

SPRING 2019

# IOWA OUTDOORS

THE DNR'S MAGAZINE OF CONSERVATION AND RECREATION

SK  
351  
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Spring  
2019  
Vol. 78  
no. 1

**IN THIS ISSUE:**

**GREAT HORNED OWL ADVENTURE**

*A BOY'S LOST 1965 STORY OF BANDING OWLETS RESURFACES*



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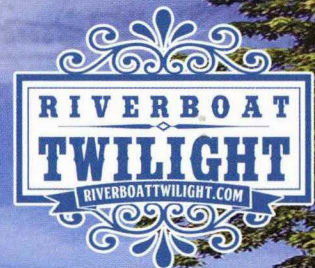
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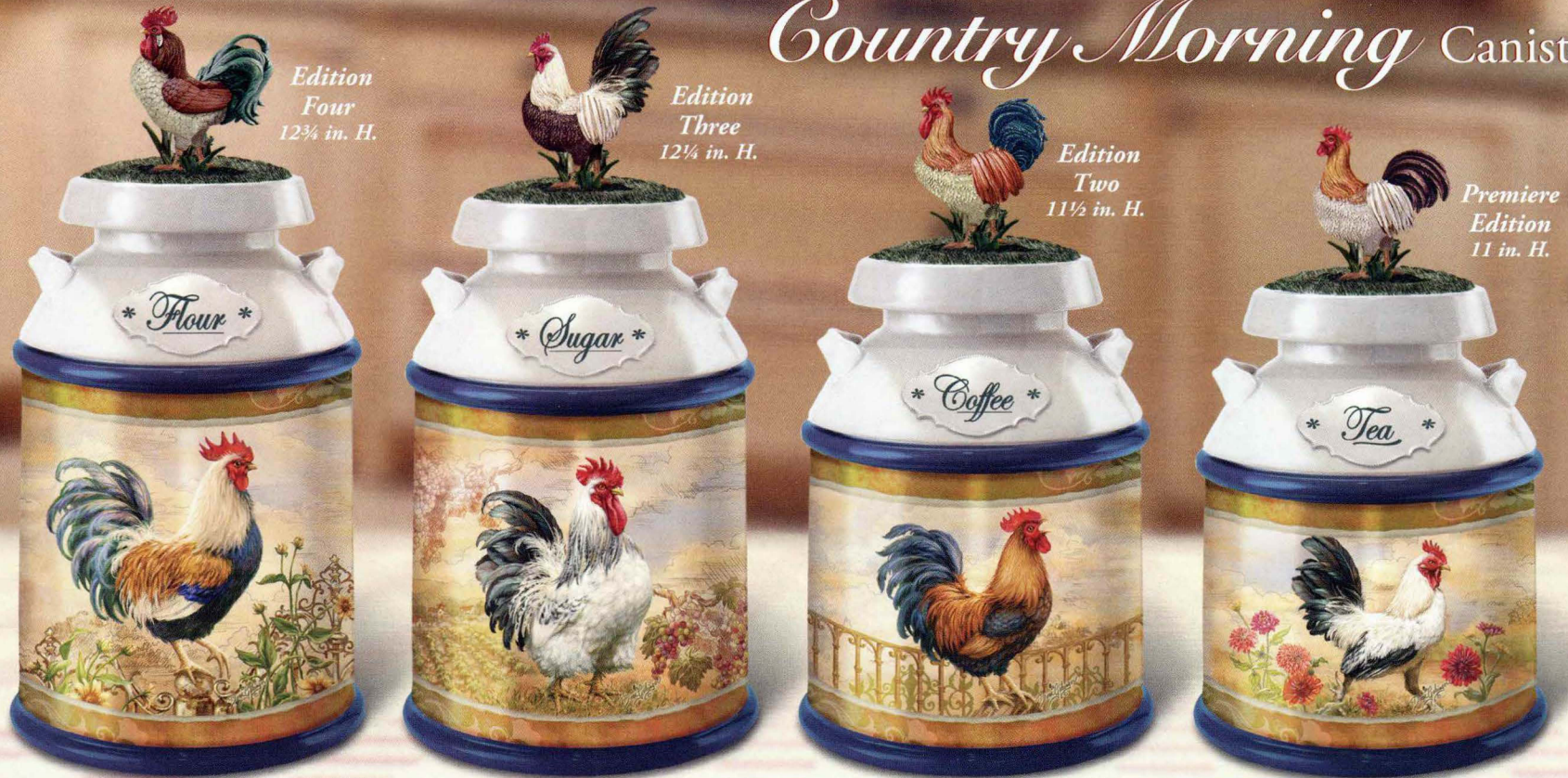
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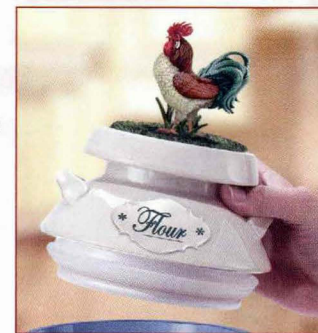
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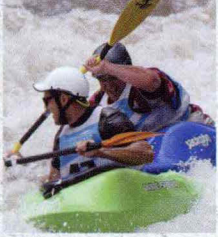
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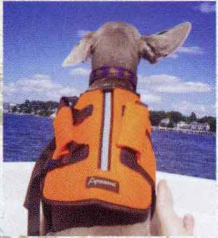
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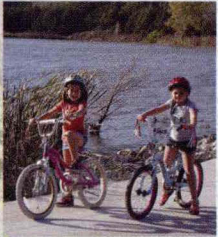
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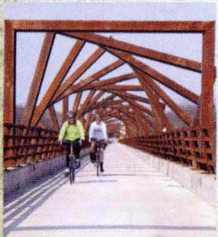
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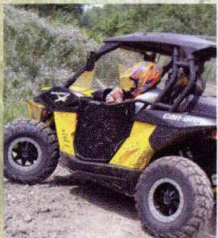
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## FEATURES

### 26 Top Dogs— Coyote and Fox

Sharing the Iowa landscape, the ever-adaptable red fox does its best to coexist alongside the larger, more powerful coyote winter through fall.

STORY AND PHOTOS BY *TY SMEDES*

### 34 Veterans Cast Away Disabilities

For one week, disabled vets from across the Midwest bond together. For some, it's their only time outdoors. This remarkable program helps broken bodies and tormented minds feel normal again—alongside those that best understand—other disabled vets.

STORY AND PHOTOS BY *LIZ JACAVINO*

### 42 Purple Martins Grace New Public Land

Newly acquired public land adjacent Walnut Woods State Park in West Des Moines not only helps clean the metro's drinking water, but features an up-close colony of purple martins—with bleachers—so visitors can watch and learn from martin-devoted park staff.

STORY AND PHOTOS BY *LIZ JACAVINO*

### 50 Long Lost Boyhood Owl Adventure

A high school writing from 1965 resurfaces, tucked away in an old birding book recently purchased by an *Iowa Outdoors* subscriber. It's a rollicking account of scaling a massive oak to band great horned owlets in a past era.


STORY BY *NORMAN C. WARD, JR.*

### 52 Hook An Angler!

DNR fisheries staff break new records every year—fish stocking, new habitat, more angler access. With more places to fish and more fish than ever, we call all hard-core anglers to personally invite more into the sport to help set more angling records.

STORY BY *SHANNON HAFNER*





**ABOUT THE COVER**

A pair of great horned owlets keep a wary eye on their surroundings. The cover makes a great companion to the recently discovered boyhood owl adventure from 1965 (see page 50). This species usually reuses nests built by another species, but also use cavities in live trees and dead snags. Great horned owls are common and widespread throughout much of the Americas, however populations declined by about 33 percent between 1966 and 2015, according to the North American Breeding Bird Survey.

**PHOTO BY ERIC WILLIAMSON**

**ABOUT THIS PHOTO**

The coyote gives birth to up to six pups in an underground den, which are usually very well hidden, although they may be close to human habitation. Pups are born in spring and stay with parents as a family through fall. And unlike the fox, which averages 10-12 pounds, the much larger coyote will reach 30-40 pounds. These pups are learning to howl at a young age, as they mimic their parents. Dig in on page 26.

**PHOTO BY TY SMEDES**

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## DEPARTMENTS

### 11 Outdoor Skills

*Learn disease-prevention skills with DIY or professional anti-tick clothing treatments, use versatile binoculars as a magnifying lens and with a smartphone, a telephoto lens.*

### 12 Together

*Kick up your heels in Elkader to benefit monarchs and hike near Spirit Lake for colorful warblers. Get tips for comfortable and potentially life-saving spring paddling. Volunteer for amphibian science and you'll end up becoming fluent in speaking toad and frog. Find instructor-led time on shooting ranges for safety and perfect aim.*

### 18 Lost in Iowa

*Bring rod and reel to explore tranquil, unexpected angling bliss in Iowa's largest metropolitan area—from small lakes in the 'burbs to quiet city ponds.*

### 64 Notes from the Field

*When filtration fibers in Creston kept breaking mysteriously—making drinking water unsafe for 40,000 Iowans for several weeks—it took sleuthing and 'round-the-clock effort to find the surprising culprit before clean water flowed again.*

### 66 Flora and Fauna

*Virtually nonexistent in the wilds of Minnesota or states to our west, take a nature stroll to find beautiful, splendid shooting stars flowering in 25 eastern Iowa counties.*

#### ABOUT THIS PHOTO

Minutes east of Des Moines, a 5-acre pond at Yellow Banks County Park in Pleasant Hill showcases the hidden and quiet urban angling opportunities worthy of exploration. The Des Moines metro area boasts more than 70 lakes and ponds stocked with thousands of fish each year. Plan your adventures on page 18.

PHOTO BY KATI BAINTER



# IOWA OUTDOORS

SPRING 2019 • VOLUME 78 • ISSUE 1

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Ed Tormey, acting - ENVIRONMENTAL SERVICES • Dale Garner - CONSERVATION AND RECREATION

DNR Central Office, 515.725.8200 • TTY users contact Relay Iowa, 800.735.2942

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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 in Iowa 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. 515-725-8261 or iowadnr.gov/volunteer

## HOW TO DONATE

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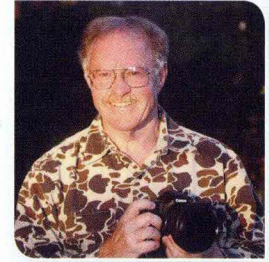


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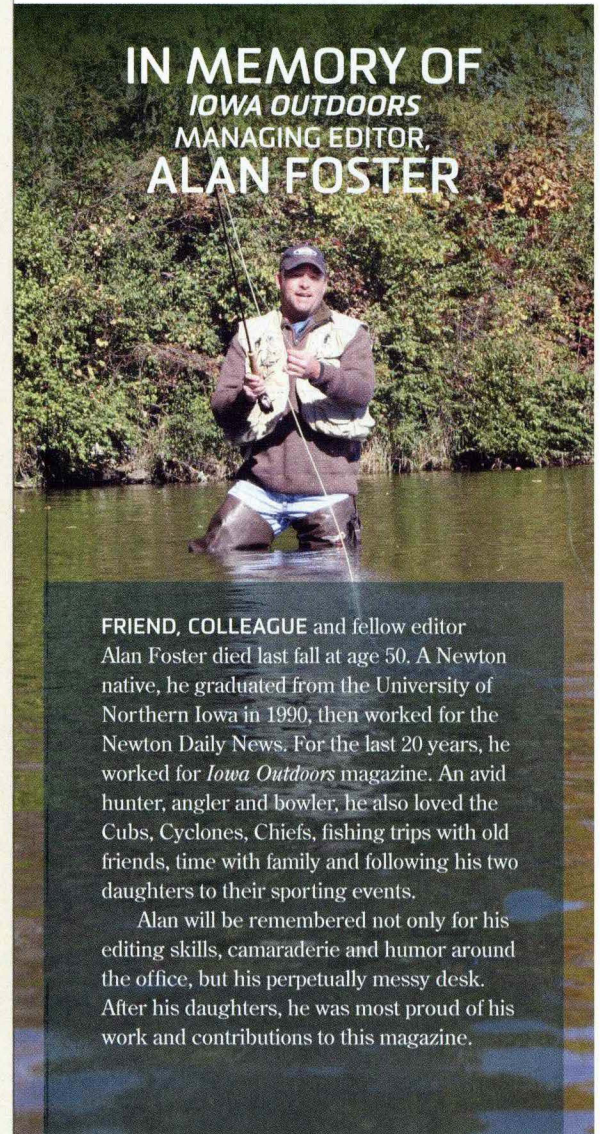
TY SMEDES is a full-time writer and photographer from Urbandale. He teaches photography classes and leads tours to the Sierras and Africa. His 250-plus page books, *Iowa's Wild Beauty* and *The Return of Iowa's Bald Eagles* are on sale for *Iowa Outdoors* readers for \$29.95. Mention this article for discount rate. 1-800-765-1690.



ERIC WILLIAMSON of central Iowa specializes in wildlife and outdoor photography. He holds a degree in professional audio/video. Search "shuttertrax" on Facebook to see his online gallery and workshops.



## IN MEMORY OF IOWA OUTDOORS MANAGING EDITOR, ALAN FOSTER



FRIEND, COLLEAGUE and fellow editor Alan Foster died last fall at age 50. A Newton native, he graduated from the University of Northern Iowa in 1990, then worked for the Newton Daily News. For the last 20 years, he worked for *Iowa Outdoors* magazine. An avid hunter, angler and bowler, he also loved the Cubs, Cyclones, Chiefs, fishing trips with old friends, time with family and following his two daughters to their sporting events.

Alan will be remembered not only for his editing skills, camaraderie and humor around the office, but his perpetually messy desk. After his daughters, he was most proud of his work and contributions to this magazine.

## PAPER OR PLASTIC? NO, MESH!

Seasoned morel mushroom hunters often advise novices to skip plastic and pack mesh bags when collecting Iowa's spring delectable gift. They claim mesh bags allow morel spores to float to the timber floor to produce more of the golden treasures. The truth is, spores are dropped regardless of whether it's a mesh, plastic or paper bag, advised Lois Tiffany, "Iowa's Mushroom Lady" and botany professor at Iowa State University until her death in 2009.

She, along with the late ISU botany professor George Knaphus and professor Don Huffman of Central College in Pella, conducted a 10-year study on the distribution and ecology of morels. A better reason for using mesh bags, said Tiffany, is due to the heat and moisture plastic generates, which can taint the delicate fungi. "You wouldn't take a pound of hamburger and put it in a plastic bag and place it in the back window of your car for a couple hours," she compared. "Morels are equally vulnerable to other bacteria contaminating the mushroom and becoming a problem." Mesh bags allow air to circulate, and create more opportunity for dirt and bugs to shake loose from the mushroom folds.

Tiffany debunks the long-held theory that mushroom hunters should leave some specimens for seed. "I can't imagine any collecting group being thorough enough to collect every mushroom."

### MOREL TIPS

Use these mushroom hunting tips from mushroom clubs and skilled foragers to put more of these tasty fungi in the bag!

#### When to Look

Natural spring signs alert us as to when to look: oak leaves the size of a squirrel's ears; lilac budding and ready to flower; may apple leaves opened up like umbrellas; trilliums, bloodroot, trout lily, Virginia bluebells, dandelion, spring beauty and columbine flowering.

Whether you want to follow the morels north with the spring, or wait until they reach your location, this is a great way to be in the know.

Track the progression of morels from Mexico to Canada at [thegreatmorel.com](http://thegreatmorel.com).

#### Weather

The chances of finding morels improve when daytime temperatures reach the 60s and nighttime temperatures are in the 50s. More specifically, scientifically, a soil temperature of 53 degrees is the time to start looking.

Variables affecting this include type of soil (well-drained sandy soils warm up more quickly than clay soils), the degree that the ground slopes and its aspect (whether the slope faces north or



south, for instance), the amount of sun or shade, soil moisture, the time of day, etc.

The temperature of the soil at one location can range as much as 8 degrees in a day. When everything else seems to be just right, a warm spring rain can trigger morel emergence.

An early warm spell in spring, where it cools off for a week or two before it gets warm again, plays havoc with hunting success. If you waited to hunt until after the second warming, your chance of finding morels is diminished.

As a general rule in Iowa, it is best to start looking in early April, and then continue to hunt through mid May.


#### Where to Look

Dead elms are a great place to look. The elms remaining produce a prodigious amount of winged seeds every spring in a battle to survive, and dying and dead elms may still be encountered while searching for morels.

"Your best luck," says Dave Layton of the Prairie States Mushroom Club, "will be where the elm is still dying, or has died within the last year." Such an elm will have most of its bark on it, but few, if any, leaves.

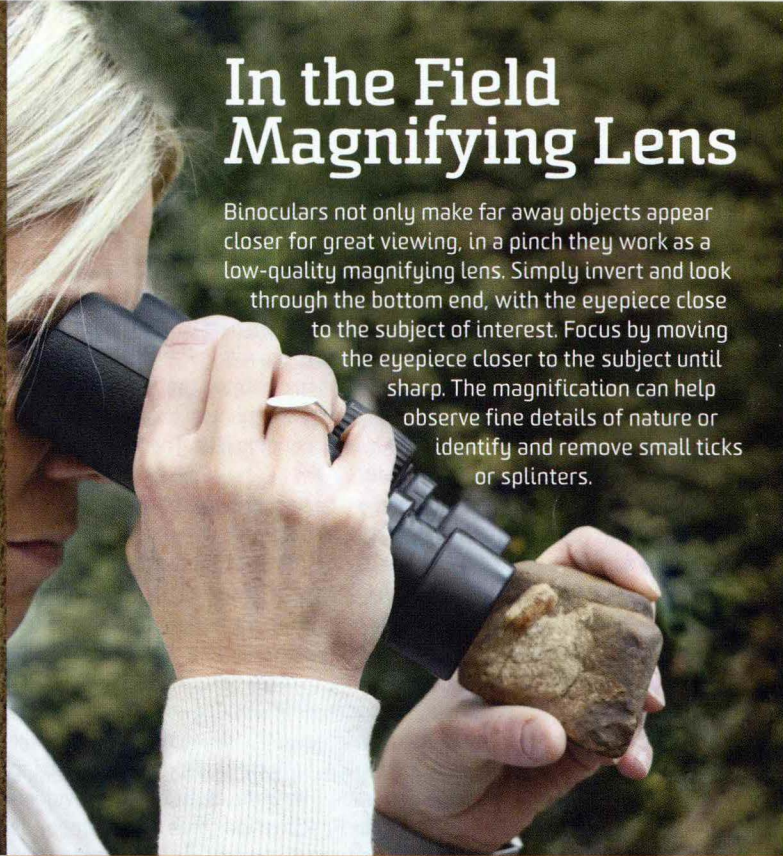
## TIPS, TRICKS AND MUST-KNOWS TO ENHANCE YOUR OUTDOOR FUN

### Tick Smart Solutions to Prevent Illness




Ticks can carry serious viruses such as Lyme Disease. Repellents containing DEET are not sufficient to protect against tick bites, according to the Tick Encounter Resource Center at the University of Rhode Island. DEET only repels ticks to areas where they could bite and that little protection does not last long. Permethrin kills ticks on contact. For best protection, use permethrin repellents on clothes and DEET for skin. Buy permethrin sprays at outdoor stores to make your favorite clothing tick proof, or send your clothes in for professional treatment. DIY sprays are effective for perhaps 3-6 washings, professionally treated clothes for 70 washes. To learn more about ticks, permethrin, how to prevent tick exposure or where to ship clothes for professional treatment, visit [tickencounter.org](http://tickencounter.org).

