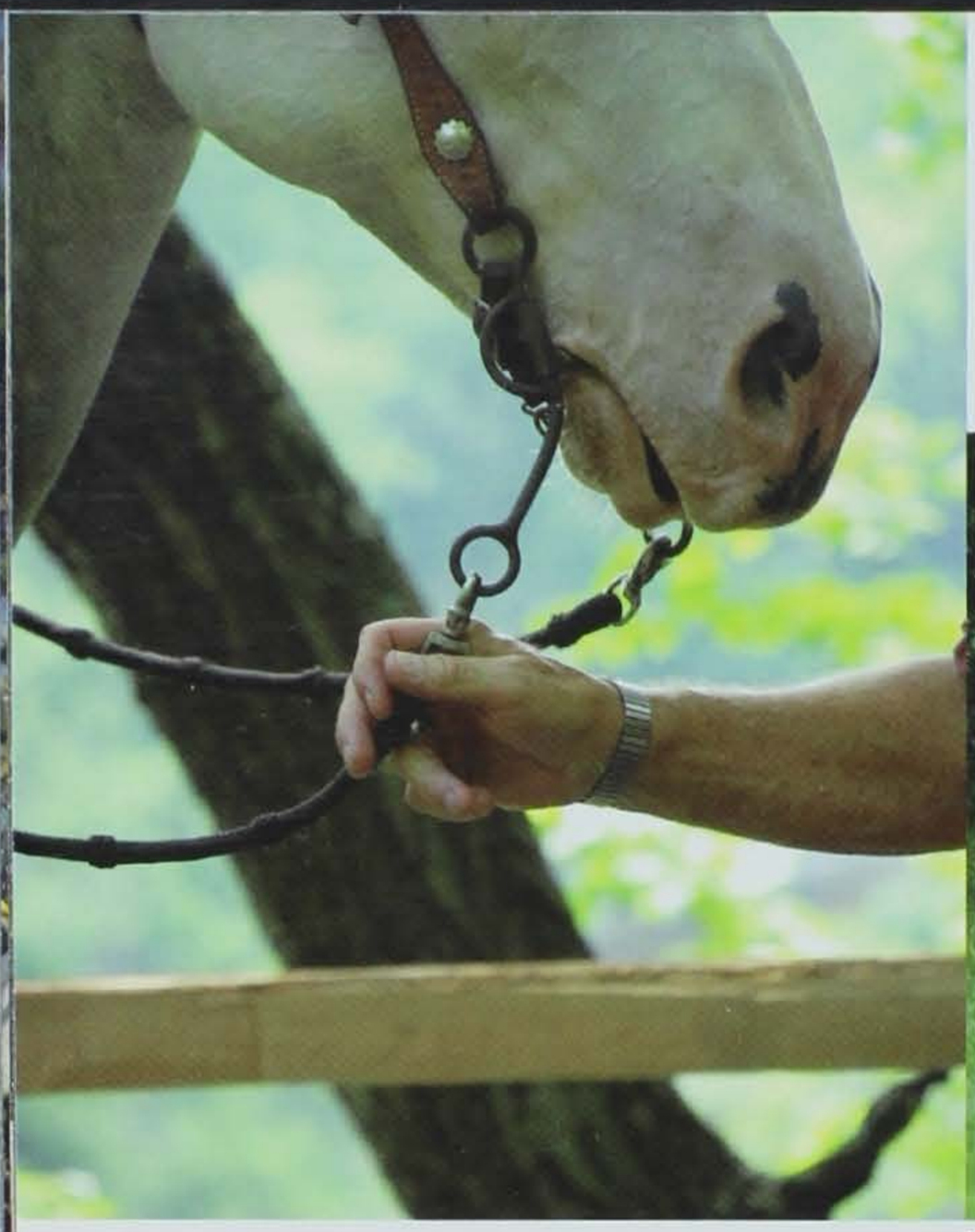
PHOTO BY LORA CONRAD

Equestrians turn off a wet-weather trail onto a narrow dirt trail for an intimate ride through Shimek State Forest. There are several loops off the main trail that wind through Shimek's Lick Creek Unit.

other horses are of many shapes, ages and heights. What the paired horses and riders share in common is classical training to influence horse response through breath, balance, eyes, hands, legs and sitting posture.

A single line is formed at the rocked wet-weather trail, and when everyone is ready, the horses are urged forward with a squeeze of the riders' legs and the squeaking of saddle leather. With eyes up, shoulders open, sitting tall in a neutral, balanced and relaxed position, each rider and horse move as one. Horseback riding requires fitness, flexibility and focus.

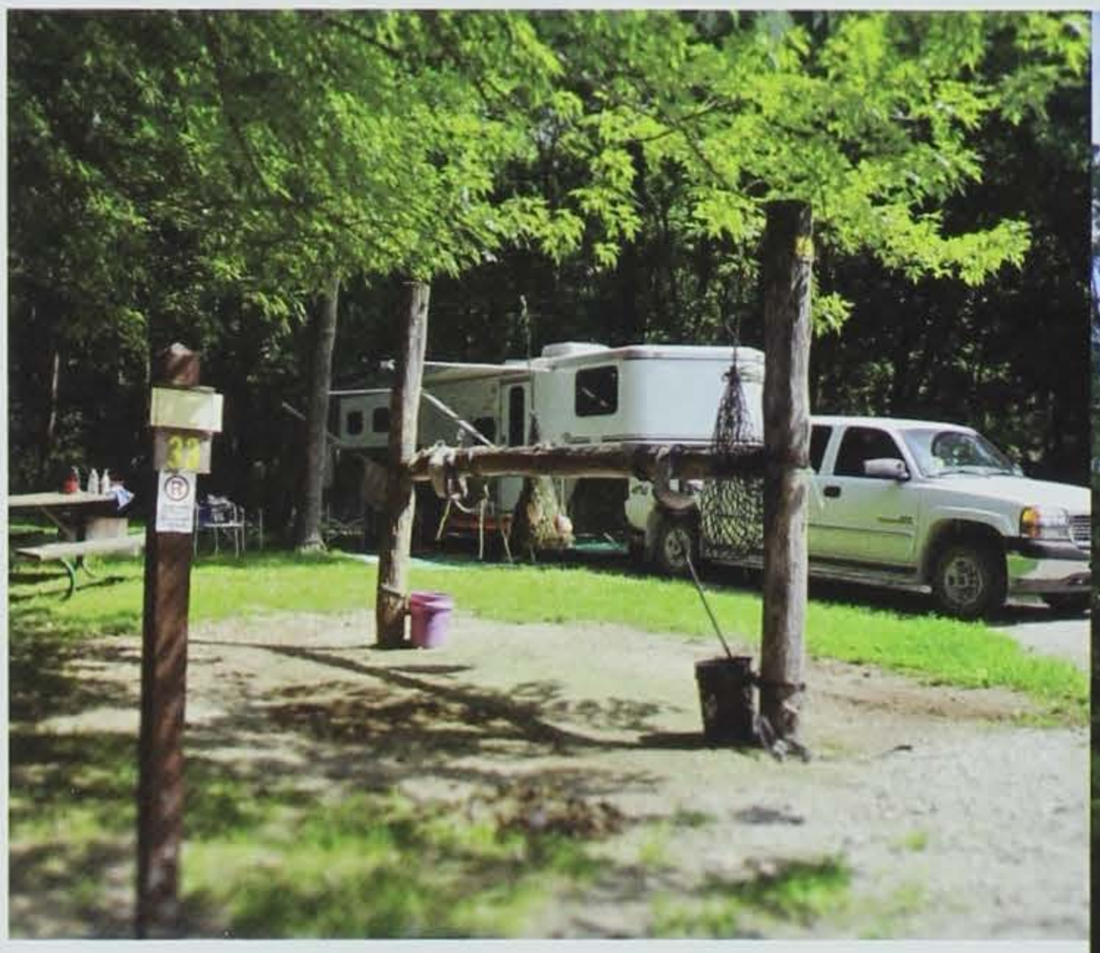
Surrounded by filtered light of oaks and hickories and drumming woodpeckers, we drift into wilderness tranquility. The riders part from the rocked trail to a narrow dirt horse trail where the scenery is more intimate and the songs of eastern wood-pewee and brown

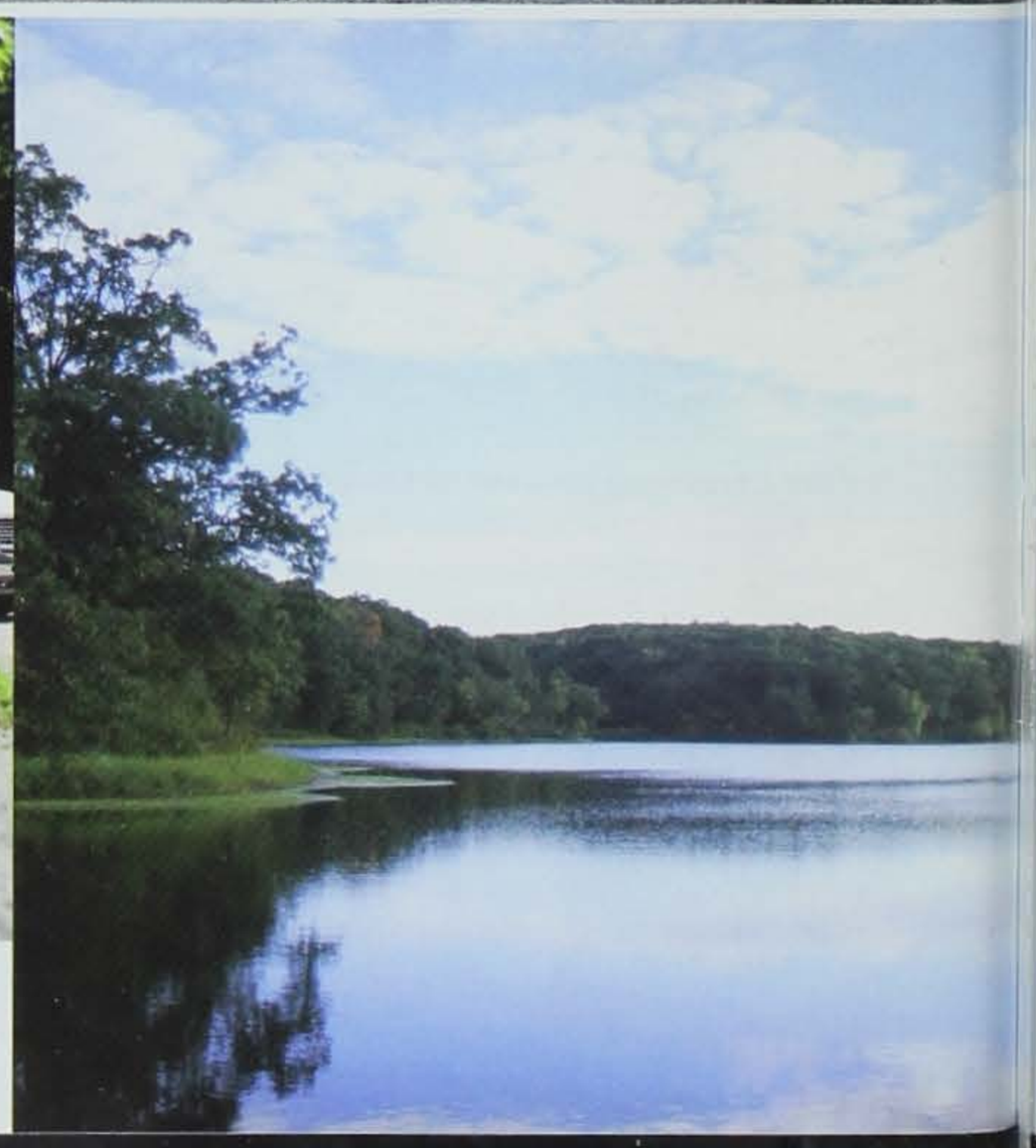


Wet-weather trails takes riders through an open meadow and a dense hardwood forest. The campsites at the Lick Creek Unit provide horse trails and large camping areas for trucks and trailers. The Des Moines River runs alongside part of Shimek State Forest.