### In the Field Magnifying Lens



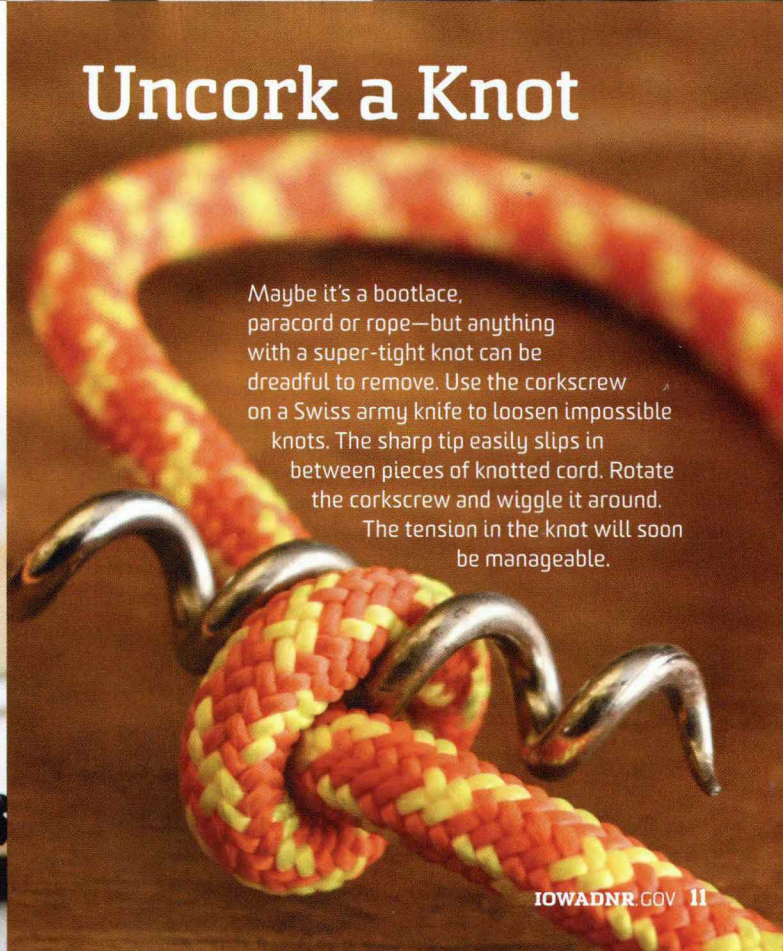
Binoculars not only make far away objects appear closer for great viewing, in a pinch they work as a low-quality magnifying lens. Simply invert and look through the bottom end, with the eyepiece close to the subject of interest. Focus by moving the eyepiece closer to the subject until sharp. The magnification can help observe fine details of nature or identify and remove small ticks or splinters.

### DIY Zoom Lens for Camera Phone



Use your binoculars or a spotting scope as a simple zoom lens by holding the lens of a smartphone up to the eyepiece. Fine tune placement of the lens, and use the screen to zoom in, increase lighting or switch to video or HDR options—as in normal photos with a smartphone. Do so to capture an image typically far out of range for handy phone cameras.

### Uncork a Knot



Maybe it's a bootlace, paracord or rope—but anything with a super-tight knot can be dreadful to remove. Use the corkscrew on a Swiss army knife to loosen impossible knots. The sharp tip easily slips in between pieces of knotted cord. Rotate the corkscrew and wiggle it around. The tension in the knot will soon be manageable.

## ACTIVITIES, TIPS AND EVENTS FOR THE WHOLE FAMILY



### FOR ALL AGES, A WEIGHTY IMPACT ON HEALTH

Last December I was on my way to dinner in Santa Fe N.M. A friend of my host pointed out that a tree we walked past was so historic it had a website. Then our party ducked into Burro Alley. The alley featured a restaurant with two statues of burros to celebrate their role in the early days. Burro Alley is where these beasts of labor were stopped to unload wood they hauled into town from surrounding hills. The wood was sold for multiple purposes, but mostly fuel.

Although the revelation that a tree had its own website was impressive at first, I realized the Decorah eagles had a website—plus a camera! Thinking of trees, I thought this article needed to address forests' medicinal value to humans. But later when reviewing the most compelling current research, I decided I was barking up the wrong tree.

Instead, there is exciting research in telomeres—those minuscule bits of matter at the very tip of our chromosomes that protect DNA from damage during cell division. Cells constantly divide and when they do, some minor damage can occur. Over time, this causes aging. Much like eyelets keep shoe laces from fraying, both chromosomes and shoe laces can become frail and fail when frayed. Now the exciting news. Evidence indicates aerobic activity can help. Research indicates older competitive runners have much longer, thus more effective, telomeres than inactive peers—comparable to those of healthy younger individuals.

For years I have written on the growing body of evidence that links the benefits of physical activity and aging. I have extolled that exercise contributes to general health, fitness and the prevention of diseases and disabilities versus sedentary peers. And that doing so outdoors in natural areas has benefits for the mind as well. But now, insight explains how so at the molecular level. I am sure as science advances, a clearer understanding will explain how genes, our immune system, muscles and other bodily functions improve with physical activity at both macro and micro level. The new field for exercise science relates to the benefits of exercise at the molecular and biological level.

As I reviewed research, I was aware some might see aerobic activity as the only way to go, but as is often the case, new evidence promotes activities like weight training. A study in *Medicine & Science in Sports & Exercise* shared evidence "...even a little weight training might reduce the risk of heart attack or stroke ..." and "People appear to gain this benefit whether or not they also engage in frequent aerobic exercise."

Let me share what "even a little bit" means. Even one session of under 60 minutes a week provided a measurable impact with no great evidence of benefit beyond 120 minutes a week. Or at least a benefit related to cardiovascular disease.

The study co-author was none other than Duck-chul Lee, associate professor of kinesiology at Iowa State University and the data research was based on thousands of records provided by the Cooper Institute.

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

## But Why?

Helping adults answer children's nature questions

CAROLYN, 6, IN LYNNVILLE, ASKS:

*Is it OK to look in a bird nest?*



This time of year is very busy outdoors. Birds are in the process of building and rebuilding nests, sitting on eggs or taking care of their young. Explain to your child that birds do not nest at the same time. Some start as early as mid-February, such as great horned owls. And some as late as August, such as the American goldfinch.

Children want to help the bird nesting process, which can be a benefit or a fatal problem for the birds. Have your child help by providing structures for eastern bluebirds, wood ducks, American kestrels and house wrens, to name a few. Houses should be built ahead of the appropriate nesting season, erected in the correct habitat, maintained to serve the birds and allow the child to enjoy their efforts. This can be a great activity to involve someone new to the outdoors. Watching birds is a popular activity. Make a game by having children observe birds and keep a list. In time you may want to assist them with binoculars and a bird identification book such as *Birds of North America*, a Golden Field Guide from St. Martin's Press by Chandler Robbins, Bertel Bruun, and Herbert Zim.

Ensure your child understands that disturbing the nesting process creates problems. Explain that checking nests at inappropriate times, handling chicks or allowing pet access to the area is detrimental. It is OK to observe birds from a distance, whether using binoculars or peering at a nest outside your window. Some birds use the same nest each year, so leave them for reuse.

Get out this spring and watch the birds near your house. Together, you will be amazed at what you see.

## MUSIC AND MONARCHS FESTIVAL IS FAMILY FUN



Make plans to head to the family-friendly outdoor Music and Monarchs festival on Saturday, May 11. Located in Founders Park along the gurgling clear waters of the Turkey River in scenic Elkader, the Music and Monarchs festival is a donation-based conservation education music event hosted by the Clayton County Conservation Awareness Network (CCCAN).

This entertaining festival features live music from nationally touring bands, statewide conservation demonstrations and a smattering of family and kids craft activities.

The idea for the event hatched in 2014 when CCCAN board members Gary Siegwarth and Brian Gibbs were looking for a creative way to connect local communities to current natural resource issues. It was also during this time that the plight of the monarch butterfly was making national headlines, so the two pitched their idea of a monarch-themed conservation festival, featuring educational activities and live music, to the rest of the board. The event quickly took flight the next spring.

Now in its fifth year, the festival goal is to bring awareness to local habitat loss and the impact on native wildlife and insect species. Although the focus is on the familiar monarch butterfly, the bigger picture emphasis is on declining pollinator habitat across Iowa.

Each year, the festival grows in popularity—even featured as a can't-miss event by Travel Iowa. This year's event again features incredible live musical performances, local food vendors and hands-on activities, such as making seed balls with pollinator habitat seeds, face painting, larger than life monarch painting, a milkweed seed pod piñata and more! Best of all, participants will have the chance to take home free milkweed plants to create butterfly habitat in their own backyards.

To learn more about Music and Monarchs, visit [claytoncountycan.com](http://claytoncountycan.com).

## Walk With Warblers Near Spirit Lake

Bright yellow, striped black and white, patches of blue—the vibrant colors and designs of warblers excite birders who get the treat of seeing them migrate through Iowa.

If you would like to check some birds off of your life birding list, join Dickinson County Conservation as it celebrates Wings and Wetlands Weekend with an annual Warbler Walk 8 a.m. Saturday, May 11.

“We will celebrate these migrating species and learn about why our area is important to them as they migrate north,” says Bryanna Kuhlman, environmental education coordinator for the Dickinson County Conservation Board. “Although these birds don't live here year-round, we offer an important habitat and are important to their life cycle.”

To join the Warbler Walk, meet at the Marble Lake boat ramp, west of Spirit Lake. Bring binoculars or borrow a pair from the conservation board during the approximately two-hour hike.

“It is really cool to see those species you don't typically see,” Kuhlman says. “They are a quicker moving bird and are hard to get your eye on, so if you do see one, it is very rewarding.”

Local birder Ed Thelen will join the hike to help people spot tiny warblers high in the trees and help identify which species they are.

“By inviting Ed along, we're inviting his expertise of not only those birds, but other birds we may see along the way,” Kuhlman says.

Plus, warbler species each have different vocalizations, and Thelen is helpful in using those calls to identify warblers that will

be around.

“Having Ed along is very useful, because he's able to pick up those calls among other bird species and hone in on where they would be,” Kuhlman says.

All ages are welcome to attend the Warbler Walk, although ages 8 and up may benefit most from learning about these birds and how to identify them.

Hikers will go approximately 1.5-2 miles along some hilly and muddy terrain, so be sure to wear appropriate clothing and shoes.

“People should come to enjoy a beautiful spring day and to learn about a hobby they may be interested in and to see some migrating birds—if they're already into birding—to add to their list for the year,” Kuhlman says.

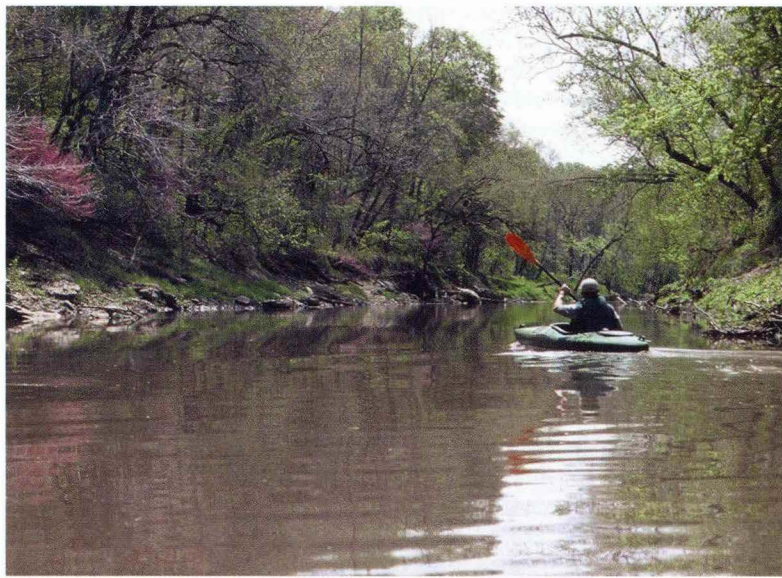
For Warbler Walk details or other county programs, call 712-336-6352, visit [dickinsoncountyconservationboard.com](http://dickinsoncountyconservationboard.com) or Facebook, Instagram and Twitter.



## EAGER PADDLER? USE EXTREME CAUTION

After a long, cold winter and cool spring, restless paddlers are ready to put canoes and kayaks in the water. And while late winter and early spring paddling can provide solitude, exercise and an opportunity to see amazing wildlife, safety is paramount.

“Many paddlers, especially novices, fail to realize that although air temperatures may be above average during some late winter and early spring days, waters are still dangerously cold and you must be prepared,” says the DNR’s Todd Robertson, certified paddling instructor. “As a rule, if the water plus the air temperature does not equal 120 degrees, you are at risk for hypothermia and cold water shock.”



To learn more about water safety and paddling classes, contact the DNR’s Todd Robertson at [515.243.3714](tel:515.243.3714) or [Todd.Robertson@dnr.iowa.gov](mailto:Todd.Robertson@dnr.iowa.gov).

### Safety Tips for Paddling Cold Water Conditions

Always wear life jackets. Not only do they help keep your head above water, they help maintain warmth.

Dress for the water temperature, not the air temperature. Plan as if you were to be in the water at some point. A wet suit or dry suit is a must. Dress in layers so you can peel a layer off if overheated.

Do not wear cotton clothing—it fails to insulate when wet. Opt for synthetics or wool.

Consider attending classes to improve boat control skills before heading out in cold water.

Stay away from strainers and sweepers—wood or branch piles—deadly hazards that can pull a paddler under or cause pinning. These are usually found on outside river bends where currents are strongest.

Don’t paddle alone, especially in cold water—use a buddy system. Go with a small group of paddlers and know which paddler is most experienced.

Bring a dry bag with a complete set of extra clothing to change into should you get wet. Get out of wet, cold clothing as soon as possible. Having the right gear and understanding the stages of hypothermia is crucial for remaining safe.

Have a float plan. Let others know where you are paddling and when you expect to return.

## MORE FUN FOR LESS!

## Resort Fee Now Includes Free Golf and Water Park!

Set summer plans now—reserve an overnight stay at Honey Creek Resort State Park and your resort fee will include unlimited golf (cart not included) and all-day aquapark with inflatable lake playground—a \$60 value!

With so much value packed into a summer vacation, don’t wait, plan your summer stay today. Call [866-797-5308](tel:866-797-5308) to book by phone or visit [honeycreekresort.com](http://honeycreekresort.com) to reserve online.



# Shoot Smarter...Better...Safer

No matter if you're an old gun or never pulled the trigger, all can up shooting skills and learn basic or advanced tips from instructors—in an educational, safe and welcoming setting.

Tap into great resources at the DNR's Olofson Shooting Range and Training Center near Polk City for a variety of classes—from guns and ammo skills and knowledge—to wild game cookery, even fishing.

"We can have a lot of people shoot here safely," says Ajay Winter, DNR training specialist and range manager. "And do so in a totally welcoming, clean atmosphere. We want to help you be safe and shoot competently in a supportive environment."

And there is no better place than the recently refurbished facility, which offers not only expanded ranges, but a 50-person audio/visual enriched classroom. Courses listed below run March through May. Several offered repeatedly. Find all details—dates and times, class duration, age limits if applicable, what is supplied and what to bring, fees and registration information at [register-ed.com](http://register-ed.com) (select Iowa) or call the range at 515-795-4000.



## COURSE NAME

**TURKEY HISTORY, BIOLOGY & CALLING**—Learn Iowa's wild turkey history, biology and the art of turkey talk from experts to increase chances of calling in wild game. For both novice and advanced hunters.

**SHOTGUN BASICS WITH SHOOTING**—Learn shotgun shooting basics from instructors to refine skills while shooting on the range.

**TURKEY HUNTING TACTICS**—Learn about clothing, equipment and gear needed to hunt turkeys. Learn different hunting methods and decoy set ups.

**CONCEALED CARRY**—Learn Iowa's concealed carry laws and earn certification upon course completion.

**RELOADING RIFLE & HANDGUN AMMUNITION**—Learn about reloading rifle and handgun ammunition to reduce shooting costs, increase enjoyment and potentially increase firearm accuracy.

**TURKEY FIELD DRESSING & COOKING**—Learn to dispatch the bird, process meat, taxidermy prep and cooking recipes. Instruction, equipment, materials and food provided.

**RELOADING SHOTGUN AMMUNITION**—Learn to reload shotgun ammunition in a safe, controlled atmosphere.

**HUNTER EDUCATION CLASS**—Standard hunter education class with meals provided for three nights. Certification upon completion.

**RIFLE BASICS WITH SHOOTING**—Learn the basics of rifle shooting, with instruction, refine shooting skills on the range.

**RELOADING LAB DAY**—Refine loading skills in a supervised, controlled environment. Test ammunition as you produce it. Try variations and compare results.

**HANDGUN BASICS WITH SHOOTING**—Learn basics of handgun shooting and refine skills with instructed range shooting.

**SHOTGUN PATTERNING DAY AT THE RANGE**—With staff support, use patterning board to pattern your shotgun for the upcoming season.

**TRAP & SKEET SHOOTING BASICS**—Learn the basics of shotgun shooting games—trap and skeet—from classroom to range experience.

**SHOT HEARD 'ROUND THE WORLD**—Remember the first shot fired during the American Revolution. Shoot at special commemorative targets.

**INTRODUCTION TO FIREARMS**—Great for novices to learn about all types of firearms and get acquainted with their operation in a supportive setting. Non-shooting course.

**HOW TO START CATCHING BLUEGILLS**—Learn fishing basics and how to catch bluegills.



# Together

BY STEPHANIE SHEPHERD

## Become Fluent in Frog and Toad Volunteering for Amphibian Science Adds Wildlife to Your Night Life

### Frog & Toad Call Survey

Every year, late March to early April, the calling begins. The western chorus frog is first to find its voice with an ascending, repeating “ccrrreeek.” It is quickly joined by the soprano chirp of spring peepers or the rumbling, snoring bass of the leopard frog. The singers are all males, trying to attract a female. The loud chorus is a welcome sign of spring.

And since 1991, at wetlands across Iowa, volunteers have listened and collected data on what’s singing as part of the DNR’s Frog and Toad Call Survey—one of the nation’s longest running with more than 13,000 surveys on more than 1,200 wetland sites in 82 counties.

The survey value is multifaceted. The DNR wildlife diversity program is small, and without dedicated volunteers, would be impossible to collect data statewide. The survey helps determine frog distribution and range, monitor population trends and index water quality.

The survey came from serious concerns over a precipitous decline of amphibians worldwide, often attributed to water pollution. Amphibians spend at least part of their life in water and have highly permeable skin sensitive to pollutants. Declines can also be due to habitat loss (Iowa has drained nearly 95 percent of its wetlands), or invasive species such as the bullfrog, which is expanding its range in Iowa and is an aggressive predator of other frogs and toads.

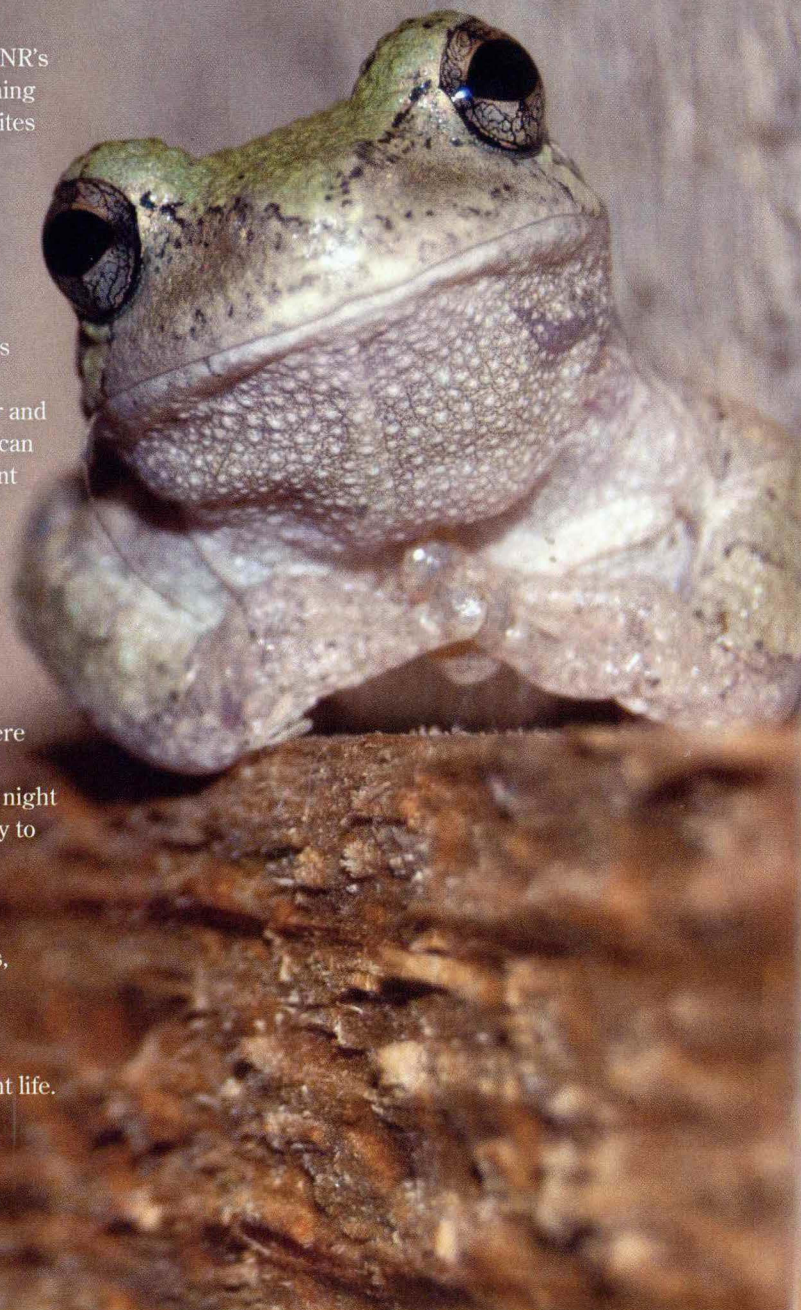
Volunteers can also assist in the North American Amphibian Monitoring Program (NAAMP), which runs in 23 states with about 80 survey routes in Iowa. Each route needs a volunteer to drive three times each spring and summer. The night surveys stop at 10 wetland spots where volunteers record what frogs and toads are singing after five minutes of listening. It’s a fun way to explore the outdoors at night and data is used not only in Iowa but regionally and nationally to monitor amphibian populations.