EQUESTRIAN CAMPGROUNDS
are also in these state parks:

Brushy Creek State Recreation Area, Webster County
Elk Rock State Park, Marion County
Lake of Three Fires State Park, Taylor County
Nine Eagles State Park, Decatur County
Stephens State Forest, Lucas County
Volga River State Recreation Area, Fayette County
Waubonsie State Park, Fremont County
Yellow River State Forest, Allamakee County





thrasher are much closer. Leaves and branches rustle, shaken by breezes. Overhead, a daunting series of "caks" from a Cooper's hawk briefly stills the woodland.

On horseback, it's easier to see what surrounds us in Shimek. The trail takes a sharp right and the riders lean forward to keep their weight in balance with the horses as they climb a steep hill. Below is Lick Creek, dry today, but it usually runs mostly north to south in the unit, with a westerly flow near the unit's center. In wetter years, the stream is fed by seep, with rocked crossings for horses interspersed on winding narrow and wide horse trails throughout the forest. Along Lick Creek and its intermittent tributaries grow silver maples, elm, basswood, green ash and sycamores. On leaves overhanging the creek, horseflies lay their eggs.

The horse trails rise up and wind down throughout the 2,866-acre unit. Vistas depend on the season as most of the forest is deciduous, with areas of declining red and white pines planted in the 1930s. Shimek forest topography is hilly and highly erosive. The ridges are flat with deeply cut drainages. The soil that feeds the trees is thin. Roots run out at least three times as far as the trees are high. Tree roots entangle together, and tree roots of the same species may naturally splice together. Disease affecting one species can spread quickly in this environment.

Simple posts with painted numbers along the equestrian trails match the numbers on the horse trail map so new trail users can find their way through the forest and woodlands. It's a way to provide a wilderness experience that intensely marked trails do not.

The trail is dusty and particles float in the sunshine like a veil behind us. In open woodland, deer resting in the grasses pop their heads up to watch us. Other mammals have likely sought shade, tree cavities or tunnels under exposed tree roots to keep cool. Shimek is a summer home to endangered Indiana bats that fly from Missouri and southern Illinois to nest in the loose bark of hickory and silver maple stands.

Occasionally, a horse speeds ahead to catch up with the horse in front of it, even bumping into it. Horses are herd creatures, and if the rider does not pay attention or give the horse sufficient instruction, it may close ranks to join the herd. On trails, riders should maintain control and keep several horse lengths between them to avoid getting kicked and to see ahead for possible difficult terrain.

Where the trail widens, the riders draw abreast of each other to chat. When a rider is met on the trail, it's back to single file. The most common remark is, "If it wasn't for the horseflies..."

Bicycle riders and others using the trails should call out to equestrians and their horses as they come upon them and not pass until the rider gives the okay. Horses can be spooked by people coming up behind them silently. It's a good idea for the passing bicyclist or backpacker to talk to the horse so it knows you are human. If tempted to pet or feed a horse you don't know, first ask the rider if it is okay. Horses can be dangerous to those on the ground and to the rider if it becomes frightened.

"Make a mental note of this downed tree over the trail," calls out one rider.

"I'll stop at the office and leave a note for John on my way home," is the answer. "We're about halfway between 18 and 17, wouldn't you say?"

After a couple of hours of spiritual reprieve, we hook back up with the rocked wet-weather trail. This was laid with the help of Friends of Shimek State Forest Equestrian Trails. The trail is topped with several inches of three-quarter inch limestone, small enough to embed in the path with use and provide a smooth surface for the horses to walk on after a year's use. In the meantime, trail horses are shod or wear booties to protect their hoofs on the all-weather trail.

"Many of the Friends of Shimek volunteers are also members of the Great River Classical Horsemanship Association," says Ann Bennett, a classical riding instructor and horse club leader. "Our members live in southeastern Iowa and western Illinois and often ride in the Lick Creek Unit."

Back at the campground, the equestrians dismount to share a picnic lunch and exchange jibes. Then, almost choreographed, they help each other pack up gear, remove trampled manure and hay to the bunker, deposit redeemable cans in the cages and trash in the bin. The horses are loaded in trailers and the trucks pull away, leaving no signs they've been there except road dust and blissful sighs in the wind.

Shimek's Two-Way Street

"The equestrian trails are multi-use trails," explains Shimek State Forest manager John Byrd in his office. "In the 1970s, forests became viewed as places to recreate as well as conserve. At Shimek, five small man-made lakes

were created and stocked for fishing. Picnicking was encouraged, and old closed county roads and logging roads were turned into trails. Multi-use trails are shared by backpackers, hikers, mountain bikers, mushroom hunters and those looking for shed deer antlers, as well as horseback riders." Birders, too.

Equestrian trails require a lot of maintenance, and southeastern Iowa's climate, with its destructive ice storms, frequent thunderstorms and occasional high winds, present additional challenges. Trails are closed when they are muddy because resources are too limited to spend on continuous trail upkeep.

"When I started at Shimek in 2005, equestrians volunteered from time to time to help with upkeep, but when funding cuts in 2009 were so sharp the DNR considered closing the trails, the equestrians came to me asking, 'What can we do?'

"While putting in organized work days and learning about forestry over the next two years, the group incorporated as a nonprofit in 2011. They are 'invested users,'" explains Byrd. "Three or four times a week one of the Friends will report to me things they see that need attending as they ride the trails. They hold work days every few weeks to attend to things they've put on the list, or are a priority for me in the Lick Creek Unit.

"Once vandals knocked over four-by-four posts in the campgrounds. The Friends set them back up and painted them. They clean out fire rings, horse stalls, paint outhouses and have even obtained funds to purchase materials for a covered horse shed. They tore down the old shed and built the new one to DNR specifications.

"There's not enough I can say about how helpful this

PHOTO BY LORA CONRAD

A new horse shelter in the Lick Creek Unit campground was built thanks to $5,500 raised by the Shimek Friends and another $4,000 from the Lee County Charitable Fund. DNR Shimek staff and Friends provided in-kind labor, tools and materials to remove the old shelter and install the new one. A current fundraiser will build a second horse shelter in the Lick Creek Unit.

Friends group is. They volunteer their equipment and labor at the drop of a hat. They bring a lot of skills."

The feeling is mutual, as expressed on a Friends work day held in August 2013.

"We appreciate John," says Lora Conrad, editor of the Friends newsletter and website. "He listens to our concerns and does what he can to accommodate our desires, even though forest care is his priority."

"He takes the time to explain forestry practices and what goals the Iowa DNR has for Shimek State Forest," adds Judy Duke, another equestrian.

"His knowledge keeps us from making the errors of amateurs in attempting to help maintain and improve Shimek State Forest facilities," sums up Ringo Covert. "John has helped foster a team spirit amongst us and developed pride in our group and its role."

Forest Field Day

"As a forest manager, I have three goals," says Byrd during a forest field day hosted for the Friends of Shimek Forest and others in March 2013. "One, manage Shimek Forest's 9,500 acres in a sustainable manner; two, protect the forest from threats, such as disease and invasive plants, and; three, enhance public benefits from trees and forests."

Byrd showed the attendees several forest areas managed for different stages of forest growth. By educating the public, he finds people tend to value what they understand.

"A 'crop tree release' is done to improve the forest stand," clarifies Byrd. "One of the most valued trees in Shimek is oak, but we also manage for other desirable species such as black walnut and hickory. These species require sun to grow. Eliminating less desirable and

Horse riders leaving established trails cause erosion by creating deep crevices in the hillside. Pocks form, which hold water and drain poorly due to the thick clay base. Conditions like this make it dangerous for horse and rider.

PHOTOS BY MINDY KRALICEK

sunlight-competing trees allows the oaks and hickories to grow faster, gain a wider canopy and produce more mast—acorns and hickory nuts for deer, squirrels and birds.

"We mostly girdle, but will fell occasionally, unwanted or less desirable stock. Girdling is cutting into and through the cambial layer of the tree, usually one inch of the tree trunk all the way around it, twice. Girdling kills the tree, but leaves it standing for wildlife to use and the method keeps our forestry staff and desired trees safer than if the trees were cut down.

"Areas with trees approaching harvest size are thinned to allow light in for the next generation of oak. Trees 10 inches in diameter or less are felled or girdled. The cut trees are treated with herbicide in order to keep them from re-sprouting. Oaks are not treated because if they re-sprout, that's the species we want to have in abundance."

Oaks—especially white oak and bur oak—were clear cut during settlement to build houses and for use as railroad ties. Land not cleared for farming or development regrew as oak forests, as the sunny conditions of clear-cutting were favorable for their species. Now oaks form the Shimek forest canopy and species thriving in shade are ash, elm and black cherry. The focus in Shimek is providing habitat for native oak success, so practices emphasize getting light to the forest floor. When oaks thrive, so do many of the animal species that rely on the acorn harvest.

"Next is the 'shelter wood' harvest," continues Byrd. "About 40 to 60 percent of the large trees are harvested—depending on the amount of natural oak regeneration in the area—for lumber, veneer, pallets and other wood products. The harvest increases the sunlight getting to the forest floor and allows existing or new oak seedlings to grow.

"Ten years later, all the remaining large trees are harvested—unless we hold off until there is sufficient oak regeneration," adds Byrd.

If the forest understory becomes too dense for oak saplings to grow, a prescribed burn may be used. Oak bark and roots are more adapted to withstand fire than other trees, so this clears the forest floor for oaks to thrive. Burns also encourage wildflowers to grow in the area opened up for light.

"My goal is to regenerate the forest with this multi-step cutting technique so there is natural forest regeneration, rather than planting or setting out trees after a single clear cut," explains Byrd. "Plus, there are forest stands with a diversity of habitats for birds and wildlife that wouldn't be here if the forest was all mature trees and clear cut. This helps meet our objective to provide multiple benefits—so people experience nature and a diverse landscape when they visit Shimek forest.

"Equestrian trails and forests are rather incongruent entities," adds Byrd, as he points out an area where horses have been ridden off the trail. "There are legitimate concerns associated with horses in forest and woodlands: namely erosion, creek water quality and possible introduction of invasive species.

"Equestrians would probably prefer to ride off the beaten path for various reasons, but horses are required to stay on the established trails because when people ride to the side of trails, or go around obstacles, they damage the natural areas and cause erosion. Erosion degrades water quality in the creeks and damages the managed trails as well.

"That's why I support the rocked wet-weather trail. Horses and riders now have the option to ride there when dirt trails are closed due to muddy conditions. About 30 percent of our horse riders bring their horses from other states to ride the 25 miles of horse trails in the Lick Creek Unit. Some riders make plans weeks ahead of time to camp here. If it's raining or snowing when they arrive, they still want to ride. Now, with the three-mile rocked loop, they can still ride without fear of injuring their horses' ligaments on pocked trails or by slipping in the mud.

"Of course, there may be times even the wet-weather trail is closed depending on its condition. If in doubt, call the Shimek State Forest office or check the DNR website for trail closings," suggests Byrd.

Get Involved

To learn more about starting a Friends organization to help state parks or other natural areas, go to *iowadnr.gov* and search "friends." To learn more about volunteer opportunities, go to *iowadnr.gov/volunteer*.

To join the Friends of Shimek State Forest Equestrian Trails, contact Ann Bennett, *windrushhill@formtel.net* or *319-986-2199*. Donations can be sent by check to Lee County Bank &Trust, Attn: Debbie Miller, FOS Treasurer, 2501 Avenue L, Fort Madison, IA 52627.

Forest Ambassadors

While waiting for another truckload of rock to spread on a Friends work day, Byrd emphasized the value the equestrian Friends' group brings to Shimek.

"Beyond the labor they provide and the physical changes they make—which we greatly appreciate and couldn't have gotten done without their help—what the Friends do most for this forest is bring their enthusiasm and service as community ambassadors. They help get the word out when there is a problem and influence visitors to respect the forest and follow camping and trail use rules.

"When they have a work day and are wearing their orange volunteer vests, they greet forest visitors and remind them bottles and cans dropped in the green cages are redeemed and those funds are used to improve facilities, or they'll explain what projects they are working on and ask for donations. How many people will litter after our volunteers engage them? It makes a difference."

Raising Razing Goats

BY *KAREN GRIMES*
PHOTOS BY *BEN CURTIS*

Voracious goats take a bite out of the understory at Story County's McFarland Park, leaving prairie plants and sunlight behind.

The plants we love to hate: honeysuckle, autumn olive, multiflora rose, poison ivy, buckthorn. In the woods, they grab you, trip you up, snag your clothes, scratch your hands and give you a rash. Farmers hate them, too. They call them trash trees—honey locust, willow, mulberry. The shrubs and vines—greenbriar, wild grape, Russian olive, sumac and gooseberries—are tough to remove and compete against giant native oaks. Under threat from oak tatters and oak wilt, these majestic trees fight an even tougher reproduction battle. Hemmed in by invasive species and shaded out by thick understory, an acorn has about one chance in a million of making it to adulthood. Along the way, the unlovables hinder oaks from germinating, growing and surviving.

It takes active management for native woodlands to beat out invasive plants.

Clearing underbrush creates open, inviting paths through the woods, one where wildflowers and oaks thrive. Burning, cutting, girdling or herbicides all work. But fire is the best way to clear the understory, says Amy Yoakum, Story County Conservation Board's first natural resource specialist.

Long before settlers, Native Americans herded bison with prairie fires. Dependent on periodic disturbances, prairies and oaks flourished. And oak-hickory forests became the dominant woodland type in Iowa.

"Even small oak seedlings are well adapted to fire sweeping through the understory, springing back quickly

because of a well developed root system," says Yoakum.

Oak-hickory forests began declining in the mid-1900s, now making up less than 26 percent of woodlands. The dearth of fire is partly at fault. Today, fire has its limits. If too much fuel, smoke, neighbors' reactions, the house or outbuilding are concerns—fire may be the last resort.

But there is another, lesser known, effective method tested by more than one Iowa county conservation board. This answer is cute, funny, charismatic, loveable, curious and edible. Critters who have a voracious appetite for all things unlovable that cattle scorn. Ruminant field managers. Goats.

Yoakum introduced goats to two Story County natural areas: Robison Wildlife Acres and McFarland Park, using two different approaches. At the 78-acre Robison wildlife refuge, Yoakum's approach is slow, designed to restore an oak savannah and bring back a 13-acre prairie.

The fenced-in prairie looks like no other: vegetation is short and a lively green, or barren, brown and waist-to-shoulder high. Trotting through the barren stems, 10 goats emerge to greet us. Some quickly lose interest and lie down. Another climbs to the top of the mineral feeder, playing King of the Mountain.

Moving among the brown-faced kikos and the curious Boers, Yoakum says both breeds are meat goats. "These are Deb and Eric Finch's breeders. They come here after weaning their babies in the spring. The kikos are more dramatic and prone to following you around, saying ma-ah-ah quite pathetically. I've learned they're just drama queens."

Finch's goats also worked the rounds at Chichaqua Wildlife Area for the Polk County Conservation Board. Yoakum read about the goats and restoration at Chichaqua. "I said, 'I have to have some.' I called Loren Lown at Polk County," who led the project there. "He just raved about them. He thinks they are the most wonderful goats ever."

Story County has never had a problem with goats escaping, and they are well cared for. Conservation board staff checks water on Mondays and Fridays. Iowa State University volunteers check the goats again mid-week.

Goat owner Deb Finch comes out once per month to check them, worm them and look at their hooves, she says.

However, they lost two goats to predators after a freak 8-inch snow in May 2013. Although the snow partially knocked down the fence, the goats stayed inside. "Something got in and killed one goat, and so traumatized another goat that it eventually died, too," Yoakum says. "They think it was a dog, which the experts say is more likely to attack the hind quarters or rear end. A coyote usually goes for the neck and throat. So it was probably a dog."

Yoakum says she felt terrible about the loss, but Finch told her not to worry. Anyone who raises livestock knows some losses are unavoidable.

The solar charger for the electric fence is in the sunniest spot of the field, and it's only putting out 3,000 volts. "Four thousand is ideal, so we know there's a problem. It's time to walk fence." Sure enough, she finds the fence doubled over under a fallen branch. Dragging the branch off raises the voltage.

This summer will be the fourth—and only the third full—growing season for the goats to browse the prairie. The first summer was brief, after organizing a fundraiser for fencing and the solar electric charger. "We had to mow a path around the area where we wanted to place the fencing. And we had to develop a contract," says Yoakum.

As she walks through the green grass and forbs inside the enclosure, Yoakum says, "Unbelievably, this was bare dirt when we started, predominantly shaded with honeysuckle, waist-high poison ivy and multiflora rose. There was some dogwood. If you stuck your hand out in front of you, you couldn't see it."

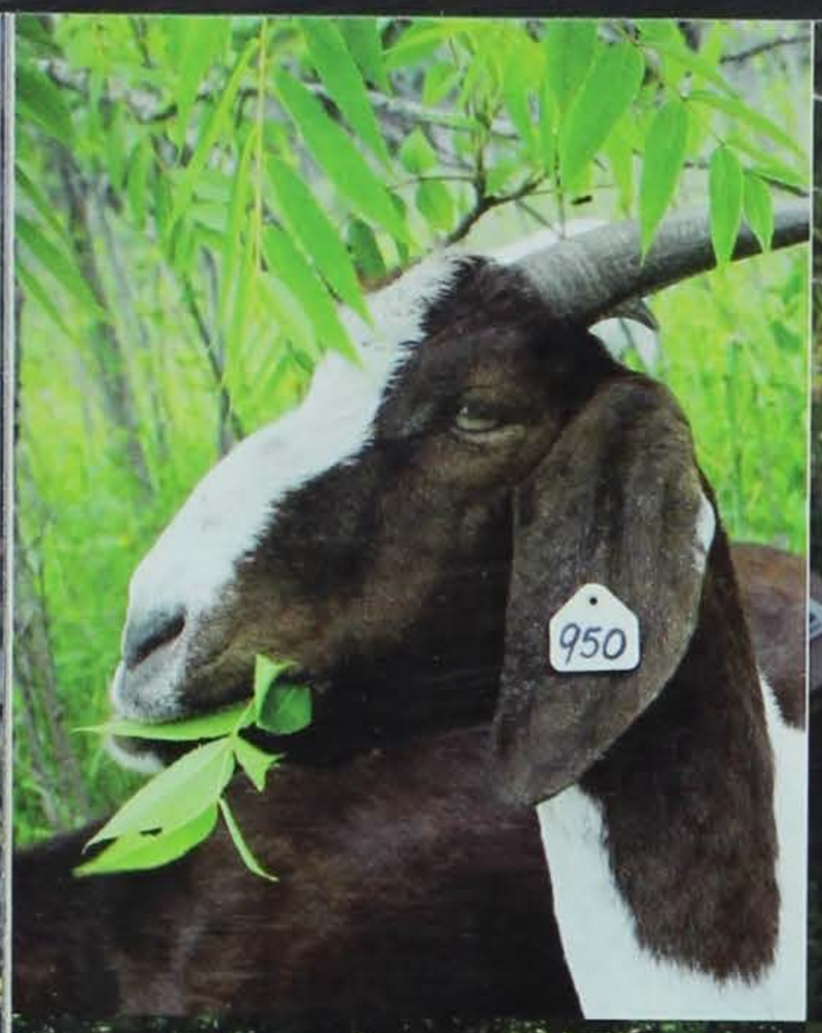
Today, she is surrounded by black-eyed Susan, cup plant, monarda or bee balm—also called horsemint—cream gentian, wild strawberries, greater and lesser ragweed, blue-eyed grass, showy orchis (one of the woodland orchids), golden Alexander and Indian grass. All have returned from the bare earth of just three years ago, without seeding of any kind. Above her shoulders wave the stripped-bare stems of bush honeysuckle and poison ivy.

She pulls apart a dogwood leaf, showing how you can tell a dogwood because the leaf veins are tenacious, holding together even when the leaf is pulled apart.