### But I Don’t Know the Calls

After an interesting three-hour class with other volunteers, you’ll walk to a pond to learn calls with DNR staff. Provided materials contain everything you need: survey instructions, sample sheets, your survey route and a CD of frog and toad greatest hits. Then you are off to experience Iowa’s wild night life.

### GET INVOLVED

Check the map of available routes, then contact us to volunteer. Training workshops are held every spring around Iowa as a part of the DNR Volunteer Wildlife Monitoring Program. To learn more and find classes near you, visit [iowadnr.gov](http://iowadnr.gov) and search “frog and toad survey” or contact DNR coordinator Stephanie Shepherd at **515-432-2823** extension 102. For a map of routes visit [pwrc.usgs.gov/naamp](http://pwrc.usgs.gov/naamp).







## NESTLÉ PURINA COMMITTS \$1M TO DUCKS UNLIMITED TO BOOST WATER QUALITY

Ducks Unlimited and Nestlé Purina PetCare Company have partnered to protect and improve 1,600 acres of wetland and grasslands over three years to promote healthy soil, crops and wildlife habitat.

Purina operates three pet food manufacturing facilities in Iowa (Clinton, Fort Dodge and Davenport) and sources ingredients for dog and cat food products statewide. They committed \$1 million to

promote supply chain sustainability and improve recreational use of wetlands and lakes across Iowa's Prairie Pothole Region.

"Purina and Ducks Unlimited are joining Iowa's efforts to improve our water quality, and I applaud this partnership," says Governor Kim Reynolds. "These organizations represent farmers, conservationists and outdoor enthusiasts who all have a stake in preserving our natural resources for the livelihood of Iowans and wildlife."

Producers proactively seek ways to enhance stewardship of key ag watersheds, says Ducks Unlimited CEO Dale Hall. The Prairie Pothole Region is North America's most critical land for breeding waterfowl and one of DU's highest priorities to restore wetland health. "We're glad to have our partner Purina joining the effort."

This partnership will advance three conservation strategies in collaboration with the Iowa DNR, IDALS and farmers to achieve:

Lake enhancement: Improve at least three natural shallow lakes in north-central Iowa, transforming lakes saturated with nutrients, sediment and algae into clean, productive wetlands for improved water, public recreation and healthy fish and wildlife.

Prairie potholes: Protect and restore at

least 100 acres of native grasslands near shallow prairie pothole wetlands to maximize wildlife habitat and improve the environment.

Iowa Conservation Reserve Enhancement Program (CREP): Restore at least two wetlands per year and, on average, treat runoff from more than 1,000 acres of ag land per project. CREP restores wetlands within intensively farmed areas to support nutrient management and runoff prevention.

"At Purina we're committed to sourcing our ingredients responsibly, which includes promoting water stewardship in our supply chain, and contributing positively to the communities where we have a presence," says Joe Sivewright, Purina CEO. "Working with our longtime partner Ducks Unlimited, area farmers and other conservation partners to promote water quality and quality of life in this region is a win-win."

The effort will reduce flooding and improve water quality for residents and wildlife, including ducks.

Restored wetlands can remove 70 percent of nitrates and 20 percent of phosphorus. Restored grasslands filter runoff, reducing nitrates up to 90 percent and phosphorus up to 55 percent.

Learn more at [ducks.org](http://ducks.org).

## REMEMBERING A LANDOWNER'S ROLE IN RESTORING THE MAQUOKETA RIVER WILLARD AND MARCIA HAWKER, MANCHESTER

Paddlers and anglers floating from Backbone State Park to Manchester this spring will discover a new 3,200-foot Maquoketa River channel meandering through meadows before dropping down class II-III rapids through a rocky gorge. It was dug, built and planted over two years and completed last December.

As canoeists and kayakers wind through the area, they can pay tribute to landowners Willard and Marcia Hawker. They owned the dam and most of the lake's bed as citizens since 1998. Willard, an ex-Marine and retired sporting goods store owner in Manchester, wanted the lake-like Quaker Mill Pond above the dam to become a waterfowl preserve.

In 2010, an earthen dike broke—the second time in two years, leaving the concrete dam high and dry. Meanwhile, the pond filled with silt. Homeowners noticed worsening floods until the dike breached, draining floodwaters. The dam also caused three drownings and blocked fish passage to the Maquoketa River headwaters. The county engineer had concerns with the route the river carved below the breach, diverting under a county road bridge not designed for a river.

Willard, an avid outdoorsman, believed deeply in conservation. He loved the dam, but considering everything, and his values—it was

time. He asked help from DNR's river programs and fisheries, who helped partner with landowners and Delaware County. After a year-long survey, analysis and talks with neighbors at county supervisors meetings, the partners decided to remove the dam, cut a pilot channel through the old lakebed and close the breach to send the river back where the 22-foot high concrete dam had stood since 1914. The restoration was less expensive than building a larger bridge at the river's diverted location, and lowered the 100-year floodplain for neighbors.

Full design, planning and permitting took several years. Hawker sometimes joked he might not live to see the project he'd come to believe in. When construction began in 2017, he and Marcia often watched the dam removal from a prominent vantage.

Meanwhile, Willard donated land to the county conservation board, the sponsor of the county's portion of the Maquoketa River Water Trail for an access.

"Willard kept telling us all the way through



to just do the right thing and that he trusted us to get it right," says Nate Hoogeveen, DNR River Programs Coordinator. "This project reduced a dam hazard, allowed fish passage, conserved surrounding land, restored the river and added public access for a new water trail. It's humbling to be a part of a project addressing so many issues. Even more so working with an individual like Willard."

Willard was diagnosed with incurable pancreatic cancer during the holiday season of 2018, just as the project wrapped up. While in hospice, he requested word be sent to the DNR to make sure the final seeding was done in time for spring. He passed away on Jan. 12, 2019, surrounded by family, at age 87.

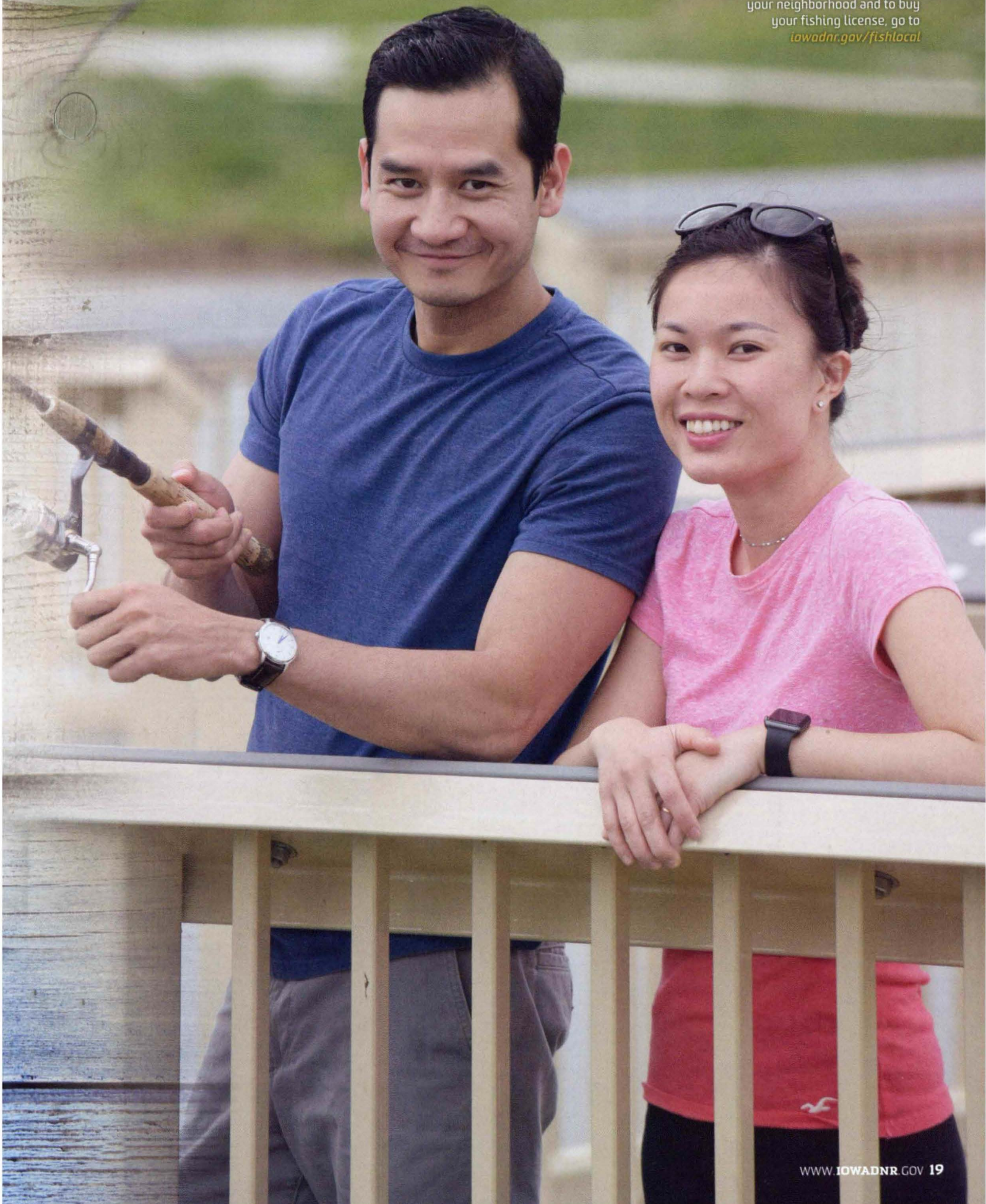
## Let's Go! Outdoor Fun Five Minutes Away

**FISH**  
**LOCAL**



It's time to get hooked on fishing in the Des Moines metro area with more than 70 lakes and ponds stocked with thousands of fish each year. That means no matter where you are, it's just minutes away from relaxing, outdoor fun with friends and family. Grab your gear and "Fish Local" in central Iowa.

To find ponds and lakes in  
your neighborhood and to buy  
your fishing license, go to  
[iowadnr.gov/fishlocal](http://iowadnr.gov/fishlocal)



## Altoona

### ALTOONA PUBLIC LIBRARY COMPLEX

—behind the Altoona Public Library at 700 8th St. SW. Paved trail from the library parking lot extends to Prairie Heritage Park, Civic Plaza and the Enabling Garden (1050 1st Ave. South). Catch largemouth bass, bluegill, catfish and black crappie.

**CLAY POND**—in the Clay Estates neighborhood on the west side of 3rd Ave. SW near 35th St. SW; close to Clay Elementary (3200 1st Ave. South). Paved trail from 3rd Ave. SW. Catch largemouth bass, bluegill and catfish. Picnic tables.

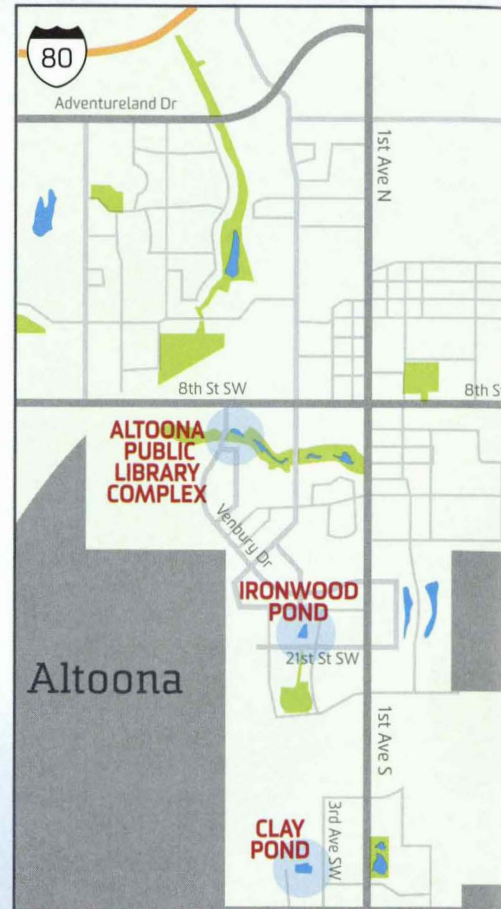
**IRONWOOD POND**—at the east end of Stonegate Court SW near the intersection of 21st Street SW and 3rd Avenue SW. Paved trail from 21st Street SW. Venture a tad farther south on the trail to a fun pirate-themed playground, Pirate's Cove Ironwood Park (2222 3rd Ave SW). Catch largemouth bass, bluegill and catfish.



Clay Pond



Ironwood Pond



Altoona Public Library Complex

# Ankeny

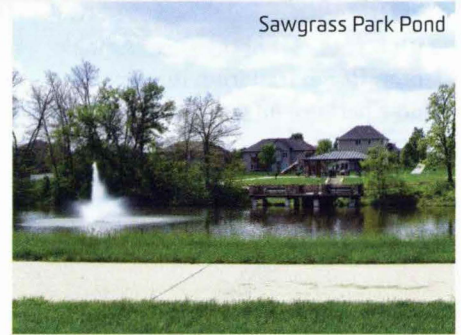
**HAWKEYE PARK POND**—in Hawkeye Park at 400 NW Lakeshore Drive. Paved parking on the east and west sides of the pond. Playground, shelter, ball fields, picnic tables, portable bathrooms and paved trails that connect to the nearby Ankeny Miracle Park (310 NW School Street). Catch largemouth bass, bluegill, channel catfish and crappie.

**GEORGETOWN PARK PONDS**—in Georgetown Park at the Corner of NW Georgetown Boulevard and NW Ash Drive, across from Ashland Ridge Elementary School (2600 NW Ash Drive). Paved parking, playground, portable bathroom, shelter, paved trails, picnic tables and basketball court. Catch largemouth bass, bluegill, channel catfish and crappie.

**HILLSIDE PARK PONDS**—in Hillside Park at the corner of SE 20th Street and SE Four Mile Drive. Dirt parking on the east side of SE Four Mile Drive or parking on SE Hillside Drive—take the paved

trail to the pond. Playground, portable bathrooms and picnic tables. Catch largemouth bass, bluegill, channel catfish and crappie.

**SAWGRASS PARK POND**—in Sawgrass Park at 2222 SW 36th Street. Paved parking, portable bathrooms, pier, walking bridge, paved trail, playground and shelter. Catch largemouth bass, bluegill, channel catfish and crappie.



Sawgrass Park Pond

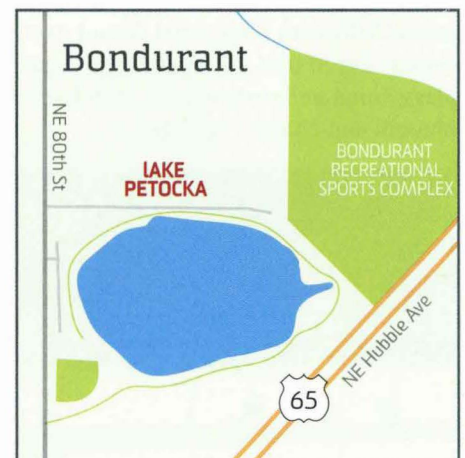


Hawkeye Park Pond



# Bondurant

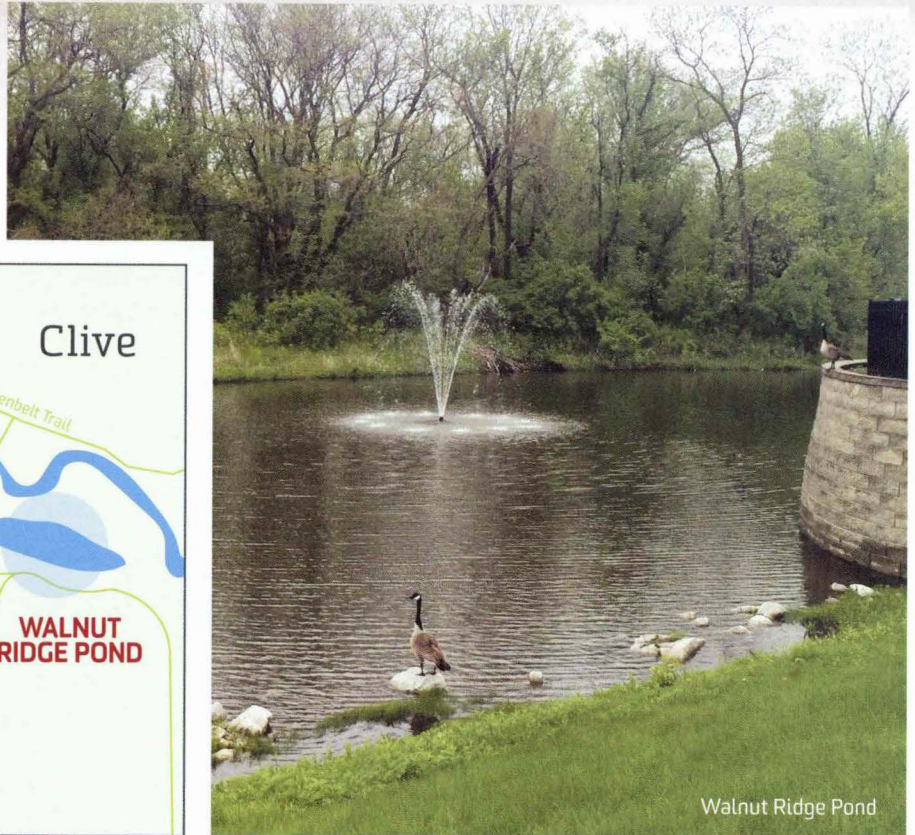
**LAKE PETOCKA**—on the northeast edge of town at 520 Pleasant Street NE. Many gravel parking lots. Modern restrooms, playground, ball fields, shelter, picnic tables, exercise equipment and paved trail that connects to the Chichaqua Valley Trail. Catch largemouth bass, bluegill, crappie, channel catfish and yellow perch. Trout stocked each fall and winter.



# Lost In Iowa

## Clive

**WALNUT RIDGE POND**—1801 NW 114th Street east of the Clive Aquatic Center. Paved trail from the Aquatic Center parking lot connects to Clive Greenbelt Trail.