"Without fire, haying or grazing, there is nothing to stop the shrubs from growing into bushes. The bushes shade out the soil, making it impossible for prairie plants to grow."

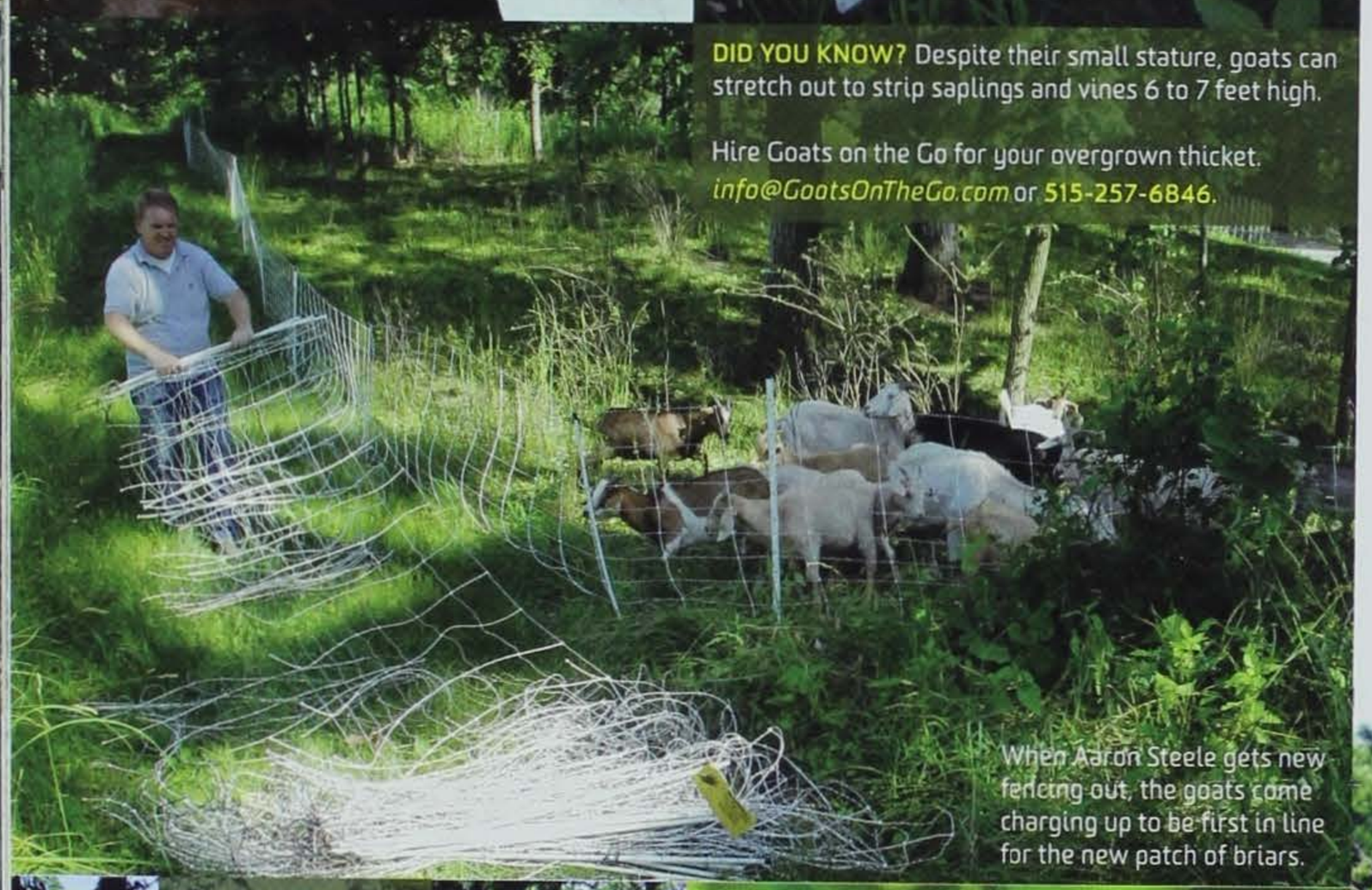
The goats eat some grass, but their preferred foods are browse—bark, leaves and weedy shrubs. "We like the 'go green' aspect of having the goats," she says. "We're not spraying chemicals on any stumps. We're not using

Goats are fabled to eat almost anything—including tin cans. However, they are browsing animals and will sample just about anything remotely resembling plant material. When tasked with cleaning up native woodlands, they strip the leaves off shrubs and vines, letting sunlight in to regenerate native grasses and wildflowers. Three years into the experiment at Robison Acres in Story County, a surprising abundance of wildflowers flourish where dense thickets once stood.



DID YOU KNOW? Despite their small stature, goats can stretch out to strip saplings and vines 6 to 7 feet high.

Hire Goats on the Go for your overgrown thicket. *info@GoatsOnTheGo.com* or **515-257-6846**.



When Aaron Steele gets new fencing out, the goats come charging up to be first in line for the new patch of briars.

Regularly checking electrical fence keeps the solar charger at highest voltage. A downed branch cuts current significantly, says Amy Yoachim, who restores natural spaces in Story County parks.

Strong persistent veins prove this is a dogwood leaf.

All in A Meal

So what do goats savor? They have a wide appetite, but do have preferences. Here's how food sources stack up:

Comfort Food to a Goat: Multiflora rose, blackberry, greenbriar, honeysuckle, locust, sumac, willow, mulberry, wild grape, autumn olive, gooseberry, chicory, red clover, ragweed, lambs quarter, sericea lespedeza, crown vetch, poison ivy/oak, spotted knapweed, pigweed, oak, walnut, agrimony, leafy spurge.

Second Choice Snacks: Cedar, buck brush, hickory, ironweed, spiny amaranth, curly dock, pokeweed, buttercup, white clover, thistle, burdock, ox-eye daisy, Queen Anne's lace, garlic mustard.

Unliked Foods: Most grasses.

Yuck Food: These species are undesirable to goats. Horse nettle (poisonous), perilla mint, wooly croton, buffalo burr, wild cherry (OK if fresh, poisonous if wilted), switchgrass (may cause photosensitivity), alsike clover (may cause liver damage.)

BELOW: Thorny stems laid bare by hungry goats who prefer anything but grass.

gasoline to cut down trees and shrubs."

And the prairie is regenerating naturally. At its own pace. "Two years ago was the first year I noticed Indian grass, so hopefully some of the other grasses will come back too.

"It's unclear as to whether this field was ever plowed. If it was, it was early enough, before the chemical revolution, so we may see..." she gestures with hands spread wide, questioning the possibilities.

Goats begin pruning brush on the prairie in early or mid-April, right after weaning—about the time leaves emerge. Their hunger for vines and tips of shrubs and trees aid in reclaiming the 13 acres of prairie, one acre at a time. Even in the second full year, the prairie to the south was much more open than the brushy areas on the north, east or west of the small paddock the goats share. "It takes about one month per acre per goat to clean it out," Yoakum says.

They are not in a hurry at Robison. But at the 200-acre McFarland Park, they are doing something more akin to flash grazing to make a big impact in a really short time.

On the northeast edge of McFarland Pond, entrepreneur Aaron Steele, partner in Goats on the Go, a for-profit business, housed 20 to 22 goats, including kids, in 2013. They were stacked up tight in a small area. The kids nurse for about three to four months, although they start eating vegetation at a week old.

Steele says they do a few demonstration projects like these to promote his relatively new business, but the goats are also available for hire. "We took the goats out of McFarland on Saturday to a private home. There was not a blade of grass in the backyard. It was a jungle." The abrupt slope down a ravine was too steep to mow, so it was covered in briars and shrubs. Goats are the perfect solution. By Wednesday, the goats had cleaned out the understory and were back at McFarland.

There's no combustion, so no carbon dioxide in the air. Their hooves break up the thatch layer, leaving the root systems intact, so there's potentially less erosion, he says.

Steele is a good salesperson as he touts the main reasons to use goats: low impact on nature, the natural approach instead of machines and chemicals and they work for those desperate for a solution because of their terrain. "And, some people just want goats," he adds. "About half their motive is entertainment.

"What's nice about this project is there's achievability in it," he says. "Here at McFarland we can be visible to the public." Each goat eats three to four pounds per day, so results are fast.

Steele and his partner, Chad Steenhoek, were growing the mother herd last year, keeping the 110-pound females, but selling the male kids as they reached market weight of about 50 to 70 pounds, usually at 4 to 5 months old. Goat meat is a niche market, but is growing in popularity. "People have a great interest in knowing where their food comes from," he says. Goats are attractive to people who want to avoid animals fed on GMOs (genetically modified organisms) since they eat browse and hay. Goat meat is also popular with some nationalities.

Steele's aim is to work with more conservation agencies, looking at their long-term goals and different degrees of management. "Story County has been incredibly innovative, to find the means to do it," he says, adding that Goats on the Go can go in and help conservation groups on any level.

"We can go in and train people or help with what equipment to buy." Or, you can pay the full price and have Steele and Steenhoek do all the work.

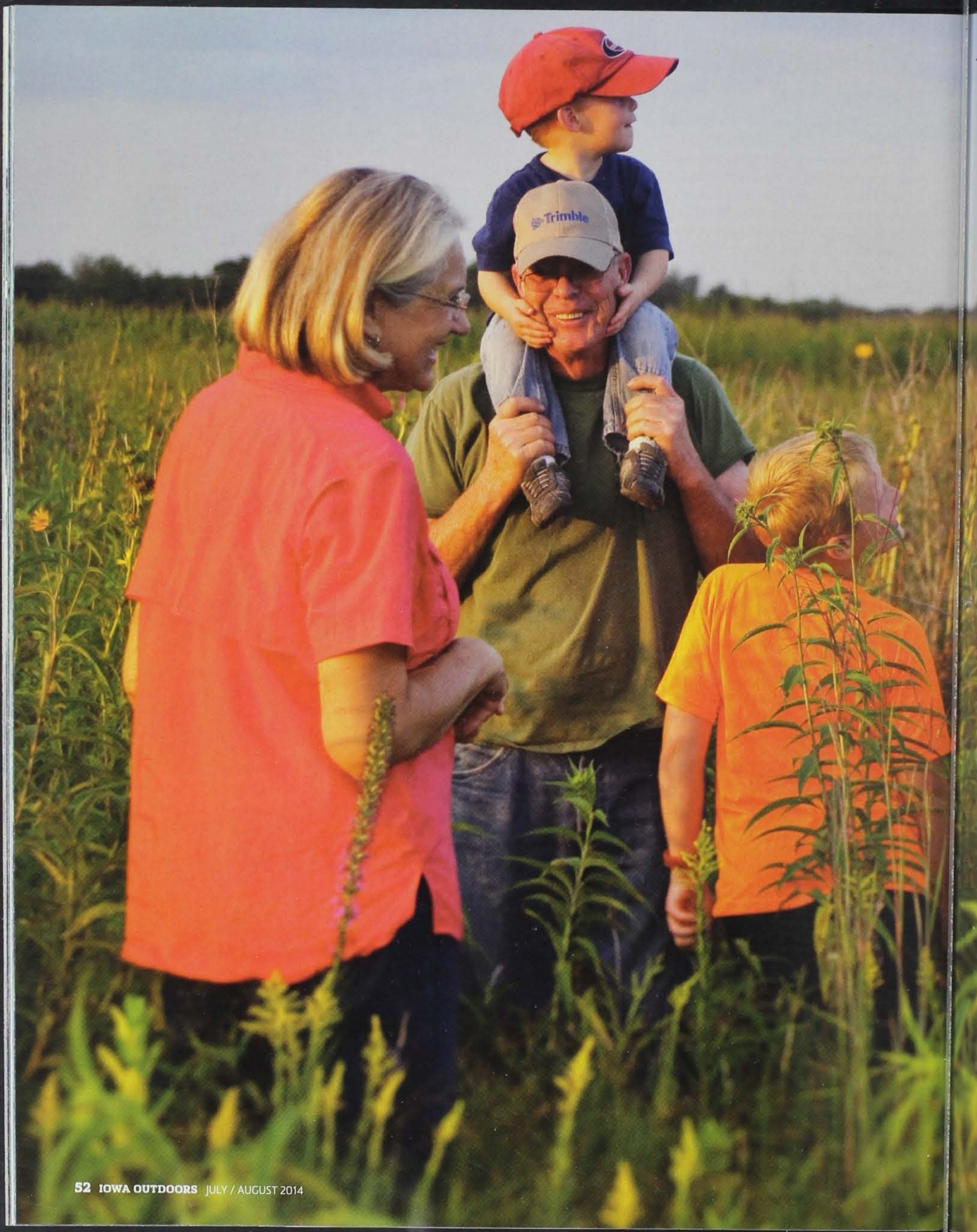
The minimum charge to have Goats on the Go bail you out is $600. That buys a considerable amount of knowledge, and pays rental on the goats, the electric fencing, setting up the paddock and moving the goats every few days. Behind the scenes, it pays for their knowledge that keeps the goats healthy—worming, hoof trimming, supplementing their food during the winter.

The goats mostly ignore Steele as he walks into the pen. Resting and chewing their cud, they have stripped the small paddock. In two days, all the target vegetation, mostly honeysuckle, is gone. "They can reach 6 to 7 feet high. See that line where they've stripped back the trees?"

But as Steele opens his SUV and pulls out new fencing, the goats leap up, all facing him. When he starts to set up new fence, the goats come trotting, baaing as they come.

"One key to keeping them in the fence," he says, "is always having enough food for them."

There are plenty of overgrown county and private areas—enough to keep Goats on the Go busy for years.


Trimble

Families and visitors of all generations and walks of life explore the northern third of Doolittle Prairie State Preserve in Story County. The northern most part has never been grazed or plowed.

Dynamic Doolittle

STORY AND PHOTOS BY *TY SMEDES*

Arguably central Iowa's highest quality prairie, Doolittle Prairie State Preserve puts on a stunning summer wildflower display every year.

Although Doolittle Prairie is home to roughly 220 native plant species, in summer, the vibrant purples of blazing star and yellow blooms of compass plant dominate the fragrant, lush landscape.

It's a beautiful August evening and the crowd at the Doolittle Prairie parking lot is growing. Several generations of Iowans have arrived—parents with small children and those with gray hair. For the past 22 years, on the last Thursday evening of each month, June through August, Lloyd Crim has faithfully led a group of one to 55 people on a field trip through the state preserve.

At 7 p.m., the group sets off northward toward the most botanically diverse part of the preserve. The heat of the day has passed, the sun is drawing closer to the western horizon and prairie wildflowers and grasses are beginning to show their spectacular colors in the warm evening light. The pungent fragrance of Virginia mountain mint wafts across the landscape as the small band of prairie enthusiasts makes its way past swaying stalks of big bluestem. As the group enters the segment, we are greeted by towering compass plants with striking yellow blooms, and seemingly countless prairie blazing star blooms with vibrant purple flowering stalks stretching nearly as far as the eye can see. The earthy fragrance of heavy vegetation is everywhere, and the juxtaposition of color is simply stunning.

Through years of experience, Crim has learned to let the group follow their own curiosities, often fanning out, to explore and create their own unique experiences. And often called upon by an excited participant, reference book in hand, he fills the role of educator. No matter the age, the group scatters, much like an excited group of school children, to explore prairie.

Geology and Landscape

Located at the southern edge of the Prairie Pothole region, the preserve has never been cropped due to wetland potholes that made it impractical to till during early years of settlement. These wetlands were formed by the Des Moines lobe of the Wisconsin glacier, roughly 12,000 to 14,000 years ago, and it is thought that myriad cavities and tunnels permeated the glacier as it melted. As the network of tunnels collapsed, shallow depressions and upland swales of glacial till created an uneven landscape. Lacking a natural drainage system, it is likely the area surrounding and adjacent to Doolittle also hosted a network of wetlands.

Prairie Tragedy
A Family Meets a Fiery End

"The area was initially homesteaded by William Rochester Doolittle in 1855," says retired Story County Conservation Board Director Steve Lekwa. "He was descended from Abraham Doolittle, a Puritan who came to America."

The Doolittles used it as a source of "wild hay" from 1855 to 1980. The unplowed 24-acre north tract was acquired by the DNR in 1980 and is managed by the Story County Conservation Board. Prescribed burning has been the primary management tool since 1980, with a portion of the area burned on a three- to five-year rotation. Spraying and cutting controls more stubborn brush and trees. The last major natural prairie fire to run through this part of Iowa occurred in 1872.

"It caught the Swearengen family's covered wagon about five miles southeast of Doolittle Prairie as they traveled between Nevada and Story City. All but the father died with the wagon. He died several days later at a nearby settler's cabin. The entire family is buried together at the Sheffield Cemetery on the east side of I-35, about two miles southeast of Doolittle Prairie," Lekwa says. "They were the last known deaths due to fire in the area. Roads and farms eliminated most of the prairie in this area by 1880, and with it the possibility of fire, but bits of virgin sod were still being drained and plowed in Story County in the 1950s and even into the early 1970s."

"It was **Nora Doolittle** who, more than anyone else was responsible for the prairie still being there today. She thought it would "be nice" if the prairie were kept as it was and as she had always known it."

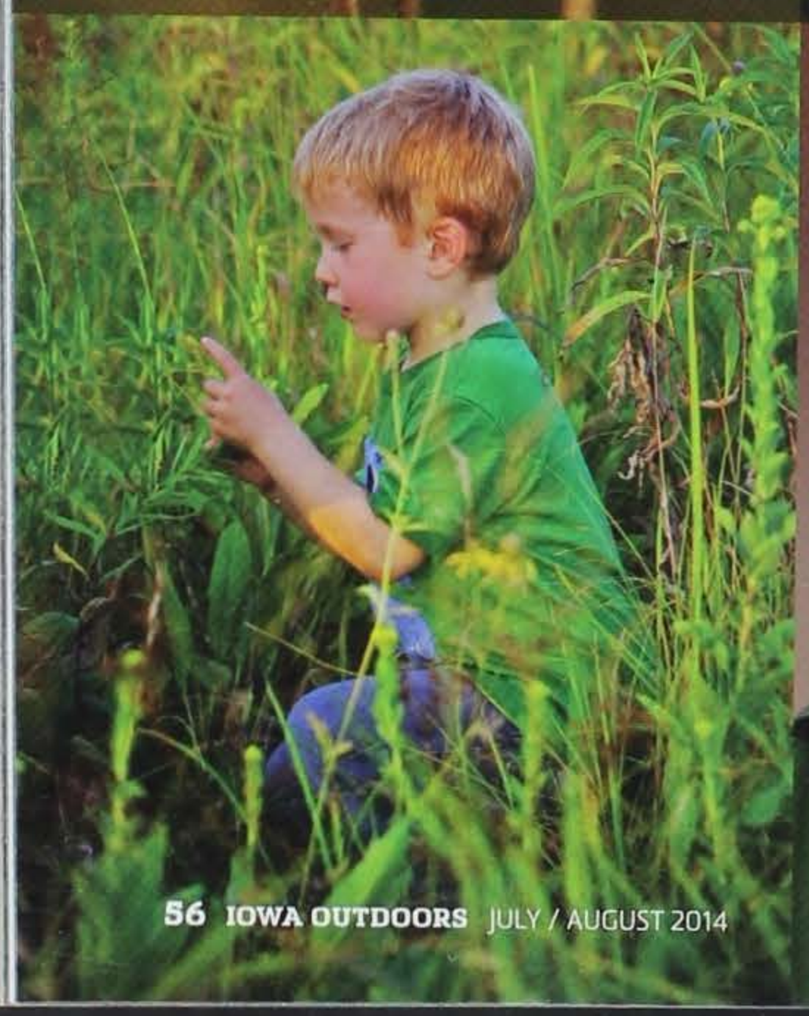
The Mathieson Tract—the central third of the prairie—is also managed by Story County, while the southern third is owned by the Doolittle family, according to an article in the Iowa Academy of Science bulletin.