Walnut Ridge Pond

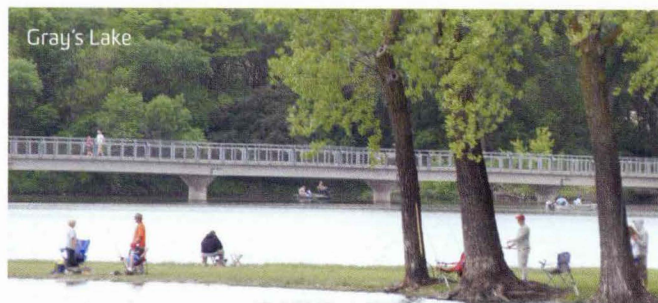


## Des Moines

**FORT DES MOINES PARK POND**—in Fort Des Moines Park at 200 SE 5th Street, just west of Southridge Shopping Mall. Paved parking, accessible fishing pier, nature trails, playground, shelters and arboretum. Catch largemouth bass, bluegill and channel catfish.

**GRAY'S LAKE**—in Gray's Lake Park at 2101 Fleur Drive. Paved parking and trails, picnic area, beach, playground and restrooms. Catch largemouth bass, bluegill, channel catfish, white bass, crappie and river species.

**GREENWOOD/ASHWORTH PARK POND**—in Greenwood/Ashworth Park, 4500 Grand Avenue behind art center. Paved trail, picnic area, rose garden, splashground, playground and restrooms. Catch largemouth bass, bluegill and channel catfish.



Gray's Lake

# Johnston

**GREENWOOD HILLS POND**—on the west side of NW 86th Street, between Windsor Parkway and Highland Oaks Drive. Paved Trail and ADA pier. Catch largemouth bass, bluegill and channel catfish.

**POINTE VISTA POND**—in Pointe Vista Park at 9612 Enfield Drive. Paved Parking, playground, paved trail, basketball court, shelter and picnic tables. Catch largemouth bass, bluegill and channel catfish.

**TERRA LAKE**—in Terra Park at 6300 Pioneer Parkway. Parking on the north side of the lake and by the Crown Point Community Center. ADA fishing pier, playground, paved trail, bathrooms and picnic tables. Catch largemouth bass, bluegill and channel catfish.



Terra Lake

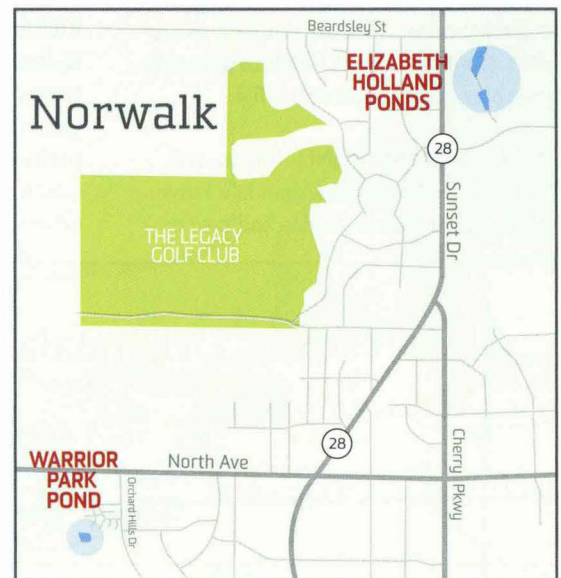
# Norwalk

**ELIZABETH HOLLAND PONDS**—near the corner of Hwy 28 (Sunset Drive) and Beardsley Street. Plans for future park with a parking area, trail, shelter house and restrooms.

**WARRIOR PARK POND**—west of the intersection of Orchard Hills Drive and West Pine Avenue. Parking on Orchard Hills Drive. Plans for a neighborhood park with a preschool age playground, child obstacle course area, parking lot and restrooms. Catch largemouth bass, bluegill and channel catfish.



Warrior Park Pond



COYOTE



RED FOX

STORY BY AND PHOTOS BY TY SMEDES

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*Sharing Iowa's countryside, the ever-adaptable red fox does its best to coexist alongside the larger, more powerful coyote.*






**I**t's a frigid January day and most birds and mammals are hunkered down, rousing to expend energy only when needing to hunt and find their next meal. A fresh snow blankets the landscape, and a red fox makes his rounds, trotting along the icy surface of an old backwater, winding through bottom-land timber. His luxurious red coat—a thing of beauty—makes him appear much larger than he really is. Making use of his incredible hearing and sense of smell, he investigates every muskrat den and brush pile, looking for movement, and cocking his head from side to side, listening for the tell-tale rustling sounds of prey beneath the snow.

The deer mice he often stalks and catches use a labyrinth of tunnels beneath the snow, to travel from their underground burrows to above-ground seed stores, hidden away in tree cavities and other protected places. Composed mostly of plant seeds and nut fragments, their food caches provide calories needed to sustain them through winter's long months. And as small as each rodent may be, a few mice will supply the much needed protein the fox needs to sustain him each day.



A photograph of two coyote pups in a natural setting. One pup is standing on a mound of reddish-brown dirt, looking down towards another pup that is lying on its back on the same mound. The pup lying down has its mouth open, showing its teeth. The background is filled with green grass and foliage. The lighting is bright, suggesting a sunny day.

Rough and tumble play allows coyote pups to gradually develop the agility and timing needed later as adults to hunt rodents and other small game in order to survive.



Although a plump cottontail rabbit will provide a meal or two, the opportunistic red fox will hunt a variety of smaller prey—birds, squirrels, mice, even invertebrates such as crickets, caterpillars, grasshoppers, beetles and crayfish.




Across a stubble field from the riparian backwater, and along a brushy fence-row, a coyote also looks for his next meal. He also hunts deer mice, along with larger prey like cottontail rabbits that feed upon tree bark and waste grain in a nearby field. His exceptional hearing and sense of smell also help him locate prey, hiding among the weeds and brush along the field's edge. Deer season just ended, and this opportunist will scavenge any remains of deer carcasses he may be lucky enough to find, using his powerful sense of smell. Such a windfall may sustain him for several days, although competition from other scavengers, including bald eagles, will quickly recycle the carcass.

Through the early part of the previous century the red fox (*Vulpes vulpes*) was mostly unchallenged as "Top Dog" throughout much of the state, but then along came the coyote (*Canis latrans*). Human-made changes to habitat led to an expansion of the coyote's range from south to north and to all corners of the state. And whenever these two meet, the coyote—at two to four times the weight of the fox—is always victor.

"Historically, coyotes were widespread throughout Iowa. However, historical information relating to how much is clouded by their constant grouping with wolves, dire wolves, prairie wolves etc. They seem to be pretty lumped together in historical accounts. But since the 1970s, coyotes have adapted to our landscape and are now considered the top predator," explains DNR furbearer biologist Vince Evelsizer. "Their numbers are strong throughout the state, and they are more of a habitat generalist than the red fox—capable of even existing in areas of black desert farmland."

He says coyote adapted to our altered landscape much better than fox. They can live anywhere, while fox needs grasslands mixed with woods and pasture to do well. Since the 1970s, the population trend for coyotes has boomed upward, while red fox population has melted away to smaller numbers statewide.

A photograph of a red fox sitting in a snowy field. The fox is facing right, looking down. Its fur is a mix of reddish-brown and white. The background shows bare trees and a snowy landscape.

Late January is mating season, when solitary fox seek out a mate. The vixen will give birth around mid-March.

### Opportunity in the Suburbs

A female red fox (called a vixen) once again claims our small suburban acreage as her territory. In mid-January we were reminded mating season was underway, when our evenings were often filled with the yapping of what sounded like a toy dog outside (see side-bar for link to an audio vocalization). Such were the vocalizations of our neighborhood vixen and her male suitors. Formerly a hobby farm, our acreage is endowed with several older structures, including one with a den beneath it, dug many years ago. As during previous years, the vixen once again claims the den as her safe and secure lair for delivery of up to six kits. We love hosting her each year and look forward to enjoying the curious kits when they emerge from the den.

Kits have gray fur and their eyes open when about a week and a half old. Red fox kits are much more precocious than their canine dog relatives and by their third to fourth week, venture from the den to begin eating meat brought by their parents. At this point, we are often awakened at night by the motion-detector light on our garage—triggered by playful kits. Having learned it is great fun to play beneath the lights, the kits' rough and tumble play provides frequent and hilarious late-night entertainment. Youngsters are weaned at two months, developing their adult coat by the end of June, when they will accompany their mother on evening hunting trips. This training, or internship, will continue through the summer until the youngsters disperse to new areas by fall.

Whenever possible, the red fox seems to have learned to



### RED FOX AND COYOTE HARVEST DATA

Both red fox and coyote provide hunting and trapping opportunities, and Iowa's red fox harvest was 1,581 animals - with trapping accounting for 73 percent of the 2015-16 harvest. The 2015 Iowa Bow hunter Observation Survey indicated red fox population trends throughout most regions of the state were similar to previous years, with northwest, central, and northeast showing a slight increase. As in other states, coyote hunting is popular in Iowa, with hunting accounting for 60 percent of 13,158 animals harvested. The survey indicated a statewide coyote population trending upward in 2015, throughout northeast and north central regions of the state, and relatively stable elsewhere. Ideal hunting conditions mostly occur in January and February when significant snowfall is most likely to be present.

avoid confrontation and predation by the larger and more dominate coyote by moving to suburban locations such as ours.

Evelsizer agrees. "There's evidence of this, but I'm not aware of scientific literature that proves it. But it's a fair assumption that suburbs offer plenty of prey and perhaps fewer coyotes. We have seen an increasing trend in fox numbers within city limits." The coyote also frequents the suburbs, but is more home in habitat of open farm country, to river valleys having brushy and wooded terrain.

Regarding their occasional suburb presence, Evelsizer says "some urban coyotes remain nocturnal and secretive and stay out of trouble. But some become emboldened and kill the occasional pet, especially house cats." He adds they have not attacked people.

## Disease as a Limiting Factor

A suburban coyote also visits our acreage, although shyer and more secretive than our neighborhood foxes. Plagued by a bout of sarcoptic mange, this neighborhood dweller has likely been slowed by the disease and adapted an opportunistic and suburban lifestyle. A few years ago, another mange-stricken coyote moved into our neighborhood and cleaned out most of our suburban whitetail fawns that spring, along with a wandering neighborhood cat population that also seemed to melt away. Preying upon the occasional pet, coyote also consume suburban garbage. Mange, a highly contagious disease found in dogs and other small mammals, is caused by the *Sarcoptes scabiei* mite, which burrow through the skin, causing intense itching and irritation. As a result, intense scratching causes the majority of the animal's hair to fall out. Cyclical in nature, the disease can nearly decimate a local fox population but usually isn't lethal to coyote. More fortunate than the more vulnerable fox, this coyote has survived the winter with a coat slowly returning to normal.

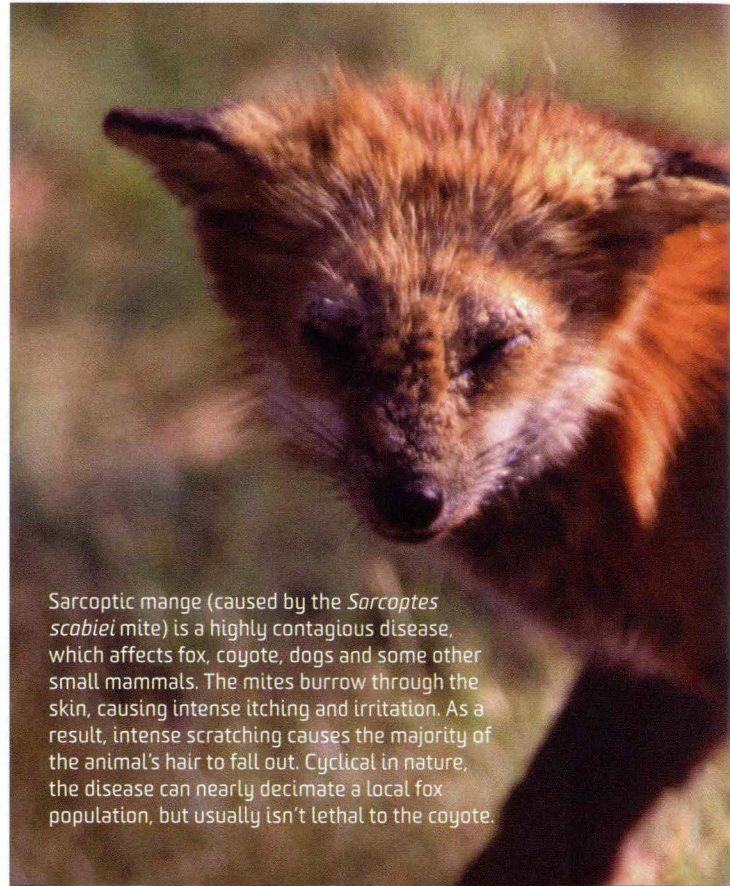
"Mange affects red fox harder than coyote, inflicting a higher rate of mortality, and it's certainly a big contributor to a suppressed red fox population. Coyotes get it, but seem to survive it better," says Evelsizer.

## Coyote as Iowa's Top Predator

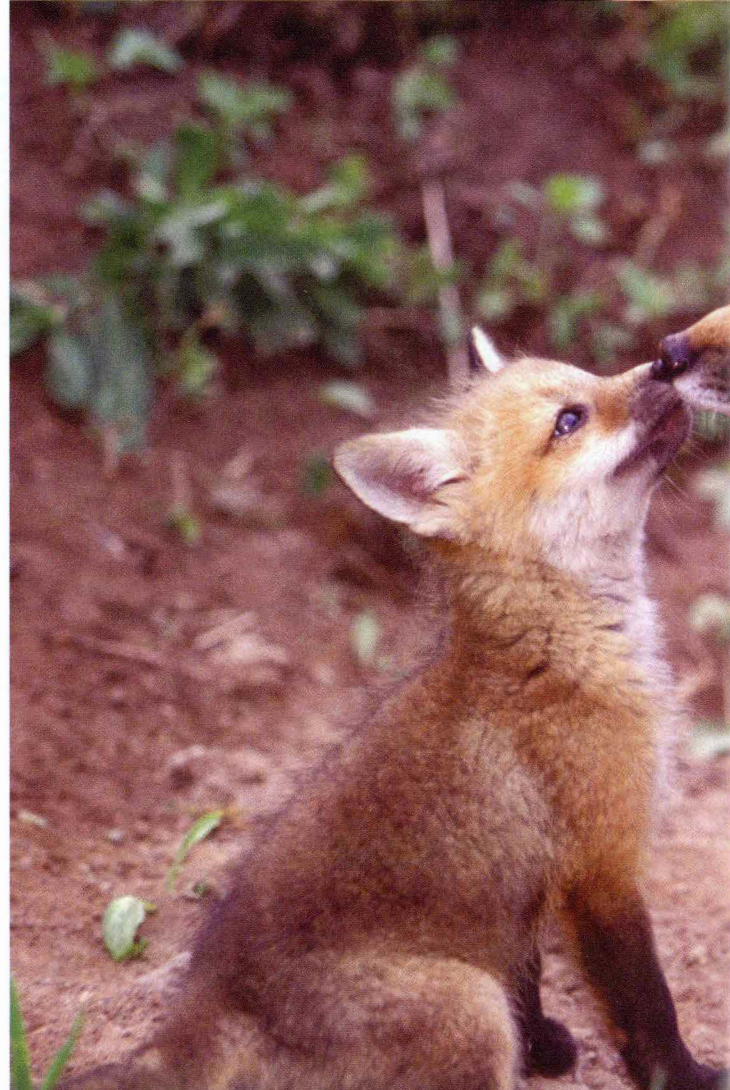
Coyote prey on rodents, Canada geese, domestic or feral cats and larger prey such as deer. "Coyotes will prey on all of these critters. So they do impact them; but I can't tell you for sure how much," Evelsizer says. Research was done in the 1970s and 1980s, but not since. "I just don't know for sure, but would guess it's quite variable. They exert a positive impact by killing feral cats and rodents. However, most folks don't like that they prey on deer at times, especially fawns in June or adult deer in the winter. Their impact on deer fawns can be negated with more CRP because it spreads adult does out during that critical time."


Coyote might have a positive impact on ground nesting birds, by reducing numbers of nest predators like red fox, raccoon, opossum and skunk, which feed on eggs, nestlings and adults. Evelsizer says, "scientific literature shows coyotes eat more rodents—especially mice—with additional evidence showing that in areas dominated by coyotes there's a smaller effect on ground-nesting birds. Red fox, skunk, and opossum do target bird eggs more often than do coyote."

It's well known the coyote inflicts substantial losses to western sheep ranchers and Evelsizer adds, "Iowa livestock losses aren't well documented here in Iowa. Sometimes a farmer will report losses to us and sometimes only the vet knows what happened. It does occur, but often rogue dogs do more damage than coyotes. Studies show depredation reported to be coyote caused was only right 40 percent of the time. Their livestock impact is usually inflated. We have less rangeland in Iowa, fewer sheep, and lower predation by




Sarcoptic mange (caused by the *Sarcoptes scabiei* mite) is a highly contagious disease, which affects fox, coyote, dogs and some other small mammals. The mites burrow through the skin, causing intense itching and irritation. As a result, intense scratching causes the majority of the animal's hair to fall out. Cyclical in nature, the disease can nearly decimate a local fox population, but usually isn't lethal to the coyote.





The coyote also sometimes frequents the suburbs, but is more at home in habitat ranging from open farm country to river valleys containing brushy, wooded terrain. Their preferred diet includes deer, rabbit, mice, squirrel, pocket gopher, beaver, ground nesting birds, amphibians and even snails and fish.



Red fox kits are much more precocious than their canine dog relatives and by their third to fourth week they begin emerging from the den.

The Red Fox communicates readily during the mating season, while coyote family vocalizations are often heard during summer and fall. Listen and watch online videos of red fox and coyote vocalizations by searching for those topics at [youtube.com](https://www.youtube.com).

coyotes on sheep, than western states.”

Like the red fox, the coyote gives birth to up to six pups, in an underground den. Dens are usually well hidden, although close to humans. Pups are born in spring and stay with parents as a family through fall. And much bigger than a fox, which averages 10 to 12 pounds, coyote will reach 30 to 40 pounds. Coyotes are especially noted for their vocalizations, including family symphonies often heard in the fall.

### Red Fox and Coyote Confrontations

Is the red fox is more vulnerable to the larger and faster coyote when crossing open country, as opposed to meeting in brushy habitat where the smaller, quicker fox can out-manuever the larger, less agile coyote?