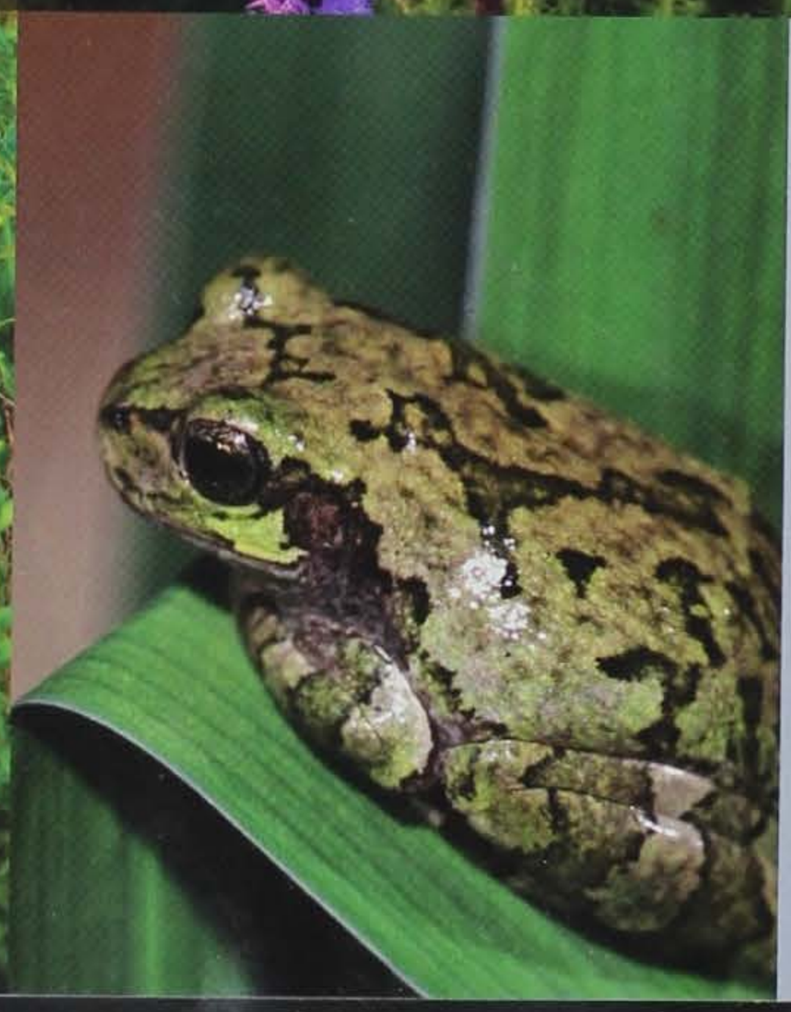
"Merlin and Wesley Doolittle, grandchildren of William R. Doolittle, farmed the land adjacent to the preserve, but the sentimental value of their grandfather's original homestead prevented them from draining and plowing the area of the preserve," reads the article.

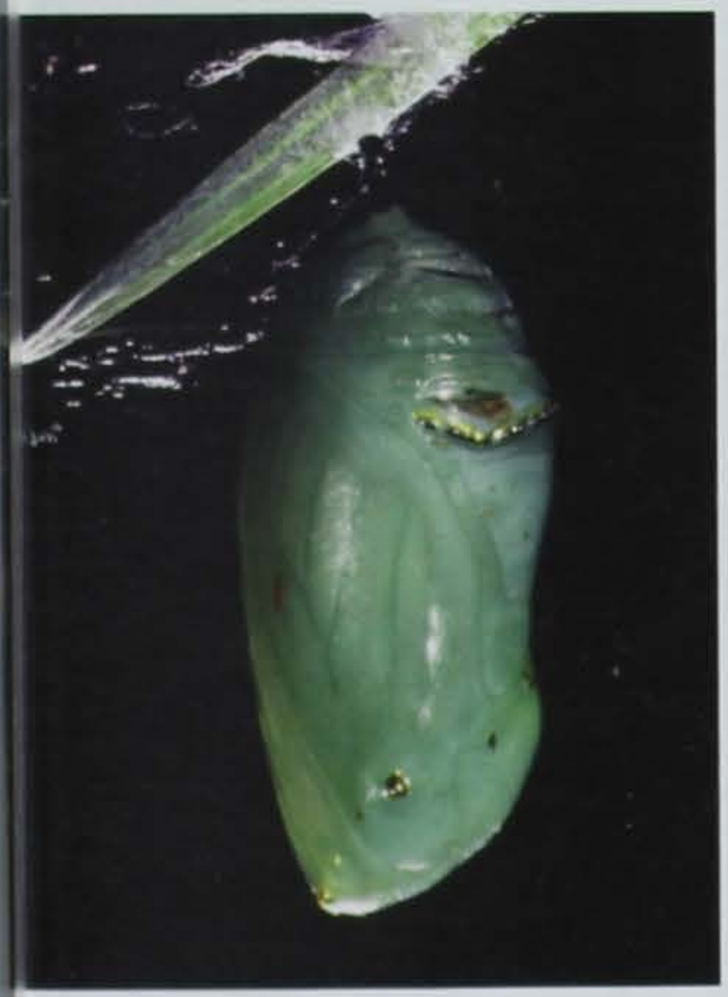
"It was Nora Doolittle who, more than anyone else, was responsible for the prairie still being there today. She thought it would 'be nice' if the prairie were kept as it was and as she had always known it. No one wanted to go against her feelings," says Lekwa. "Wesley and Merlin Doolittle farmed the actual land where the state preserve is today."

The grandsons cut prairie hay from the area for years when cattle were still being shipped long distances by rail and later by truck. It was considered "tonic" that helped prevent "shipping fever" when fed to the cows after long trips. Horses also loved it and some of the hay was sold to Iowa State University to feed the horses still kept on campus. When the market for "wild hay" declined, the land was sold to the state and became a preserve in 1980.

A monarch rests on a rattlesnake master, which gets its name from Native American use of its root as an antidote for rattlesnake venom. A running crab spider seems to be the glue that holds three thimble weed seed heads together. The earthy fragrance of vegetation, including blazing star and compass plants, is everywhere. A youngster explores the wonders of Doolittle Prairie. During particularly wet years, green tree frogs are a conspicuous inhabitant of the prairie. It's nesting season for red-winged blackbirds, and this male is aggressively defending his territory.







A dew-covered moth overnights on a gray-headed coneflower. A sedge wren sings from atop a post in the Doolittle Prairie parking lot. It is often seen flushing from sedge and marsh habitat, only to drop from view a few feet away. The colorful bottle gentian blooms from late August until first frost. The life cycle of a monarch (one generation)—egg, caterpillar, chrysalis, adult—lasts six to eight weeks. The fourth generation, emerging in the fall—migrates to Mexico or southern California where it lives for six to eight months, lays eggs and dies. Field trip leader Lloyd Crim points out a plant at the preserve. A great spangled fritillary butterfly feeds on swamp milkweed while a bee waits its turn.

A cool, July morning finds a bumblebee overnighting on a blazing star flower. He will begin his day as soon as the first rays of morning sun warm the body. A second, unidentified insect clings to the opposite side of the bloom. RIGHT: Exploring the fields of Doolittle Prairie is a family adventure.

A Seed Source for Expanding Iowa's Prairie Acreage

Carl Kurtz, dean of Iowa nature photographers, is best known of those who sell prairie seed and restore Iowa prairie and authored the book *A Practical Guide to Prairie Reconstruction*. In the late 1970s, Kurtz and now retired Iowa State University professor Jake Landers approached the Doolittle family about buying the prairie for The Nature Conservancy.

"They were not interested in selling it, but were willing to lease it for what they were getting for hay," says Landers. "Carl harvested seed and we parceled it out to several county conservation boards and private individuals who were interested in planting prairie."

The Story County Conservation Board eventually leased the southern third of the prairie, likely to prevent it from being plowed and cropped. Kurtz used Doolittle seed to plant his own farm and start his seed business.

"Prairie seed, descended from Doolittle seed stock, has probably been planted in a third of Iowa's counties. The United States Fish and Wildlife Service was a big buyer and used seed to plant many acres of mitigation lands," Kurtz says. "Port Louisa (National Wildlife Refuge in Louisa County and Mercer County, Ill.) bought about 2,000 pounds each year for several years." Kurtz estimates roughly 7,000 to 10,000 acres have been planted with seed stock having parentage traced back to Doolittle—not bad for a 26-acre preserve.

A Repository of Iowa's Natural Heritage

"To place the flora of Doolittle Prairie State Preserve into context with other wet prairie remnants in Iowa, the percent floristic similarity was calculated between Doolittle Prairie and three other preserves of similar size containing wet prairie," the previously mentioned article says. "These were Stinson Prairie (Kossuth County), Cedar Hills Sand Prairie (Black Hawk County) and Williams Prairie (Johnson County). Wetlands and swales cover at least 50 percent of the area of each of these preserves. The floristic similarity of Doolittle Prairie to the other three prairies was similar, ranging from 35 to 39 percent," reflecting a low level of commonality among any of these prairie preserves to one another in terms of the makeup of their plant species. This suggests these prairie preserves together contain a tremendous amount of plant diversity, despite their small size.

A Small Place with Big Impact

As the prairie walk continues, a small boy studies with amazement a tiny insect he discovered. An excited group of adults huddles around a field guide, trying to identify a flower that has them stumped. Crim helps them out. As I look around, I wonder how many students Landers led here, and how many went on to manage prairies elsewhere. I also wonder how many have attended the field trips led by Crim over the past 22 years. And I wonder about the prairie seed business started by Kurtz, and the thousands of acres of prairie that have been planted, all from seed originating from this small remnant prairie. And I wonder how many explored the thousands of acres of restored prairie in dozens of counties across Iowa, to learn about the past so they may appreciate this unique part of Iowa's natural heritage.

Doolittle Prairie is a special place—appreciated, preserved and loved by very dedicated people. With their perseverance, and the effort of many others, it should endure, and will be explored by children and excited adults for generations to come.

My Backyard

Get Iowa's Most Awesome Trail App—FREE

Use the free Iowa By Trail app and open the door to more than 1,800 miles of trails, find directions to trailheads, see and post trail photos, read or write trail reviews, plus find fun things and nature highlights along the way.

It even tracks your mileage and average speed, and can notify you about trail closings due to flooding or construction. Currently, the app is focused on Iowa's vast network of multi-use trails widely used by cyclists and walkers, but will expand with statewide public fishing accesses in 2015 as well as hiking trails in state and county parks.

The app is "something no one else in the country has at a statewide level. It showcases what makes Iowa special. We see this as a tourism tool for all that Iowa has to offer," says Hannah Inman with the Iowa Nature Heritage Foundation, the nonprofit conservation group that released it. "Iowa has one of the best resources for statewide trails in the nation and the app leverages this great resource."

It highlights great eateries, lodging, museums, points of interest and hidden gems found in towns along the trails. It provides vital information, such as local weather and locales for bike shops, restrooms and water—all geared to make an outing as easy and comfortable as possible. Share your fun by sending tweets and Facebook posts, invite friends, write trail reviews and rate trails from the app.

When you travel to a different area in Iowa, the app automatically lists nearby trails. All trails are searchable using filters to sort by difficulty, trail surface type, name, county and more, such as if horses are allowed or if it is good for birding or wheelchair accessible.

Currently available—free—for iPhones at iTunes.com. An Android version is anticipated this fall. Visit *inhf.org* to see an online version.

Birding On The Go With Audubon Birds Pro

Stumped by whether the bird perched high atop the tree is a yellow or prothonotary warbler? Wondering whether the melodic bird song is a rose-breasted grosbeak or a robin?

With more than 1 million downloads, the Audubon field guides are one of the most trusted mobile information platforms available. One of the newest is the Audubon Birds Pro field guide. Jammed with in-depth descriptions of 821 bird species, more than 3,200 high quality photos and eight-plus hours of songs and calls, the electronic field guide is perfect for beginning birders to seasoned veterans. Detailed descriptions cover appearance, habitat and behavior. Maps identify both seasonal and migratory ranges. Browse birds by shape, name, family, habitats, regions and colors.