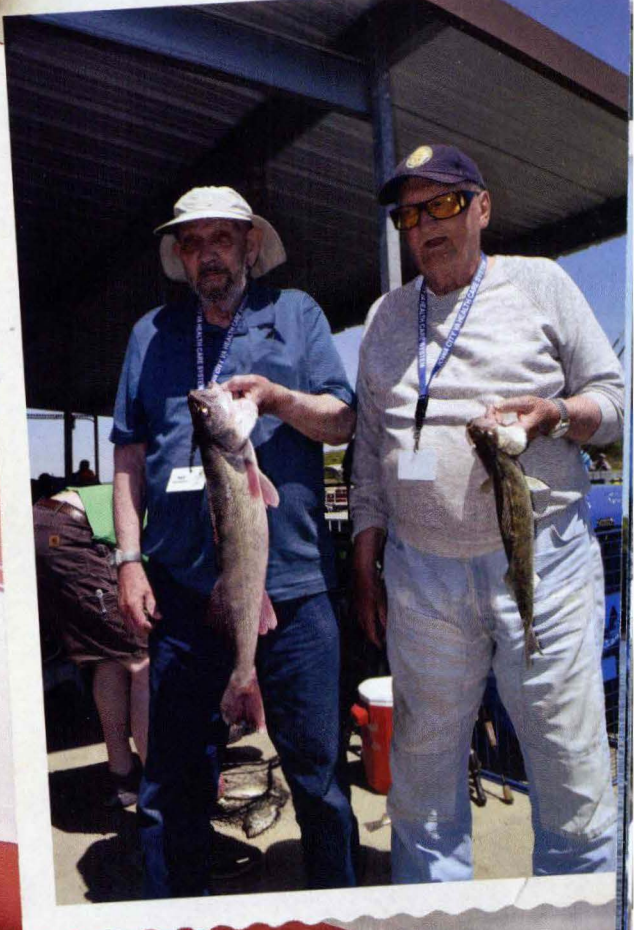
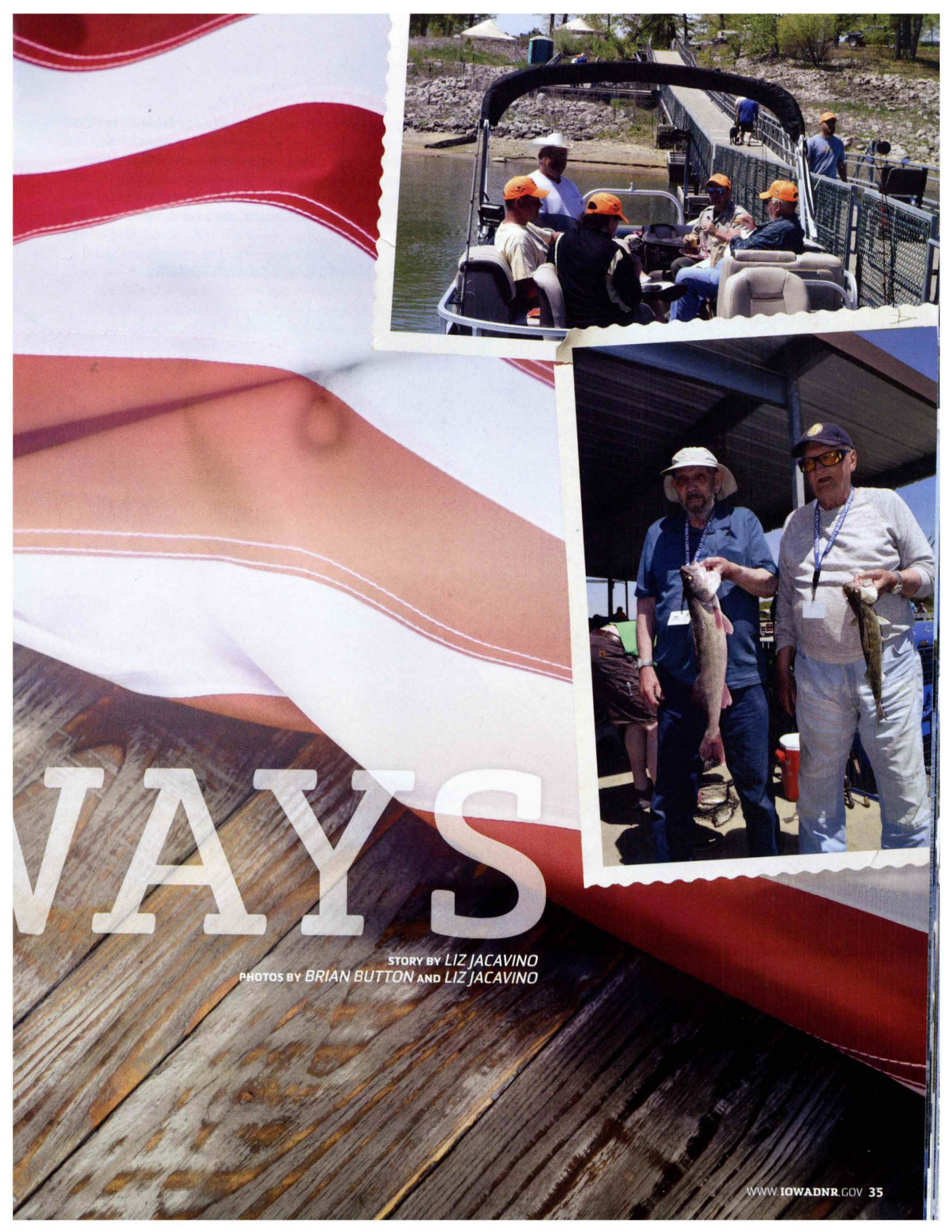
“Yes. I believe in open country coyotes can kill red fox more readily. Coyotes are quite agile, but if there’s escape habitat nearby, fox stand a better chance of avoiding being killed. For instance, brush piles and dense cover might offer protection,” Evelsizer says. 🐾



# CASTAWAY

*The special bond among veterans runs deepest for the smaller circle of disabled veterans. A unique program puts disabled vets together—on the water—for fishing and camaraderie among the waters of Rathbun Lake at Honey Creek Resort State Park. Here they cast away disabilities.*





# VAYS

STORY BY LIZ JACAVINO  
PHOTOS BY BRIAN BUTTON AND LIZ JACAVINO

**B**oats skim across the surface of Lake Rathbun, leaving a fleeting bubbly trail in the water. The sun, cemented in the cerulean sky, beams hope of a good catch. Moments of silence, laughter and wonderment fill the day—truly perfect for fishing. At the docks, groups of people fill boats. Young and old. Men and women. For one week of the year, these veterans relax, connect with nature and each other and fill coolers of fish.

### Therapeutic Fishing and Togetherness

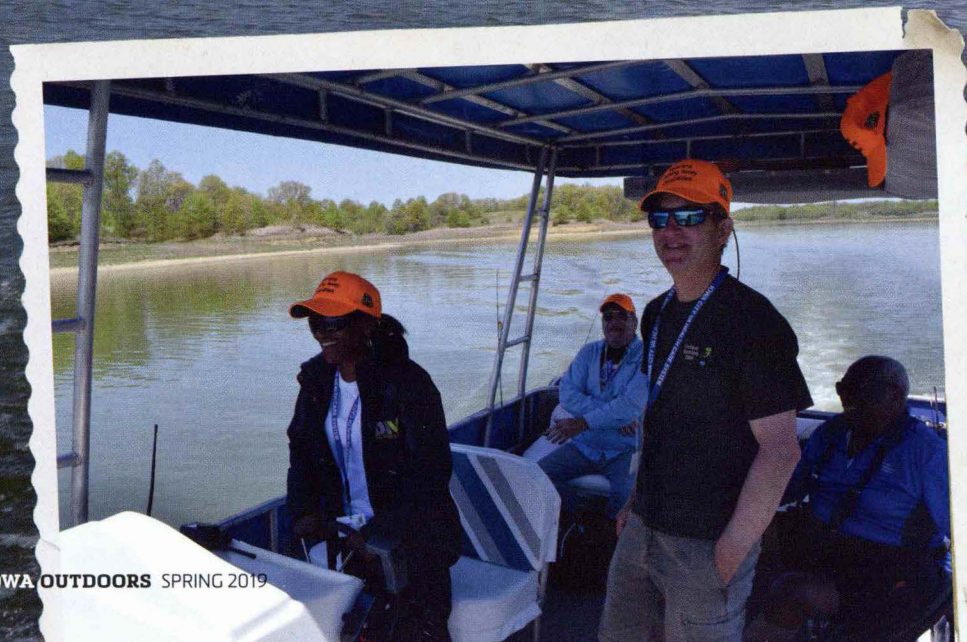
Veterans Casting Away Disabilities is a week-long fishing event that focuses on making memories while encouraging discussion about mental and physical disabilities that veterans face every day.

The mission is “to encourage a rehabilitative and therapeutic fishing event to veterans with life changing disabilities.”

Last spring, 64 veterans, ranging in age from 28 to 88, attended the week-long event. Twenty-one wheelchair bound. Several blind. Amputees—some missing multiple limbs. Many suffer traumatic brain injuries or spinal cord damage. Burn and blast victims. Military sexual assault survivors. Severe post-traumatic stress disorders are common.

### It takes effort to make it happen.-

Few hotels or resorts can host so many wheelchair attendees, but Honey Creek Resort State Park can, plus there’s the accessible dock at the marina. Nearly 80 DNR volunteers, 41 caretakers and 36 Veteran’s Administration staff and volunteers are there to bait hooks, run boats, assist with casts, remove fish and be eyes for the blind. A fleet of 36 boats sit at the ready—13 wheelchair accessible pontoons and 23 fishing boats. Dockside lunches and refreshments and coolers are provided as are evening



bonfires. Fishing gear for 110 people—poles, tackle, nets, minnow buckets and stringers, plus 140 life jackets, were organized. A three-person crew of DNR staff did nothing but clean fish—nonstop—8 hours daily for a week. They cleaned the veterans' catch, totaling around 360 pounds of fillets. Enough for a massive fish fry and fish fillets for vets to take home after the week, to boot.

It began 18 years ago, after a veteran asked Kirt Sickels of the Veterans Administration in Iowa City to put together an event to get veterans outdoors. Today, Sickels, himself a Navy veteran, focuses on localizing the event and getting community involvement. Most funds are donated and every meal is sponsored by an organization. Veterans pay nothing and feel grateful to have an outing like this available.

"I think this event is fantastic," says Tom Sankey, a Marine from Mitchellville. "It brings people together that wouldn't have gotten to know each other any other way."



A three-person crew of DNR staff cleaned fish 8 hours daily—for a week—cleaning the veterans' catch. The 360 pounds of fillets provided a massive fish fry and fillets for vets to take home after the week, too.





“This is freaking awesome,” says Kurt Paeper, Army veteran and two time Purple Heart recipient from Humboldt. “It’s just nice to get to talk to people who get it.”

The week-long fishing vacation gives disabled veterans an opportunity to rehabilitate with other vets through outdoor activities. It’s a time to forget about physical limitations or difficulties. Veterans from all over the Midwest traveled to Honey Creek Resort State Park in Appanoose County to fish, kayak and more.

For some housebound vets, it was their first time outside for three years, says Sickles. “Now they are in boats at a resort,” he says. “Fishing is just a vehicle, getting the veterans out, they’re not sitting on the couch, they’re participating with other veterans.”

Robert ‘Bob’ Fencil travels from Waterloo every year to attend. He is a guy who holds a conversation with anyone and everyone. It’s warm out and he’s taking cover in the shade to enjoy his lunch.

Fencil joined the Navy in 1974 after working in the foundry at John Deere.

“You couldn’t see your hands in front of your face,” he says. “I had to drink three glasses of water after work to get the soot from my throat.”

His supervisor gave him three options: wait it out, quit, or enlist. The next day Fencil joined the U.S. Navy. He served from 1974-78 working on an aircraft carrier, the U.S.S. Midway. Fencil’s fleet rescued refugees from Vietnam and carried them to Japan.

Some are repeat attendees, others new this year.

“I’d rather fish than sleep,” says Sankey, a first timer.

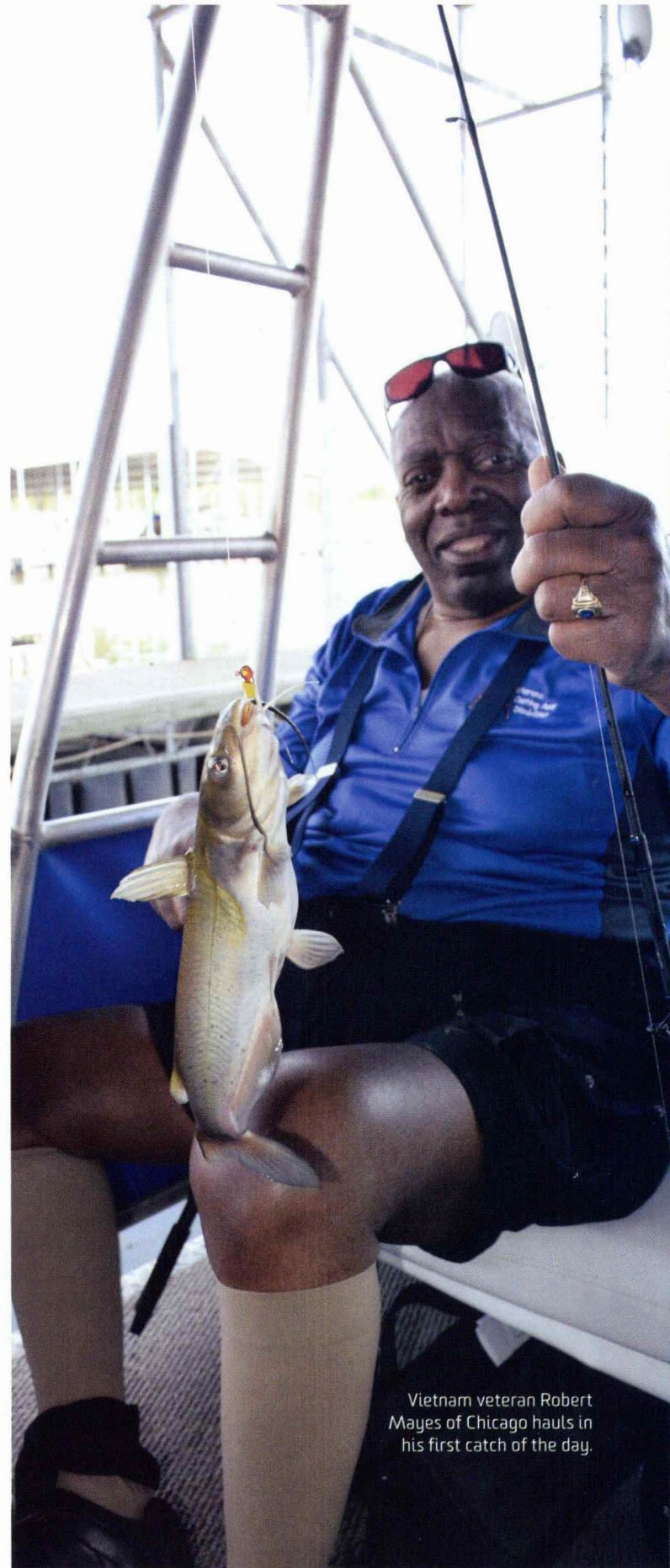
But life-long anglers aren’t the only ones here. Robert Mayes did not fish much growing up in the Chicago area.

“I’m not very good at this,” says Mayes. “But I’m here for the camaraderie and to help others.”

Mayes, who is blind, hasn’t caught much all week. DNR staff and other volunteers help bait lines, cast, and be the eyes for the blind—and for all of the other veterans that need assistance. He sat bobbing a line in a covered dock, trying to lure unsuspecting fish to the hook. He didn’t notice right away that his line tugged. Then it tugged again. He reeled back and reeled back again, not sure whether it was a meal or a small crappie. A catfish broke through the surface of the water. A keeper. Mayes smiled upon the news. A decent catch.

Navy veteran Dennis Keefe of Iowa City sat across the boat from Mayes. He says he’s only fished three times—the three years he’s come to this event.

“No, I’m not a fisherman,” says Keefe. “I’m here because we all speak the same cryptic language. We have different experiences, yet we are all on the same wavelength because we can share basic experiences that no one else could relate to.”



Vietnam veteran Robert Mayes of Chicago hauls in his first catch of the day.

## Building a Community

Commonality. Friendship. Camaraderie. All three words uttered by almost every veteran when asked why they come year after year.

"The companionship here is amazing," says Ken Smith, an Army veteran from Manly. "I've met a lot of people and I've developed some really good friends here."

This was Smith's third time. His nephew brought him his first year. He's been back ever since.

"It's an excellent deal," says Smith. "These veterans need all the assistance they can get."

Mayes returns every year to show solidarity for his fellow veterans.

"It's important to be involved because we need to show support to other veterans," says Mayes.

Mayes was stationed in Vietnam and Thailand during three years of service. He remembers his gratefulness returning home.

"The pilot came over the speaker and said, 'You are looking at the Golden Gate Bridge, boys,'" remembers Mayes. "I was so happy to be back."

After Mayes returned from service, he immediately became involved as an advocate for veterans. He worked supporting veterans in the Chicago area for years, talking with representatives and senators to improve care. The lack of action frustrated Mayes.

"The benefit handbook used to be inches thick. Now they've cut it down to nothing," says Mayes.

Mayes comes back every year to build camaraderie with other veterans and share tips about benefits and care.

"I try to help others navigate medical conditions and such," he says. "I want to make sure they are getting the help they need."

Many veterans arrive knowing the primal connection other veterans need.

"Most of the time vets don't get to talk to too many people," says Fencil. "There's an openness to talk to fellow veterans."

"People can relate even if experiences were different," says Ed Womack of Webster City. "There is a commonality between everyone here. You get to talk to someone who understands what we went through because they went through the same thing."

Womack was drafted into the Army and served from 1962-65 behind the Iron Curtain. He worked as a construction engineer building barriers against earthquakes and other natural disasters. He traveled to Istanbul, Yugoslavia, East

Germany and Morocco while enlisted. He recalls some experiences as "terrifying."

"You never knew what would happen or if someone was going to try to kill you today or not," says Womack.

Last year was his first time here fishing. He says it felt like a family.

Kevin Kelley, a civilian volunteer and caretaker, has attended for years with Army veteran Danny Sullivan of Clinton. Kelley has been Sullivan's caretaker for six years. For both, this week is always something to look forward to. Kelley says he was excited to spend his 50th birthday here.

"I'm just honored to be a part of this family," he says.

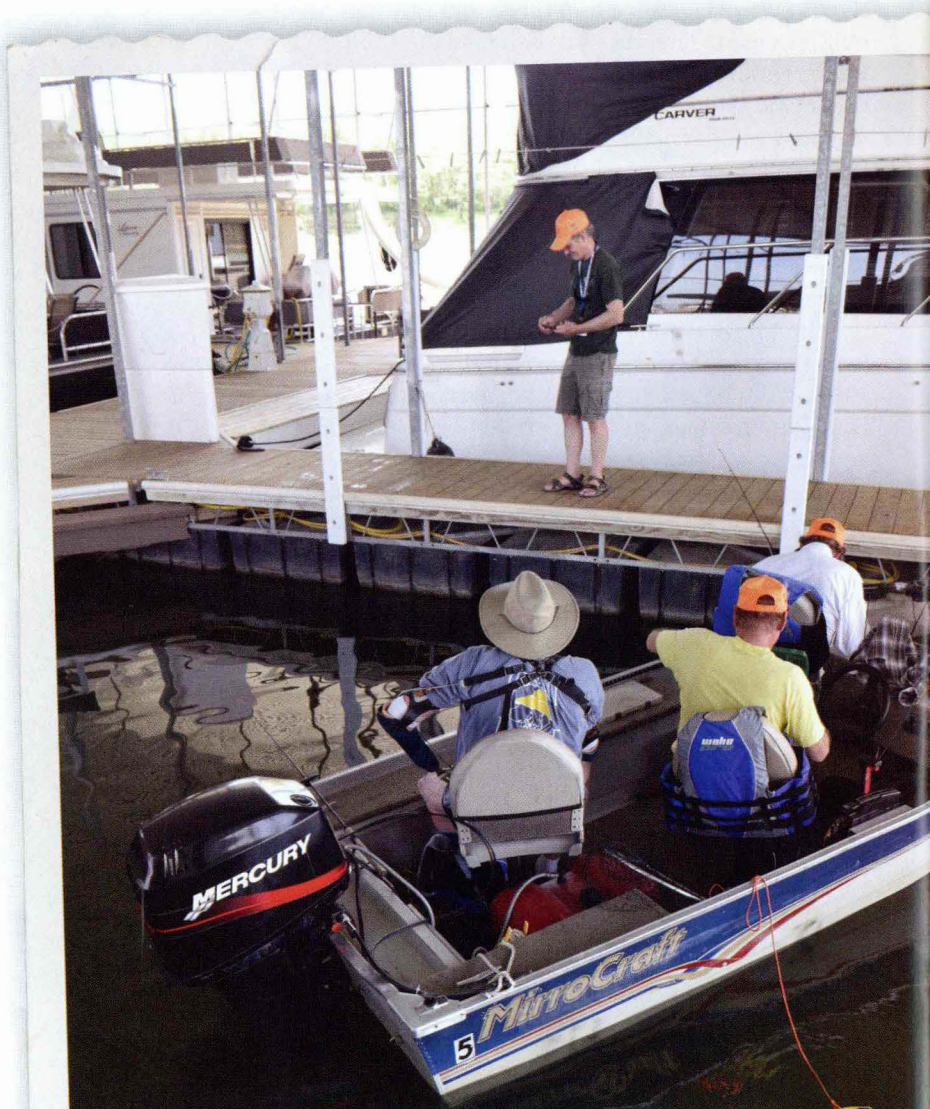
A day fishing, "with a bitchin' dinner and bingo" was exactly the birthday Kelley wanted.

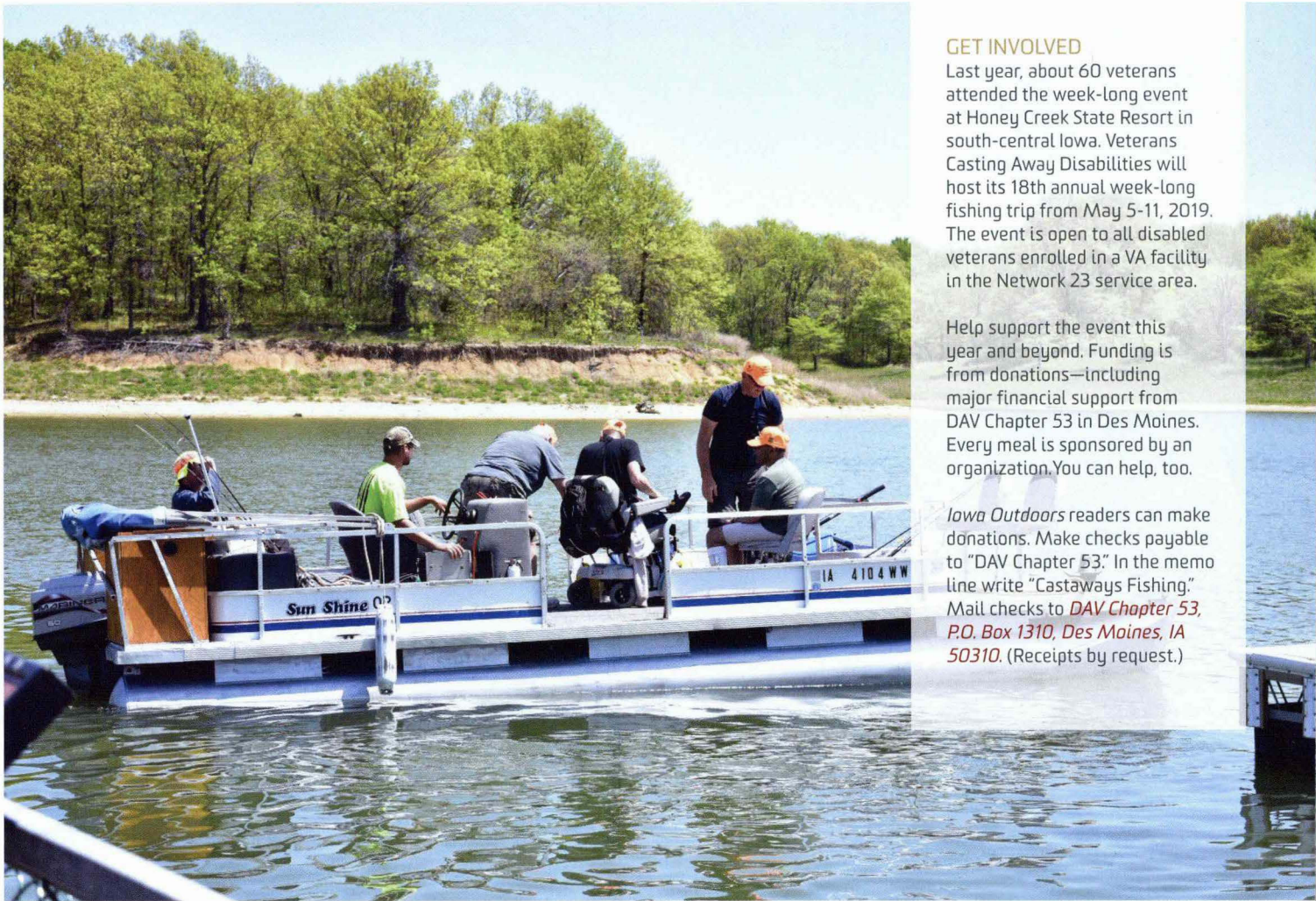
"It's always an adventure with these guys," he says.

The veterans share their own adventures with one another. Some share battle stories, others their craziest moments while enlisted. Fencil, shares tales of exotic cuisine he's tried.

"I'll eat anything that's placed in front of me," he says, launching into a wild story.

While docked in Pakistan, he and a few others left to try a recommended place to eat. With no menu





### GET INVOLVED

Last year, about 60 veterans attended the week-long event at Honey Creek State Resort in south-central Iowa. Veterans Casting Away Disabilities will host its 18th annual week-long fishing trip from May 5-11, 2019. The event is open to all disabled veterans enrolled in a VA facility in the Network 23 service area.

Help support the event this year and beyond. Funding is from donations—including major financial support from DAV Chapter 53 in Des Moines. Every meal is sponsored by an organization. You can help, too.

*Iowa Outdoors* readers can make donations. Make checks payable to "DAV Chapter 53." In the memo line write "Castaways Fishing." Mail checks to **DAV Chapter 53, P.O. Box 1310, Des Moines, IA 50310.** (Receipts by request.)

translation, they each ordered something. Fencil's plate arrived. It was a rat.

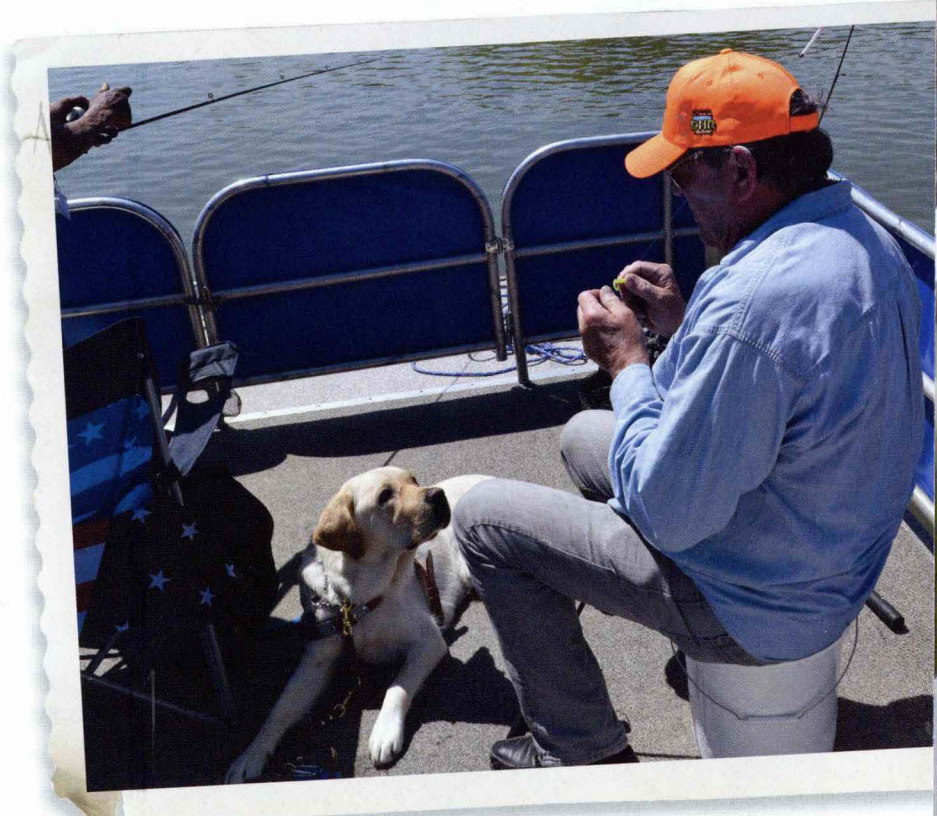
"They motioned to me to drag the rat through honey on the side of the plate and lick it off," says Fencil. He did.

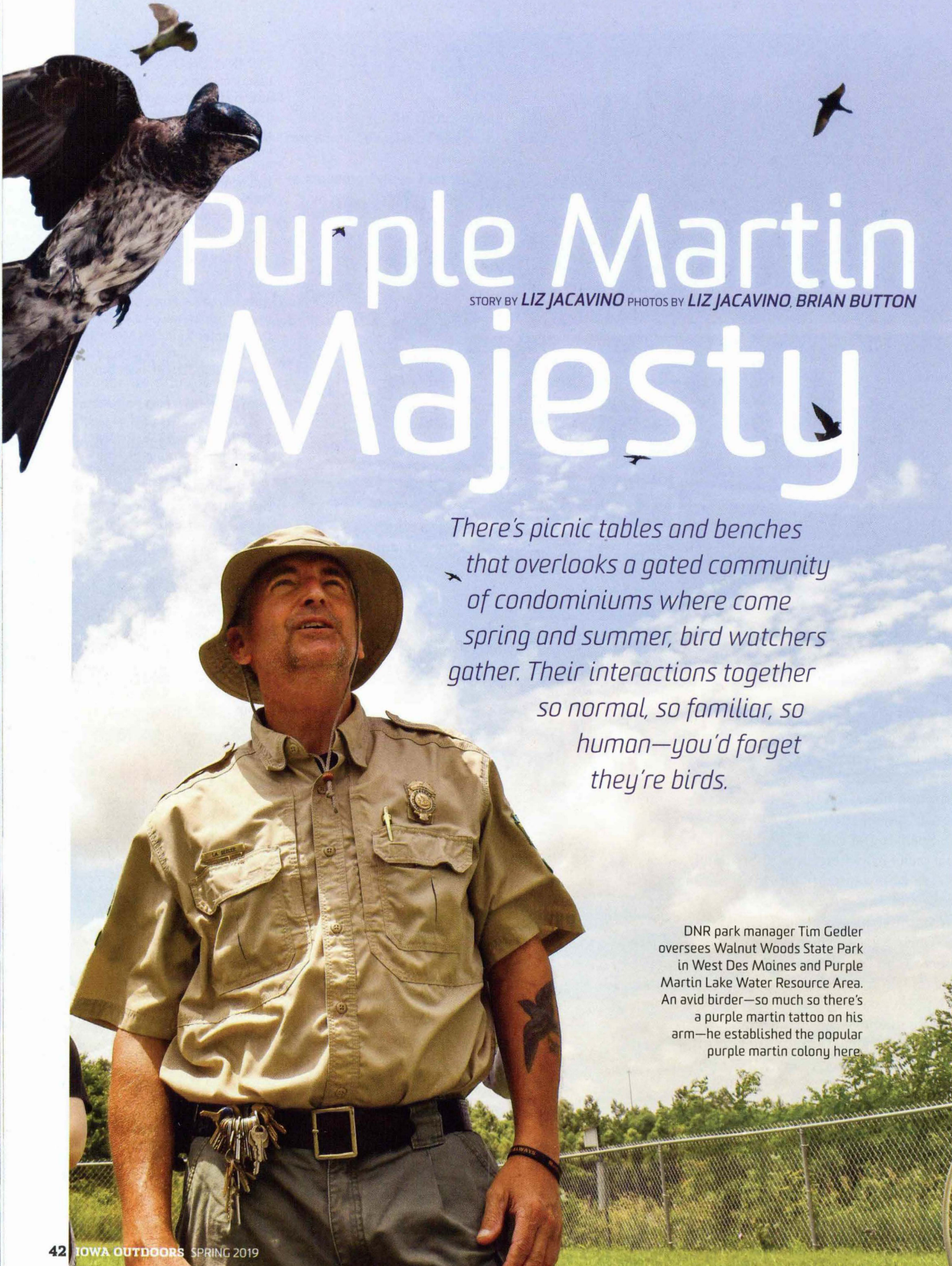
Speaking of rats, "I tried not to be a barracks rat when I was in Scotland," says Keefe who wanted to use his free time to leave base and explore. "I was never going to get to be in these places again."

One of the greatest experiences came when he switched from the Navy to the Reserves. He moved from Scotland to sunny Hawaii. There he participated in the colors ceremony on the memorial over the sunken battleship, the USS Arizona, which lays just submerged after sinking December 7, 1941 in Pearl Harbor with 1,177 crew and officers entombed.

"It was one of the coolest things I did," says Keefe, who adds that the community built in the military is unlike any other.

"The military tends to be the greatest kind of fraternity in the world," he says. "There's a true brotherhood and you can see that here." 🐾





# Purple Martin Majesty

STORY BY LIZ JACAVINO PHOTOS BY LIZ JACAVINO, BRIAN BUTTON

*There's picnic tables and benches that overlooks a gated community of condominiums where come spring and summer, bird watchers gather. Their interactions together so normal, so familiar, so human—you'd forget they're birds.*

DNR park manager Tim Gedler oversees Walnut Woods State Park in West Des Moines and Purple Martin Lake Water Resource Area. An avid birder—so much so there's a purple martin tattoo on his arm—he established the popular purple martin colony here.



**P**urple martins are a uniquely social bird, both with each other and with humans. The relationship with humans is what attracted Tim Gedler, park manager at Walnut Woods State Park in West Des Moines.

“They fascinated the heck out of me,” says Gedler, who flings frozen crickets from a spoon into the air to feed the martin colony in the lean insect times of early spring.

### Rebirth as an Outdoor Play Place

Gedler’s interest and dedication to the outdoors helped create the new Purple Martin Lake Water Resource Area, nestled between Walnut Woods and a handful of gravel quarries further west. A few years ago, it too was a quarry. Once mined for sand and gravel, the former quarry filled with water and sat with little purpose. Few offers came in. Gedler pleaded for the DNR to try and buy it, but restricted budgets forced a rejection. The land’s owners wanted it to remain a natural area, though. At one point, someone proposed for a water park. Then, Des Moines Water Works (DMWW) swooped in to purchase the land.

“It was out of the blue that Water Works wanted to buy it,” says Gedler.

Ted Corrigan, DMWW’s Chief Operating Officer, explains that the utility’s interest is in naturally lowering nitrate levels found in the Raccoon River. Corrigan says that by pumping river water into the lakes and letting it sit, nitrates dilute. The process of lowering nitrate is cost effective and naturally treats water.

“We are excited to use a natural process to clean water,” says Corrigan. “We keep the water moving, which makes the water a higher quality.”

Gedler knew he needed to get in contact with DMWW as soon as the purchase went through.

“Right away, I jumped on that when the deal was done,” he says.

Gedler and Corrigan wanted the lake to stay a green area, but DMWW did not have staffing to care for the large property. Gedler offered his hand. Walnut Woods would manage the area while DMWW uses the lake for their natural water treatment process.

“It’s a great opportunity to make a beautiful natural green area for the public,” says Corrigan. “This will help make it possible to tell the story of water.”

“It’s for the good of the future to have this supply of water,” says Gedler. “They’ve been really open to have the area open to the public for nature observation and recreation.”

Keeping land public was also a major point that made partnering possible.

“We wanted to work with Tim because he is aware and was interested in opening it up to the public,” says Corrigan.



“We really liked that idea.”

For Gedler, he fought hard to protect and conserve the area.

“To me, urban green space is so rare now,” he says. “We need to value any green space we can. I needed to preserve this for its own sake.”

In the next two years, Gedler plans to create a nicer trail access for canoes and kayaks and have the main parking lot paved.

## Helping Build a Colony

When Gedler began partnering with DMWW, he knew immediately he wanted to build a purple martin house. One house soon became a colony of little apartments full of purple martins. Purple martins stick out in Gedler’s mind as his favorite bird, but birding is something he’s been doing most of his life.

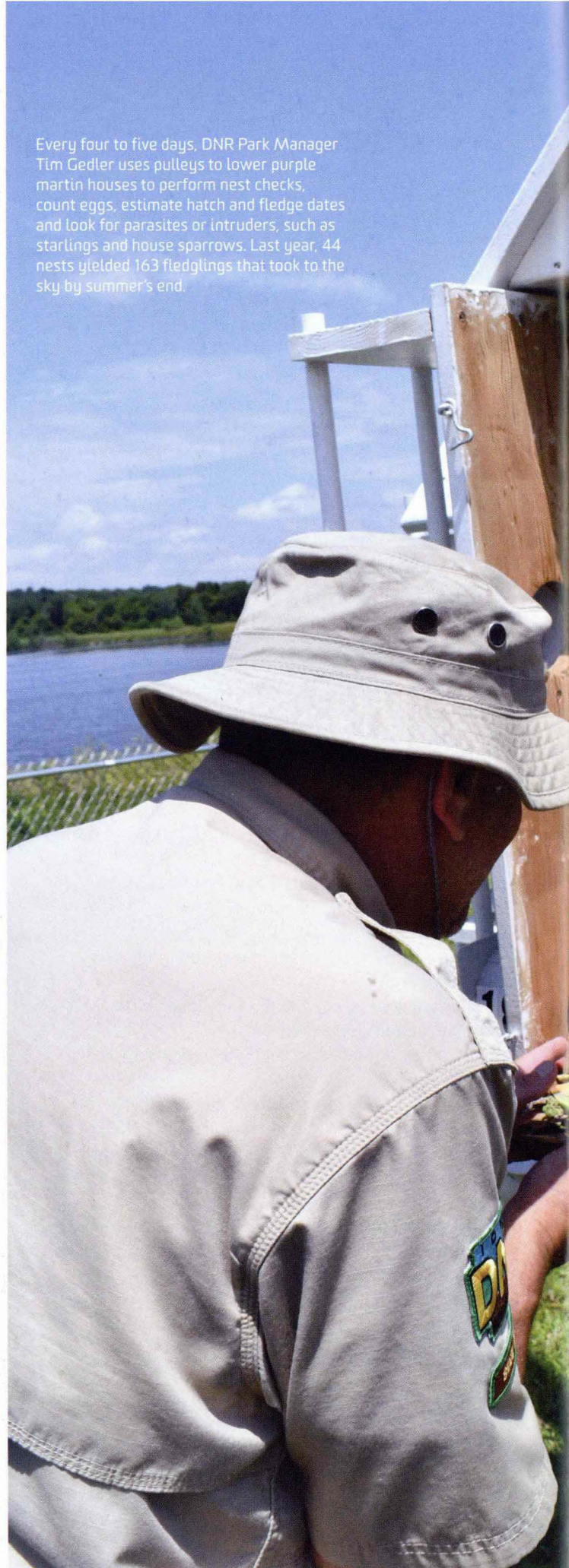
Gedler’s interest in birds began as boy while delivering newspapers. He remembers the first bird he identified.

Every morning, Gedler woke up before dawn to go out and deliver papers in his Des Moines neighborhood. One morning along his paper route, he saw two little white patches dive from the sky. Gedler stopped in his tracks.

“It made this big dive and when it reached the bottom it made this loud noise,” remarks Gedler. “I thought to myself, ‘wow, that’s a cool bird.’”

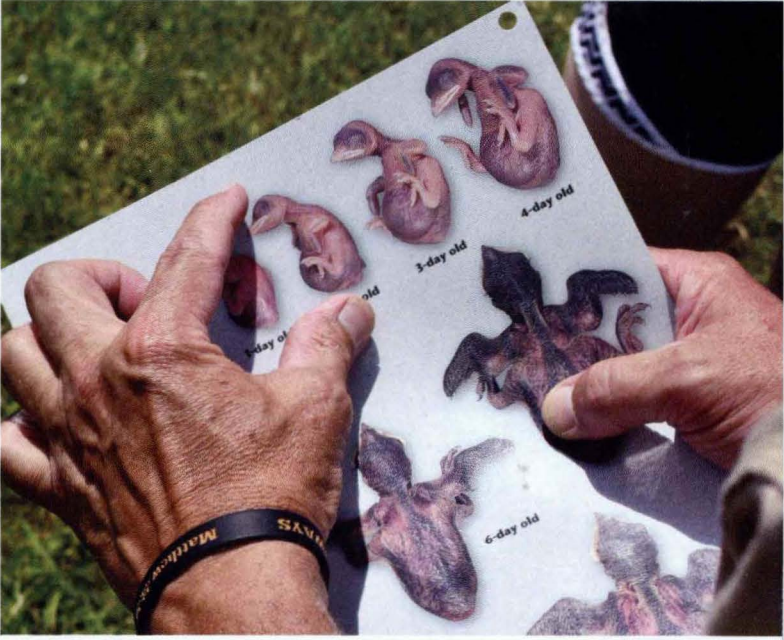
He pedaled home to ask his mother if she knew anything about it. He started skimming through pages of a bird atlas his parents kept in the basement until he found a picture of the bird he saw. Under the nighthawk family, with two little white patches and pointed wings, he found the common


Every four to five days, DNR Park Manager Tim Gedler uses pulleys to lower purple martin houses to perform nest checks, count eggs, estimate hatch and fledge dates and look for parasites or intruders, such as starlings and house sparrows. Last year, 44 nests yielded 163 fledglings that took to the sky by summer’s end.