Learn about bird families, classification and conservation. Learn the natural history of birds and which are threatened and endangered. Get tips on getting started in birding, how to identify parts of a bird and the different types and stages of plumage.

Search recently spotted birds or notable sightings in your area, drawing on the continuously updated database powered by the Cornell Lab of Ornithology. Create a personal nature account—post, keep lists and share sightings with friends and followers.

Audubon Birds Pro is compatible with iPhone, iPad, iPod Touch, Android and Nook devices. Prices range from $5 to $10 depending on device.

Wild Cuisine *CAMPSIDE*

BY *BRIAN BUTTON* PHOTOS BY *BEN CURTIS*

Tasty, Nutritional Wonder

Right underfoot is a tasty, nutritional powerhouse long consumed in the Mediterranean and now emerging at farmers markets, upscale eateries and health-conscious food stores. The heat- and drought-tolerant common purslane has a crisp, succulent snap with a mild lemony taste, but its off-the-chart health benefits are turning gourmands onto this nourishing plant.

Purslane has more heart-healthy omega-3 fatty acids than any other plant (think flax seeds and walnuts) and 10 times more of the antioxidant melatonin than any fruit or vegetable. Its vitamin A levels are as high as any green, leafy vegetable and is high in vitamins C and E and only 15 calories per 3.5 ounce serving.

Add the crisp, chewy leaves and stems raw to salads or toss in with pasta, omelets and soups, or steam and eat it like a vegetable with vinegar and oil. Many cultures dry the plant for use during the winter.

Find the low-growing, spreading annual in dry, full sun locales. Look for disturbed areas along sidewalks or open dirt areas.

PURSLANE AND NOODLES

1 cup purslane leaves

1/2 package Asian noodles, such as buckwheat, or whole wheat spaghetti cooked according to package directions, rinsed and cooled.

Parsley for garnish and color

Green onions (optional)

Favorite Italian dressing

Rinse and pull leaves off stem. Use leaves for salad. Mix with cooled pasta and dressing. Garnish with parsley.

Wild Cuisine *KITCHENSIDE*

BY *ALAN FOSTER* PHOTOS BY *JAKE ZWEIBOHMER*

Step inside sprawling Bourbon Street Restaurant and Voodoo Lounge on mainstreet Cedar Falls and the senses instantly scream New Orleans. The Big Easy. Grab a table under the lighted oak tree and ageless ornate street lamps and you'll swear your dining in The French Quarter. Sample some slap-you're-tongue Cajun-Creole staples that ignite the Mardi Gras spirit as much as it does the palate. Hours M-Th 4-10 p.m.; F-S 4-11 p.m.; Sunday brunch 10 a.m.-2 p.m. 314 Main Street; *319-266-5285; barmuda.com.*

Bourbon Street Blackened Walleye and Étouffée

The building that houses Bourbon Street Restaurant and Voodoo Lounge in downtown Cedar Falls is as rich in history as the storied party stretch for which it is named. The century-plus-old building has been a billiards hall, bowling parlor, cigar shop and a hatchery, to name a few. But one thing has remained constant over the past decade-plus is the top-notch southern fare not unlike what you would find on that iconic N'awlins street. Eight-time winner of the Wine Spectator Award of Excellence, Bourbon Street and Voodoo Lounge is classy to the core, from the leather couches in the lounge to the book-like menus. Build your own surf-and-turf, and add the scallop and crab cream sauce for good measure. Don't leave without sharing a Gulf-size order of the N'awlins Nachos—an endless plate of chips smothered with crawfish meat, Andouille sausage, onions, peppers and cheese.

BLACKENING SEASONING

1 tablespoon paprika
2 1/2 teaspoons salt
1 teaspoon onion powder
1 teaspoon garlic powder
1 teaspoon cayenne pepper
3/4 teaspoon white pepper
3/4 teaspoon black pepper
1/2 teaspoon dried thyme
1/2 teaspoon ground oregano
1/4 teaspoon nutmeg
2 teaspoons sugar

Thoroughly combine and store in air-tight container.

ÉTOUFFÉE SAUCE

1 cup diced onions
1 cup diced celery
1 cup diced green peppers
1 1/2 cups diced mushrooms
1 tablespoon minced garlic
1 1/2 cups mild salsa
1 cup clam juice
2 cups heavy cream
2 tablespoons canola oil
2 tablespoons white wine
salt and pepper to taste
equal parts cornstarch and cold water, mixed, to thicken

Heat oil over medium high heat and sweat the onions, celery and peppers for about 10 minutes. Add mushrooms and garlic and cook for an additional five minutes. Add salsa, white wine and clam juice. Turn heat down to a medium simmer. Add heavy cream. Season with salt and pepper. Add thickener until sauce begins to thicken. Simmer about 10 to 15 minutes and serve.

BLACKENED WALLEYE

4 walleye filets, skin on
2 ounces real butter, melted
2 ounces blackening seasoning
2 cups étouffée sauce

Heat a cast iron skillet over very high heat. Best done outdoors over gas grill or propane burner unless stove has a hood and vent. Pat fish dry. Dredge in melted butter and season liberally, about a teaspoon per side. Carefully place fish flesh side down in skillet. After two minutes, flip and drizzle with melted butter. Leave skin-side down two to three minutes. Cook until white and flaky or internal temperature reaches 130 degrees.

Warden's Diary

BY ERIKA BILLERBECK

Weed Patch

The marijuana grow was small, but the skunky smell of the plants was overpowering. There were 28 plants in all, neatly labeled by strain (diesel, white rhino, etc.), and each protected from wildlife with small cages. There was an irrigation system consisting of a couple 55-gallon drums, hoses and a small shed with a slanted roof that directed rain water into the drums. The surprising thing about this grow wasn't the size of it or the care given to each plant, but the fact the whole setup was within 50 feet of a heavily used mountain bike trail on U.S. Army Corps of Engineers ground.

Drug and Narcotics Enforcement (DNE) agents and I immediately got to work on the case. The first step was to identify the grower, which was easier said than done. We stood in the middle of the plot surrounded by tall bushes and small trees, looking for a place to hang a trail camera. The only tree large enough to hold a camera, and close enough to provide the view needed, was directly adjacent to the small shed. It would be the first place someone walking into the grow would probably look. But it was our only option, so we hung the camera and crossed our fingers.

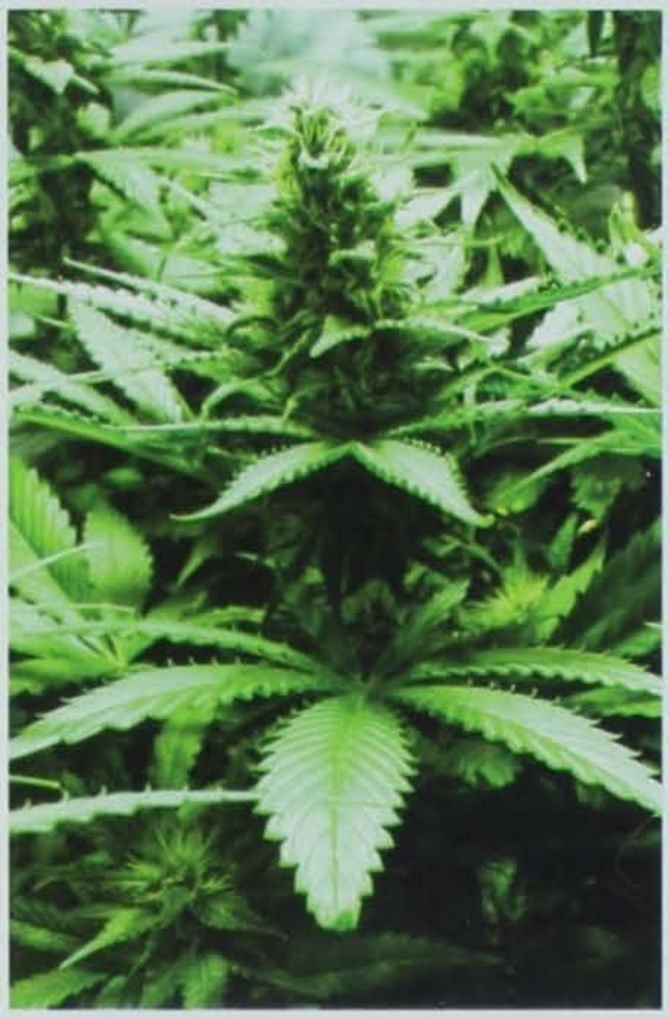
I increased my patrols around the two parking lots leading into the mountain bike trails, hoping I would be able to distinguish between a bike rider's vehicle and a marijuana grower's vehicle. After a couple of weeks, my spirits flagged. I hadn't seen any suspicious vehicles, and the only photos the camera had taken were of a deer and a close-up of a squirrel standing directly in front of the camera.

Finally, during the third week of surveillance, our luck changed. One of the agents checked the camera's memory card and struck gold. We had more than 400 photos of an individual wearing a gray t-shirt, a baseball cap, army fatigues and a camo military-style backpack. He was shown tending the plants—watering them, staking them and applying chemicals. And the best part, or so we thought at the time, was the fact his pants had a name plate above the right pocket that clearly read "Ritter."

Now that we had a name to go on, I couldn't sleep. The agents and I spent hours on the computer researching people, making telephone calls and hoping for a break in the case that would lead us to someone with the last name of "Ritter" who was or had been in the military. We came up with several leads, but none panned out.

One day, when an agent and I were checking the camera, I photographed the bar code on a new soaker hose that was lying unopened on the ground. Alongside the hose was a three-way nozzle assembly. Maybe the identification of our mystery man could be found in the computer system of the local Lowe's store.

BILLERBECK WITH DOG PHOTO BY JULIE STAUB; CANNABIS PHOTOS BY ISTOCKPHOTO.COM



After scanning the barcode, Lowe's came up with a list of dates on which a soaker hose with a matching barcode had been purchased. One in particular jumped out at me. The date of purchase was within the range of possible dates that we had predicted. The coup de grace was that the purchase included a three-way nozzle matching the one at the marijuana plot.

Luckily, the person had made the purchase with a credit card. The name on the card wasn't "Ritter" but at least I had a name to go on. Maybe he had borrowed a friend's pants. I was excited and immediately called the DNE agent. Boasting a bit about my detective skills, those of a highly trained conservation officer, I told him about my Lowe's discovery. I imagined that he would contact me for help with all his future cases. I would be a star.

But my dreams were dashed when I viewed the security video of the actual purchase. The purchaser wasn't our guy. I momentarily entertained the idea that the grow was a two-man operation, but eventually came to the conclusion that this was probably just a guy who wanted to water tomatoes in his garden with a soaker hose.

Over the next few weeks we monitored the camera as hundreds more pictures of the suspect were taken by our obviously-placed camera. Each time he was photographed, the suspect wore the same outfit. The only exception was the Fourth of July weekend when he must have been feeling especially patriotic and had traded his plain cap for one that sported an American flag.

I continued patrolling the two parking lot entrances, unsure which one he was using. Finally it happened. I noticed a car that was distinctly out of place. The car didn't have a bike rack, and the interior was obviously too small to even carry a bike. I sidled up to the car and discreetly peeked inside. Inside were a child's car seat and other assorted junk. I was about to walk back to my truck when I decided to take one last look in the rear hatch area. That is when I saw what at first appeared to be simply a small scrap of paper, but was actually a Lowe's receipt for a three-way hose nozzle. This was our guy.

I noted the license plate number and called one of the DNE agents. As luck would have it, he was sitting in the other parking lot, also hoping to spot the suspect. The agent quickly joined me and within five minutes, Mr. Ritter Pants came walking down the hill and climbed into the car. We ran the license plate which identified the car owner as a person with the last name of "Simpson."

The narcotics team obtained a GPS tracker warrant, placed a tracker on the suspect vehicle and continued to monitor it for a couple months.

Finally, about five months after starting the investigation, an agent contacted me. Simpson was at the grow, and they were planning a takedown. I pulled into the parking lot two minutes ahead of the caravan of five undercover DNE vehicles.

As three of us walked into the woods, I flipped on my body camera. We positioned ourselves on the trail adjacent to the marijuana plot and listened as Simpson tended his plants. When he finally stepped onto the trail to leave, we greeted him at gunpoint.

"How are you doing Simpson?" a narcotics officer asked.

"Fine," he replied.

"What were you doing back there?"

"Hiking," he lied.

"Did you see anything back there?" the agent asked.

"No."

We led Simpson back into the plot where the agent pointed up at our trusty piece of equipment and asked, "What do you suppose that is?" At that exact moment, the camera took a picture. The photo captured Simpson looking up with eyes the size of baseballs, and his jaw slack with shock. It was priceless.

"That would be a camera," Simpson mumbled.

Walking out of the woods we asked, "So, what's up with the Ritter pants?"

"The what?" he asked.

"Your pants. Why do they say Ritter?" the narcotics officer inquired.

"Oh, yeah. I got them from the army surplus store."

"Yeah. That's what we thought," the agent replied. He looked back at me and smiled.

Admiration & Legacy

BY *JESSIE ROLPH BROWN*

Find a volunteer project or post your own event at *www.iowadnr.gov/volunteer* or call *515-242-5074*.

HAPPY TRAILS

CENTRAL IOWA TRAILS, DES MOINES

Group builds, improves, maintains trails

There are many conservation trailblazers, but this group takes it literally—the Central Iowa Trail Association works to build and maintain Des Moines area trails. With about 150 members, the group puts in more than 1,000 volunteer hours a year, working with DNR, Polk County Conservation and Des Moines Park and Recreation. Initially formed in the early '90s to preserve park access for mountain bikers, the group has shifted focus to public-private partnerships to build and improve trails. "Some people don't realize the volunteer labor that goes into parks," says president Brian Sheesley. Through a monthly work day and other projects, the group has developed more than 30 miles of single-track dirt trail for mountain biking and trail runners. To maintain the challenging six-mile trail at Summerset State Park, the group hand-clips grass and brush. Volunteers remove invasive species, rework eroding trails and help re-rock trails. "CITA is a remarkable group in that they have consistently followed through with their ambitious undertakings in the eight years I have worked with them," says Whitney Davis, DNR trails coordinator. "They take their work as volunteers seriously and have generated a reputation for themselves as land stewards, outdoor enthusiasts and proficient partners." In some cases, they come up with project ideas, and other times, land managers come to them. The group seeks grants and fundraising to hire professionals to design and rough cut trails, then volunteers finish the work. "These trails provide access to natural areas that people otherwise wouldn't be able to enjoy," Sheesley says. "I've met a lot of good people and being able to provide the trail and see families along the trail enjoying themselves—it's gratifying to see other people enjoy the fruits of that."

—centraliowatrails.com

PUTTING DOWN PARK ROOTS

MARVEL GRIFFEY, NORWALK—Volunteer serves 26 years as camp host

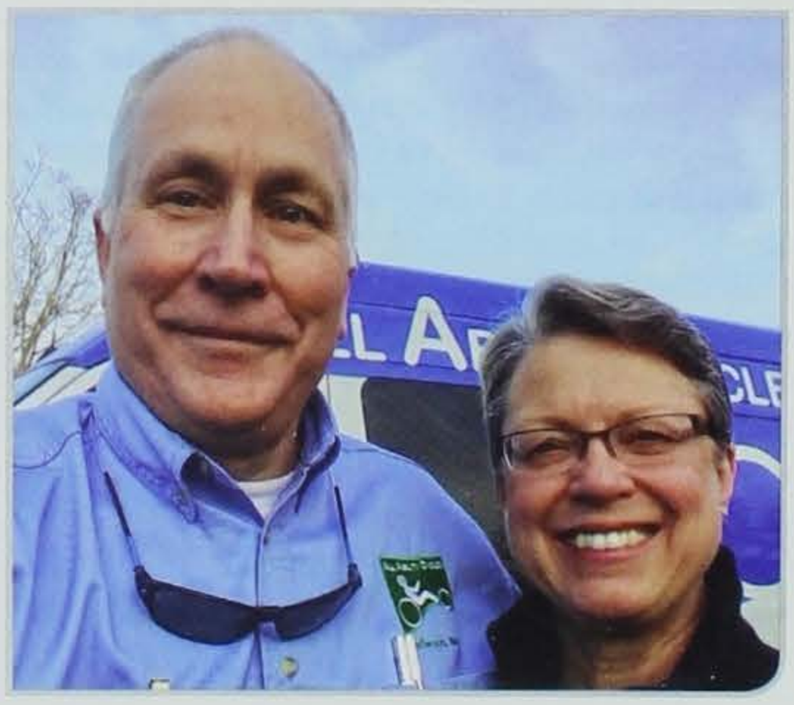
Camping is more than a tradition for Marvel Griffey. It's a way of life. She's now in her 26th year as campground host at Walnut Woods State Park near West Des Moines. "We camped all the time," says Marvel of her late husband, Tom. They started taking their five kids camping in a canvas tent. "With five kids, you couldn't afford a vacation," she says. Later, she and Tom would camp the maximum two weeks and then move to another park. The park manager at Walnut Woods at the time, Terry Manning, asked them to volunteer as campground hosts, and the rest is history. "We kind of felt like we knew everything to help campers out," Marvel says. "I like to be outside and like visiting all the people. Campers are such nice people." The 79-year-old also mows and vows to keep at it as long as her health holds up. There are "a lot of trees to mow around, but I can do it. I know I worry about the park—I have a fit if it doesn't look nice," she says. After Tom's passing a few years ago, their son Frank volunteered to help Marvel at the campground. For many years, the Griffeys have held the title of longest-serving campground host and Marvel has no plans to quit soon. "Marvel has a great sense of ownership regarding Walnut Woods, and the value of her services over the years is immeasurable," says park manager Tim Gedler. "It's her dedication toward always wanting to help park visitors in any way she can, and her service helps ensure everyone's visit will present them with nicely mowed picnic areas and campsites."

ON THE ROAD AGAIN

JOHN AND CELIA BRUNOW, JEFFERSON

Couple works to get people of all abilities cycling on Iowa's trails

The bikes may look different, but the goal is the same—to get people moving outdoors. Since moving home to Iowa from Virginia a few years ago, John and Celia "Ces" Brunow have worked tirelessly to help people with special needs find a bike that fits. Based out of Jefferson, All Ability Cycles offers bikes, trikes, hand-crank bikes, tandem cycles, trail-behind equipment and specialized adaptations to help people with special needs hit the trails. "There are lots of good bike stores in Iowa, but we didn't see anyone else focusing on that part of the population," John says. Serving people with special needs in their bike shop in Virginia "was a very joyful part of the business and we wanted to do more with it, to reach out to this community that needed greater service," says Ces. The couple traverse Iowa in their van, attending meetings and conferences to show products and give test rides to groups that support amputees or those with spinal cord or brain injuries, for example. "We get calls from all around the state. We show up in driveways and do test rides," John says. People want to get out on trails with their friends and family, John says, and Iowa's extensive trail network allows them to cycle without the hazards of riding on the road while enjoying some gorgeous landscapes. "Having the facilities, the fellowship—those things are important," he says. Their equipment has trekked across the state on RAGBRAI, too. "The joyful part of this business is when a person, whatever the disability, gets on a bike and feels the wind in their face and feels like they're moving in a normal way again. The joy on their faces is amazing and it brings us a lot of joy," says Ces.



—allabilitycycles.com; 515-386-8900

CENTRAL IOWA TRAILS PHOTO BY BRIAN SHEESLEY; GRIFFEY PHOTO BY JESSIE BROWN; BRUNOW PHOTO COURTESY JOHN AND CELIA BRUNOW

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BY *MINDY KRALICEK*

Horseflies

Horseflies belong to the Tabanidae family, of which there are 350 species in North America and approximately 3,000 species worldwide. They are often called forest flies or deer flies, despite being different species.

PAINFUL BITES

Horseflies are very noisy in flight and active only in the day, particularly in sunny areas. Their bite is painful and becomes itchy and may cause swelling if not treated. They release salivary secretions as they suck on the blood pool created by the tearing of flesh. The irritation and swelling usually disappears in a day or so. However, secondary infections may occur when bites are scratched. First-aid skin creams may relieve the pain. In rare instances, there may be allergic reactions involving hives and sneezing.

BLOOD AND NECTAR MEALS

The females bite mammals, and sometimes, humans. They need a blood meal to produce eggs. Males are pollinators, feeding on nectar and plant juices. Male horseflies lack the large mouth protrusion with sharp, saw-blade-like teeth that females use to tear into the skin of mammals.

BIG FLIERS

Adult horseflies emerge from the pupae in late summer. Horseflies are strong fliers and will immediately seek out food and a mate. They are up to 1.25 inches in length and have short horn-shaped antennae. They live only a few days.

EGGS NEAR THE WATER

Horseflies lay eggs on foliage that overhangs streams or on stones close to a waterbody. They also may lay eggs in wetlands. They lay between 25 and 1,000 dark, spindle-shaped eggs in tiers to cover a smaller area. The larvae drop into mud or water and burrow into soil to feed on larvae, crustaceans and earthworms. The larval stage lasts one to three years.

SHOO!

Horseflies can make outdoor activities uncomfortable. Wear light-colored clothing and protective mesh. Even with an application of repellents, flies will continue to swarm because of their attraction to movement, shiny surfaces, carbon dioxide and warmth.

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