Purple martin populations have declined in part due to drops in supplied housing—the species in the eastern U.S. is totally reliant on human built apartment-style housing for their colonies. “I’m just fascinated with their relationship to human beings,” says Gedler.



A close-up photograph of a Purple Martin bird in flight against a clear blue sky. The bird is shown from a low angle, with its wings fully extended. It has dark brown upperparts and a lighter, speckled underbelly. Its beak is open, and it is holding a dragonfly. The dragonfly's wings are visible, and its body is dark. The bird's eyes are focused on the insect. The lighting is bright, highlighting the texture of the feathers and the details of the dragonfly.

Purple martins feed in midair, catching large, aerial insects such as dragonflies. Feeding and roosting in flocks, often mixed with swallow species, they can feed hundreds of feet higher in the air than other swallows. In afternoon and evening, they feed closer to nest sites.

nighthawk.

Gedler attributes events like that for shaping him into a birder, helping garner a fascination with the natural world. A few years later, he took off to study environmental science at Simpson College. His freshman year he met friend, Tim Schantz, who also enjoyed watching birds. The two spent weekends together, looking for a new bird to tick off their list.

“He was the one who got the competitive birder out of me,” says Gedler. “I owe everything I know about birding to him.”

One day, the young men decided to ride their bicycles spotting birds as they went. The sun beat down on them, dirt flew up behind their tires. At one point in their escapade they found themselves crossing the Missouri border. Just as they entered Missouri, they spotted a scissor-tailed flycatcher.

“We pitched our bikes in the ditches and ran after it,” says

Gedler. “That’s how fanatical we were about birding at the time.”

While at Simpson College, Gedler began working for state and city parks during summers. His senior year of college he worked at Walnut Woods State Park, the park he now manages.

“I was just slowly building up in parks and it lead me to a parks career,” says Gedler.

Now, Gedler’s spent 32 years working at the DNR, with 18 years at Walnut Woods. Throughout his time at different parks, he’s always built birdhouses for the parks. After going to a purple martin seminar in Kalona, Gedler built his first purple martin house.

“I’m just fascinated with their relationship to human beings,” he says. Purple martins in the eastern U.S. depend on human supplied housing. Native Americans, long before Europeans arrived, put up hollow gourds for the birds to nest in.

Newly acquired Purple Martin Lake Water Resource Area in West Des Moines is adjacent to Walnut Woods State Park. The former sand and gravel quarry is now owned by the Des Moines Water Works and managed by DNR park staff. The 214-acre addition includes an 80-acre lake used to naturally pretreat water for municipal use.



## GET INVOLVED

Donate to or join Friends of Walnut Woods State Park to help support purple martins at Purple Martin Lake, plus the bird observation blind at the park for close-up views and photos of rose-breasted grosbeaks, orioles, indigo buntings and much more. To donate or learn more, email Linda MacBride at [friendsofwalnutwoods@yahoo.com](mailto:friendsofwalnutwoods@yahoo.com) or send a check to 1565 SE Walnut Woods Drive, West Des Moines, IA 50265. Memberships are just \$10 per person or \$20 for a family.



LEFT: A tree swallow nest box sits near the martin colony. Tree swallows compete with martins for housing. So why have the box nearby?

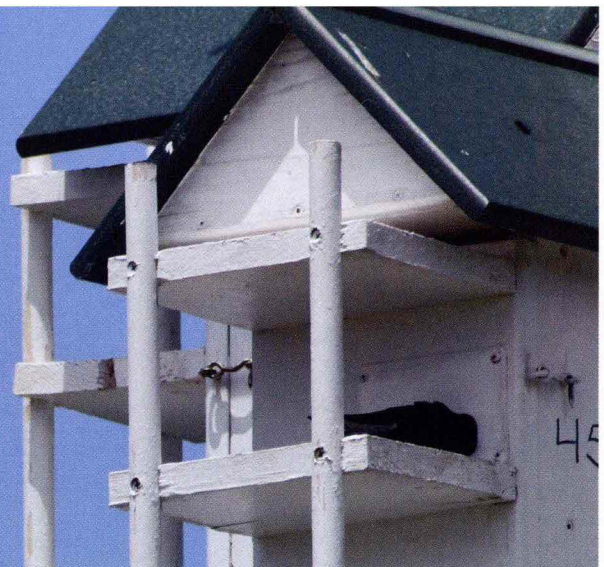
The first martins to occupy a new martin house are typically younger, says DNR park manager Tim Gedler. "And they are not good at fighting their way in. Tree swallows will drive them off."

When first installing new martin boxes, block the openings. Install tree swallow boxes 25-30 feet away. In spring, swallows arrive 2-3 weeks earlier than martins.

Once tree swallows commit to their box by perching and defending it from other tree swallows—they want area control—they will drive other tree swallows away from the nearby martin house. Then you can unblock the martin box openings. The swallows don't mind the arriving martins for some reason.

The next year, seasoned martins return. These birds are more aggressive and better able to protect their martin house—they own it now!

BELOW: Park manager Tim Gedler frequently educates visitors about the unique wonders of purple martin behavior, feeding and nesting. Nest checks on Saturdays and Sundays during the nesting season are open to the public. Attend to help count eggs, age hatchlings, record data and get up close views of nests and young. For details visit the DNR events page at [lowadnr.gov](http://lowadnr.gov) May through July.



“East of the Rockies, hardly any martins nest in old dead trees anymore,” says Gedler.

But the supplied housing has dropped in recent years. Gedler says this drop is one reason for declines in purple martin populations. Gedler set up a house and four gourds. Over time, martins settled in. Now four houses and 12 gourds can house 52 nests. Every few days, Gedler finds himself out at the houses, ready to eradicate any intruders, like a starling or house sparrow.

“I have a sense of ownership to these martins,” smiles Gedler. “They’re my martins.”

Not everyone can say they’ve named a lake before, but for Gedler it’s a part of his legacy.

“It still blows me away actually. I was pretty happy when they voted on it and I got to name the lake,” says Gedler. “Taking on this whole area and actually having gotten to name the lake is my biggest accomplishment.”

Gedler, the only full time staffer at Walnut Woods, spends many early mornings and late evenings dedicated to the martins. He sacrifices his time and labors away to modify the homes. He routinely checks the fledgling’s nests and records their growth. And all that work paid off when about 200 fledglings took to the sky at the end of last summer.

“It’s a good feeling to have them back in this landscape,” says Gedler. And it is enjoyable for park visitors, too. That’s because martins are entertaining to watch. They not only catch all their food in flight, but also water by skimming the lake to scoop water with its lower bill. They also hunt insects higher in the air than other swallows, but in the afternoon and evening they may feed low and close to the cluster of tightly-packed apartment-style houses.

Gedler began his DNR career in 1987. As he approaches retirement, he says he’ll still be around to see his martins.

“I’ll be down here until the day I die taking care of these martins,” says Gedler. “I just hope beyond me, someone takes up the torch.” 🐦



# Boy's Lost Adventure Resurfaces after 54 Years

STORY BY NORMAN C. WARD, JR.

An *Iowa Outdoors* subscriber purchasing a used, vintage bird identification book found a handwritten report inside which he shared with us. It was dated 1965, written by Bettendorf high-school student Norman C. Ward, Jr. It was originally intended for *Iowa Bird Life*, but lost and never submitted. Ironically, Larry Dau, mentioned in the story, remains an avid birder and past photo contributor to *Iowa Outdoors*. Dau, now of Boone, says Ward was "a very strong

teenager and I marveled at his ability to climb large trees to band owls and raptors. Even more amazing, he used only a rope and no cleats. Some of the trees were dead due to Dutch elm disease." Mr. Ward now lives in Ames.

The banding took place under the auspices and supervision of adult Pete Petersen, a registered bander and area ornithologist.





# This is an account of a nest of great horned owls that I banded on Saturday (April 10, 1965.)

Pete Petersen, Larry Dau and myself arrived at the nest site early afternoon. The nest site is located about 5 miles SW of Princeton on county road H. The nest tree is located on the southern fringe border of a relatively large oak woods.

The nest platform itself was situated on the extreme topmost fork of an unusually slender and very tall white oak. I had judged the tree to be about 65 feet tall.

After having some difficulty climbing to the first limb, even with the aid of a rope, I finally reached a position directly under the nest. Upon reaching this precarious position I was completely immobilized from further climbing for several minutes due to the violent swaying of the tree, caused by a very strong and turbulent wind. It was then that I was shocked with fear to note how small the limb to which I was clinging really was.

After the wind had calmed down somewhat, I heard the young owls snapping their beaks and uttering a queer sapsucker-like note.

Gathering courage, I disregarded the prohibitive wind and elevated myself eye-level to the nest. Here I found myself confronting the ferocious onslaught of two very angry young great horned owls. Not desiring to lose an eye nor receive facial injuries, I cowardly descended to a point several feet under the nest. Here I began wondering if maybe the parent owls weren't somewhere nearby, watching, waiting for a chance. It was then that I began recalling such coined expressions as "tiger of the air," "killer of the night" and "silent death."

But after receiving loud shouts of encouragement and advice from the comrades, I again inched my way up to a position slightly above the nest, and again the owls

assumed defensive position, snapping their bills loudly and spreading their underdeveloped wings all in a very impressive manner.

Seeing that in my totally tenacious position I couldn't possibly band the owls, I grudgingly placed my life into the trust of the seemingly weak branches supporting the nest and actually crawled onto the nest, much to the annoyance of the bewildered owlets. After arranging the bands, pliers, glove, etc. in order that I could easily grab them when needed, I began to cautiously handle one of the owlets with my one free hand. After convincing myself that they would only attack with their beaks for now, I turned to the problem of banding them. Since the wind was still violently rocking the tree, I could only use one hand for the banding operation.

Opening the bands became quite a problem. After assuming several unsuccessful positions, I had to resort to allowing the wind to settle. Then, balancing myself on my knees and shins, I quickly opened two bands.

After banding both owls, I sat much relieved looking down at the comical owls who now squatted looking up dumbly, blinking their eyes. I chuckled aloud rather ashamed of myself for having been frightened by these little bluffers. I recalled how ferocious they first acted but who now proved really to be rather passive. In fact, I remarked to my patiently waiting companions that they were really "as harmless as kittens."

Among the debris in the nest were 19 whole pellets (rodent presumably), a complete pheasant wing, loose

pheasant feathers, the remains of a flicker, a whole starling, a fresh rabbit breast (meat attached), a variety of bones and rabbit fur.

I descended from the tree with no further incidence. Upon more closely examining the area around the base of the tree, I found more pheasant feathers, but fortunately not a single sign of poultry depredation.



# Hook and It's All About

Each year DNR staff set records in fisheries management like stocking 165 million fish last year, besting the previous record by 9 million! Lakes, fish habitat and angler access keep improving, too. Yet no matter how spectacular the resources and amenities, about a third of license buyers don't renew their licenses the next year.

- The good news? Research shows these inconsistent license buyers will fish again if invited! Eighty-four percent will fish if invited by a child, friend, family member, co-worker or neighbor.

So to all our avid angler friends, it's your turn to help. Break the secrecy and invite an angler out. Historically, anglers guarded favorite lures and baits, secret honey holes or special techniques—mannerisms suited for 1890 or 1940—when fish were scarce. Today our waters teem with unprecedented numbers of fish—west to east from

big river to big river—and the lakes, rivers and streams in-between.

So when you invite someone new to fishing or that hasn't fished recently and share your skills—everyone wins. More anglers mean more license sales—funds reinvested to drive *even more* fish-stocking, *even more* habitat creation, continued water quality work, more angler amenities and better fishing for all.

So snag a new angler—invite others into the sport, get out and have fun.

And here are 99 counties—*full of fish*—raring for you to tackle with new buddies.

**ADAIR**—Nodaway Lake is heaven for new anglers to hook bluegills, crappies, channel catfish, largemouth bass and



# Angler

## The Invitation

BY SHANNON HAFNER

an occasional walleye. There is an abundance of 10-inch crappies and 8-inch bluegills to make this lake a top pick in 2019. May and June are prime for crappies and bluegills on spawning beds.

**ADAMS**—Excellent shore access and jetties make it easy to catch fish at Lake Icaria. Use small jigs and minnows for bluegill up to 8 inches and crappie up to 11 on fish mounds. Cast nightcrawlers or cut bait along the bottom of rocky shoreline areas or the fish mounds for excellent numbers of channel catfish of all sizes. Find camping, cabins, nature trails, playground and a beach at the well-maintained county park.

**ALLAMAKEE**—Patterson Creek, northwest of Waukon, is a good choice for fly fishing newbies. Grazed pasture provide easy walking and little casting obstruction. Almost two miles of stream on private property is open to public

fishing. Stocked weekly (except in July and August) with catchable rainbow trout, it also sustains a healthy population of wild brown trout.

**APPANOOSE**—Lake Rathbun is Iowa's perennial crappie hotspot. Anglers catch them by the dozen. It's hot for 9- to 12-inch crappies, especially in mid-May to mid-June. Hybrid striped bass fishing is tough to beat – perfect for newbies to catch a trophy-size fish.

**AUDUBON**—Littlefield Lake is popular for all ages. Catch 15- to 20-inch-plus channel cats, 8-inch bluegill and 9- to 10-inch crappie. Well-manicured shore access, camping, a beach, playground and trails. Cast for bluegills and crappies in spring and catfish in summer.

**BENTON**—Shoreside campsites at Hannen Lake southwest of Blairstown let you fish right outside your



# #MISSIONFISHIN

camper. A beautiful rental cabin sits right next to the water. Kids will revel in catching and releasing 10- to 14-inch bass (15-inch minimum). Excellent shore access.

**BLACK HAWK**—Venture to the Cedar River in the Cedar Falls/Waterloo area for great walleye, smallmouth bass and channel catfish action. Shore fishing is good with access in downtown Waterloo, several city parks, Black Hawk County Park and George Wyth State Park (which also has camping). Use crankbaits or jigs tipped with minnows or crawlers. Small boats are best with shallow water in some channel crossovers. Cedar Falls and Waterloo offer lots of family fun with miles of bike trails, dining and sports and entertainment venues.

**BOONE**—Venture to Don Williams Lake in the county's largest park. Great fun for all with a campground, beach, playground, trails, golf course and cabins. Catch plenty crappie and bluegill. Dock fishing is good, especially late April and May when crappies spawn. From a boat, drift jigs down the middle of the lake during mid-summer bite.

**BREMER**—The Cedar River near Plainfield and Waverly has a hot walleye bite. Great access to good catfishing and bonus smallmouth bass and northern pike. Sweet Marsh near Tripoli is worth a visit, too.

**BUCHANAN**—Self-sustaining northern pike and smallmouth bass thrive in the scenic Wapsipinicon River. Ten public access points provide easy access to lots of pike and smallies as well as walleye and channel cat. Shallow water can make motorboat navigation difficult, so paddle or walk-in—think adventure fishing, folks.

**BUENA VISTA**—Loaded with public access and family-friendly parks, playgrounds and restrooms, Storm Lake is perfect for kids and parents. Have fun catching and releasing slot-limit walleye (17 to 22 inches)—lots of keeper size walleye, too. Use live minnows under a slip bobber or white twister tails from shore, or toss or troll shad-colored crankbaits April through June. Anything silver works since shad and emerald shiners are the main forage fish. After ice-out, try shad guts or cut bait on windblown shores for channel cat.

**BUTLER**—Find lots of nice smallmouth bass and walleye in the Shell Rock River. Trophy walleye up to 28 inches and lots of 15- to 20-inchers abound. Float while casting jigs, cranks or live baits, or use small johnboats. Look for schooled fish in the spring below dams, obstructions and cobbles. Cast a jig and crawler, or try crankbaits during summer.

**CALHOUN**—Hook memories and small yellow bass at North Twin Lake. Shore access along Featherston Park makes

taking kids easy. Stay the night at rental cabins and cook up a steamy plate of fresh walleye or catfish. Venture to South Twin Lake for a hot bullhead bite.

**CARROLL**—Tons of access at Swan Lake State Park helps newbies get close to the action. Reel in lots of bluegill and crappie from nine fishing jetties, an enclosed fish house or shore—especially in late May and early June.

**CASS**—Catch lots of spawning bluegill and crappie off the rock reefs and old road bed at Lake Anita in May and June. Drift and troll for suspended fish in June and July. Lake Anita is one of the most consistent pan fishing lakes in the state. A 4-mile paved trail winds around the lake for bikers, joggers, or walkers. The campground is popular in southwest Iowa.

**CEDAR**—Just 20 miles from Iowa City, Cedar Valley County Park offers lake and river fishing. Cast for bluegill in limestone quarries or try catfishing the Cedar River. A concrete boat ramp provides quick river access. Enjoy the view, camp, picnic or hike the trails.

**CERRO GORDO**—Great shore and boat angling at Clear Lake, one of Iowa's better walleye fisheries. Catch 14- to 20-inch walleyes (14-inch minimum), with rod-bending trophies running 8 pounds-plus. Good yellow bass fishing and improved chances for crappie and yellow perch. A handy fish cleaning station is available at McIntosh Woods State Park.

**CHEROKEE**—Experience river channel catfish and walleye angling on the Little Sioux River. Channel cats run 2- to 6-pounds and walleyes span 15- to 25-inches. Try cut bait for cats and twisters for walleyes, or float a live chub for both. Find great shore access and a boat ramp at Wescott Park in Cherokee. Head down the road to Spring Lake for pond fishing. This old gravel pit has lots of shore access and a variety of fish species in its depths.

**CHICKASAW**—Airport Lake is a short drive northwest of New Hampton. Catch largemouth bass, channel catfish and bluegill. Nestled within the 57-acre park is a campground, beach, playground and trails. This 9-acre lake has a ramp for boats with electric motors. Two jetties provide easy access to deeper water and habitat.

**CLARKE**—Spend an afternoon fishing at East Lake Osceola. Plenty of bluegill up to 8.5 inches, 9- to 10-inch crappie and all sizes of largemouth bass. Cast along brush piles on the east side and near the boat ramp.

**CLAY**—Easy fishing for bluegill, crappie and lots of catfish at Scharnberg Pond. Great access with an accessible fishing

pier and rock jetties. Camping, cabins, beach, playground, hiking trail, and paddle boat and canoe rental at the county park.

**CLAYTON**—Bring along a pole to Big Springs Trout Hatchery and enjoy trout fishing on the hatchery ponds (one just for kids) or the adjacent Turkey River. Primitive camping available close-by.

**CLINTON**—Escape the stresses of everyday life at Hagenon Pond off highway 67 south of Camanche. Usually not a lot of angler activity. Keep kids busy with good numbers of 12- to 15 -inch bass and 6.5-inch bluegill, along with catfish.

**CRAWFORD**—Enjoy a day fishing Yellow Smoke Park Lake with someone who hasn't fished in a while. Nab challenging monster-sized bluegill that run 9.5-inch-plus. Largemouth provide a lot of catch-and-release action (10- to 14-inch fish) with the chance to hook a lunger. Admire very clear water from the paved lakeside trail, big swimming beach or water's edge campground.

**DALLAS**—Escape to Beaver Lake in rural Dallas County. Boaters find good panfishing at this small lake full of timber. Abundant crappies, mostly 7-9-inches, with some larger 10-11 inch fish. Bluegill numbers are strong, with 7- to 9-inch fish.

**DAVIS**—Escape to beautiful Lake Wapello State Park for unmatched largemouth bass fishing. Good bluegill (6- to 8-inch) and improving crappie numbers (up to 11 inches). Several miles of trails around the lake and through the park. Shaded picnic areas, family cabins and a revamped, rebuilt campground with lake access.

**DECATUR**—The bluegill bite was hot last spring at Little River Watershed Lake west of Leon. Lots of 8-inch-plus bluegill were caught from brush piles. Slowly troll jigs tipped with twister tails or Lindy Rigs with live bait along rock structure or mud flats for spring walleye (16- to 20-inches). Cast crankbaits along weed lines or plastics near cedar piles for summer bass (some over 20 inches). The lake features several fishing jetties, camping and rental cabins.

**DELAWARE**—Unique experiences for all ages await at Backbone State Park—trout fishing, cabins and camping, paddling and rugged trail hikes. Explore clear, cold-water Richmond Springs with easy trails. Keeper brook and rainbow trout stocked weekly April through October. Use small spinners, jigs, prepared baits or flyfish. Running



through the heart of park, the Maquoketa River yields brown trout in upstream areas and smallmouth bass below Backbone Lake. Easy lake access for small bluegill, crappie, largemouth and white sucker.

**DES MOINES**—Don't miss the hot panfish bite at Big Hollow near Burlington each May. Catch 9-inch-plus bluegill and big crappies. Use a 32nd-ounce jig with a 1-inch paddletail body for panfish. Excellent bass lake for 15-inch plus fish. Lots of timber, hidden coves and structure, so bring plenty of jigs and lures. Stocked muskies prowl the waters. Camping, a beach, boat ramp and jetties.

**DICKINSON**—Something is always biting at the Iowa Great Lakes. Great yellow bass fishing and good numbers of yellow perch, channel cat, bluegill, crappie and walleye. Success from shore is best in the spring and early summer, but there's plenty of action all year.

# #MISSIONFISHIN

**DUBUQUE**—The Mississippi is the go-to, known for great bass, bluegill, catfish, crappie, freshwater drum, sauger and walleye. Shore fishing is limited, with most fishing by boat. Action peaks for sauger and walleye in the tailwaters of Lock and Dam 11 in March and early April. Use heavy river jigs or pull three-way rigs tipped with minnows. The Massey Park Boat Ramp south of Dubuque has easy access to some of the best side-channel and wing dam water. Good backwater habitat is near Mud Lake Park Boat Ramp in north Dubuque. Use a slip bobber rig near brush or rock habitat tipped with nightcrawlers for bluegill and bass, or minnows for crappie and bass. After fishing, find local eateries in Iowa's oldest city and visit the Mississippi River Museum.

**EMMET**—Ingham Lake has good wader fishing for walleyes. Part of a beautiful natural lake complex, there's plenty of water to explore. Camping, nature center and arboretum nearby.

**FAYETTE**—It's easy to find a good fishing hole at Grannis Creek with both state ground and private property open to fishing only. Lots of 9- to 12-inch stream-reared brown trout, some larger than 14 inches. Stocked weekly with catchable rainbow and brook trout. Mayfly, midge, gnats, and caddis flies are common.

**FLOYD**—Rudd Lake, off Highway 18 east of Rudd, offers a 12-acre lake with hard surface ramp, trail, picnic area, playground and a beach. Plenty of largemouth, channel cat and bluegill await anglers from shore or boat. City campground, too.

**FRANKLIN**—Plan a family fishing and camping trip to Beeds Lake State Park near Hampton. Use several jetties, a two-mile lake trail and a pier to catch 7- to 7.5-inch bluegill, 8- to 11-inch crappie, a few 7- to 10-inch yellow bass and quality largemouth bass, too. Enjoy a relaxing lunch at a shaded picnic area along this quiet, no-wake lake.

**FREMONT**—Try summer catfishing on the East and West Nishnabotna rivers. Set bank poles or trotlines for channel catfish, flathead catfish and occasional blue cats. Twenty-inch-plus catfish common, with trophy 40-pounders.

**GREENE**—Easily catch lots of catfish at Spring Lake anywhere from shore—or even fish right from your camper. Burn off that big fish meal at the park swim beach and roller skating rink.

**GRUNDY**—Grundy County's newest recreation area, Grundy County Lake, is south of the Highway 20 and T-55 interchange in Dike. Catch 5- to 8-inch bluegill,

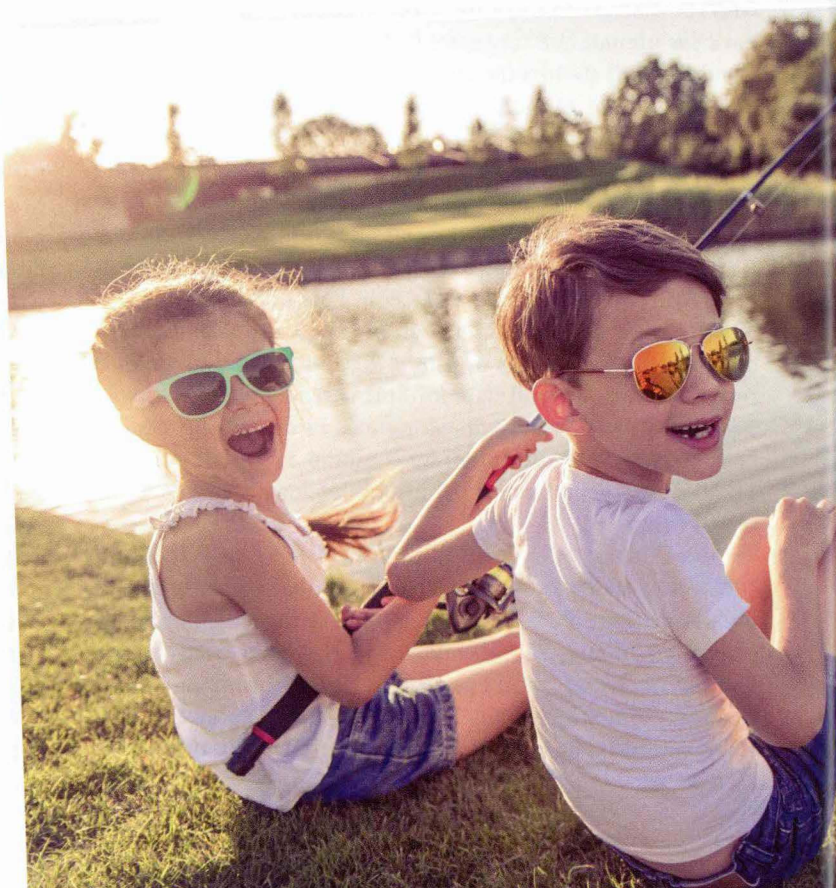
12- to 18-inch largemouth bass (15-inch minimum) and lots of channel catfish up to 5 pounds. Fish jetties or pier.

**GUTHRIE**—Float or wade a section of the Middle Raccoon River for lots of 10-inch bass with an occasional one over 14 inches. Use lead-head jigs tipped with half a crawler in the pools, around rocks, or below riffles. Catch and release only regulations protect the population from Lennon Mills dam downstream to the Redfield dam.

**HAMILTON**—Good access from jetties and lakeside trails at Briggs Woods Lake make it easy for the whole family to be successful. Cast for crappie, catfish, largemouth bass and bluegill. End the day with 18 holes of golf or a long hike in timbered forest.

**HANCOCK**—Trails abound at Crystal Lake—easy access for newbies and great for adventure-angler hikes to remote areas. Catch bluegill and crappie in May and early June. Rod-bending walleye, northern and largemouth action. Easy access with two jetties (one off Main Street) and a long stretch of shore open through the county park and campground.

**HARDIN**—Head to Upper and Lower Pine lakes near Eldora for spring bluegill and crappie. Largemouth action heats up in these two scenic lakes in late spring and summer. Pine Lake State Park, one of Iowa's earliest state parks, has camping, cabins, swim beach and more than 10 miles of trails around the lakes.



**HARRISON**—Willow Lake, in the heart of the Loess Hills, is a great family get-away with nature center, beach, playground and trails. Extremely clear water—be careful not to spook the fish. Jetties and a pier provide boat-free access to deeper water. Plan a weekend trip to stay at cabins or campground.

**HENRY**—Enjoy a variety of fishing on the Skunk River near Lowell. Find flathead and channel catfish near downed logs, brush piles or creek mouths. Use live green sunfish under a large bobber to entice the biggest cats. Good freshwater drum in many stretches excite new anglers. Try nightcrawler rigs or small jigs. Immediately put drum on ice to preserve freshness for a tasty treat. Stephenson Park has restrooms, camping and boat ramp.

**HOWARD**—Excellent shore access at Lake Hendricks for bluegill, crappie, bass and catfish. Plenty of places for fish to hang around with rock piles, crappie condos, pallets, concrete culverts and cedar trees, most within casting distance of shore. Hard surface boat ramp, camping, restrooms with showers, playground, volleyball, beach and picnic shelters.

**HUMBOLDT**—West Fork Des Moines River. Great public access at the Rutland dam through Humboldt city parks down to Frank Gotch County Park (good shore fishing) for walleye, smallmouth and channel cats.

**IDA**—Stay in a lake cabin at Crawford Creek and enjoy a weekend of fishing for jumbo bluegill, large crappie and an occasional big perch (plus a solid largemouth population). Beach, hiking trails, picnic shelters and paddle boats.

**IOWA**—Catch Master Angler-size redear sunfish (10-inch-plus) at Lake Iowa north of Millersburg. Good bluegill, largemouth bass and crappie fishing, too. Trails meander around the lake by native prairies and woodlands or run along shoreline for easy access. Quiet, well-maintained county campground, beach and nature center with butterfly garden and bird observation blind.

**JACKSON**—Lots of public access to popular areas on Mississippi River pools 12 and 13 for spring walleye and sauger and summer bass, catfish, crappie, bluegill and drum. Easy boat access below dam at Bellevue—a pretty river town with blufftop camping and vistas at Bellevue State Park south of town. A small hook tipped with a nightcrawler and weighted with a sinker or split-shot will catch most species. Good shore access below the dam, near the DNR fisheries station, Pleasant Creek, Green Island and Spruce Creek County Park.

**JASPER**—Fantastic bluegill and crappie fishing await at the 28-acre lake inside the county-owned Jacob Krumm Nature Preserve. Cast for 9-inch bluegills and 9- to 11-inch crappies. A mowed trail rings the lake with easy access to a north end fishing pier. Relax with a snack in the picnic area.

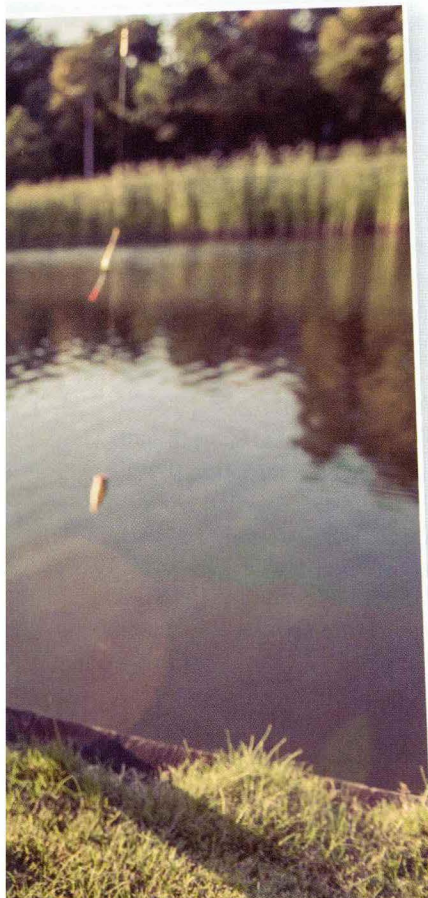
**JEFFERSON**—Catch lots of bluegills at Jefferson County Park Pond in Fairfield. Most run 6.5- to 7-inches. Bring tackle for many species—bass and channel catfishing is also good. Enjoy the campground, restroom, shelters and nature center.

**JOHNSON**—Hook family memories at Lake Macbride State Park catching bluegill, walleye, channel catfish and crappie. Easy access to limestone shores, numerous fishing jetties and accessible fishing pier. It's Iowa's only spot to catch prized Kentucky spotted bass. Pontoon, boat, canoe, paddle boat or kayak rentals.

**JONES**—Excellent river fishing at Wapsipinicon State Park south of Anamosa plus caves, golf and unforgettable views. Famous for walleye, smallmouth and channel cat, especially below the dam near the park entrance. Camping, hiking trails, lodge rental and playground.

**KEOKUK**—Belva Deer Park Pond, on the north side of the dam for Lake Belva Deer near Sigourney, has excellent shore access with a trail around it. Bass, bluegill, redear sunfish, and channel cats provide excellent fishing for kids, beginners and anglers who haven't cast a line for a while. Accessible fishing pier on east shore, restrooms and gravel boat ramp. Fish for large green sunfish along the rocks on the dam; use a chunk of worm fished under a bobber.

**KOSSUTH**—Put the family on spring crappie and bluegill over 9 inches at Smith Lake north of Algona. Bass have an 18-inch minimum, so large fish can be found. Spring crappie angling heats up after ice-out along the dam and piers. Find outdoor activities at Water's Edge Nature Center on the west shore. Campgrounds, fishing docks, playgrounds, boat ramp, jetty, hiking trail and a couple beaches.



# #MISSIONFISHIN

**LEE**—Hike to White Oak Lake in Shimek State Forest near Fort Madison. Catch 8- to 9-inch bluegill and 9- to 10-inch redears. Fish off the dam, or float a bellyboat to inaccessible shores. Drive to Shagbark Lake for 9-inch bluegill and a shore trail. Enjoy massive white pines throughout the forest. Campground and hiking, too.

**LINN**—Enjoy a quiet afternoon at Palisades-Kepler State Park fishing a scenic stretch of the Cedar River with limestone bluffs and huge sandbars. Good white bass, walleye and smallmouth bass fishing below the old lowhead dam. Shovelnose sturgeon and channel catfish action picks up late spring and summer. Chance to catch a paddlefish as they migrate up from the Mississippi River to spawn. A popular area for kayakers to start their journey down the river. Hiking trails, camping, cabins, rock climbing, playground, and boat ramp.

**LOUISA**—Usually uncrowded, Virginia Grove Recreation Area Pond has lots of hungry fish to keep newbies busy. Stocked with largemouth, bluegill and channel cats. Use chicken liver on a medium to large hook under a bobber for

catfish. Nightcrawlers are always good. The pond is isolated from the campground, restrooms, playground and hiking trails.

**LUCAS**—All anglers are successful at Red Haw State Park. Great bluegill fishing with 8.5- to 9-inch fish and redear up to 11 inches. Loads of quality largemouth and crappies, too. Easy bank fishing with several fishing jetties and many shore accesses. Shady campground overlooks the lake, picnic areas by water's edge and a multi-use trail. Enjoy the beauty of thousands of red bud trees in bloom in mid-to late April.

**LYON**—Quickly learn fishing basics at Lake Pahoja with fast-biting largemouth bass and lots of bluegill and channel cats. A 3.5-mile concrete trail inside the county park surrounds the lake. Rental cabins overlook the lake. Paddle boat, canoe and kayak rentals, playground and swimming beach. Just minutes away, the large rock rapids at the historic Klondike Dam location on the Big Sioux River provides good fishing.

**MADISON**—Stand atop a natural limestone ridge at historic Pammel State Park to watch the Middle River flow in four directions. Excellent channel and flathead catfishing, especially below the ford. Spend a night in a Yurt style cabin. Search for geocaches along the Backbone and Lodge trails.

**MAHASKA**—A bass angler's vivid dream, Hawthorn Lake south of Barnes City has huge populations up to 20 inches. Catch 25 fish a day. Abundant channel cat with some greater than 4 pounds. Crappie up to 9 inches and muskies up to 40 inches. Easy shore access with six fishing jetties. Extend your fishing day at nearby White Oak Conservation Area Lake near Rose Hill.

**MARION**—Explore the Whitebreast arm and the marina at Red Rock Reservoir in May and October for a chance at a master angler-sized crappie. Large white bass and hybrid striped bass fishing provide exciting action. Watch for gulls hovering over surfacing bait fish and toss silver or white lures into the frenzy. Fish below the dam in February through May.

**MARSHALL**—Find superb largemouth bass, bluegill and channel cat fishing at Green Castle Recreation Area. Several jetties for easy access. Great place to fish from a canoe or kayak as motorized boats are not allowed. Picnic areas, hiking trails and universally-accessible facilities.

**MILLS**—Plenty of bluegill, crappie and largemouth bass at Glenwood Park Pond keep anglers of all ages busy. Well stocked with channel catfish. Try also for black bullhead and green sunfish.





**MITCHELL**—Explore Iowa’s western-most trout stream, Turtle Creek, just north of St. Ansgar, and its two miles of public fishing. Stocked with rainbow and brookies weekly from April through October, it also boasts wild browns.

**MONONA**—Escape to Oldham Lake outside Soldier for peaceful fishing. Good numbers of 8- to 10-inch crappie and nice bluegill (7.5 to 8 inches). It’s best fished from a small boat, float tube, canoe or kayak.

**MONROE**—A fishing favorite, Lake Miami is one of the fastest improving lakes around with bluegill almost 9 inches. Outstanding crappie angling with fish over 12 inches and good largemouth bass fishing fish up to 16 inches. A short drive south, the upper and lower Albia Reservoir has amazing bluegill fishing with 10-inch fish, boat ramps and excellent shore access.

**MONTGOMERY**—Viking Lake State Park is activity loaded—lakeside camping, playground, beach, boat rental, restaurant and trails. Cast off jetties for 10-inch crappie in spring and bass and channel cat in summer.

**MUSCATINE**—Start the day in Muscatine at Discovery Park Pond, close to many attractions including the Muscatine Arboretum and Fuller Park. Excellent bluegill, largemouth bass and channel cat fishing and a chance to catch a trout stocked each spring and fall. Try a chunk of nightcrawler under a bobber for gills or chicken liver for cats. Catch bass with a variety of lures, from rubber worms to topwaters to Beetle Spins. Try flashy spinners for hungry recently-stocked trout; dough baits, corn or other scented baits work best after trout settle in. Stroll to Heron Hideaway Pond, with its renovated shoreline, located behind the Environmental Discovery Center. The center’s large aquarium features local fish species.

**O’BRIEN**—Big bluegill and nice bass keep kids busy at Mill Creek Lake near Paullina. Easy shore access and jetties. Family fun with camping, cabins, concessions, lodge and hiking and biking.

**OSCEOLA**—Ocheyedan Pond offers unique fishing. This small former surface mine has decent catfish. Good shoreline access, picnic area, beach and trails.

**PAGE**—Once a limestone quarry, Ross Area Pits County Park features deep, clear-blue water surrounded by trees. Catch bluegill exceeding 8.5 inches and 10- to 12-inch bass among sunken boats.

**PALO ALTO**—New populations of yellow bass at Five Island and Lost Island Lakes will keep you busy from boat or shore. Both have a diverse fishery with lots of walleye and catfish.

**PLYMOUTH**—Plymouth County’s newest recreation area, River’s Bend Wildlife Area, has good bluegill and largemouth bass fishing. Channel catfish are stocked every other year. Restrooms, fishing jetties, camping, picnicking and hiking.

**POCAHONTAS**—Have fun canoe or kayak fishing for perch and northerns at newly renovated Lizard Lake. Keep your eyes on abundant habitat for wildlife views.

**POLK**—Plan a quick get-away at Big Creek Lake State Park near Polk City. Here, late April/early May is best for crappie; walleye bite picks up in May and June. Hybrid striped bass provide excellent action in spring and summer. Use the numerous fishing jetties, a universally accessible fishing pier or visit Big Creek Marina to rent fishing boats, pontoons, water bikes, kayaks and more. Kids enjoy the large playground and cabanas near the popular beach.

**POTTAWATTAMIE**—Farm Creek/Young’s Pond, between Griswold and Carson, has quality size fish. Look for spawning bluegills and crappies along the dam in spring and largemouth bass and channel catfish in summer. Launch a small boat or kayak from the boat ramp in summer to fish to get to deep water and weed lines.

**POWESHIEK**—Catch lots of 7- to 9-inch crappie and 6- to 7-inch bluegills at Diamond Lake west of Montezuma. Excellent access with 11 jetties. Fish cleaning station, paved trails, playground and many picnic spots. Camp right along the water’s edge or in the newly renovated campground. Boaters must use their electric trolling motors only on the lake.

**RINGGOLD**—Cast for master angler-size channel catfish (30-inch-plus) at Fogle S.W.A. Lake, west of Diagonal. Catch largemouth bass up to 19 inches, bluegill up to 8.5 inches and 8-10 inch crappies along the brush piles and rock reef off of the boat ramp. Cabins, camping, playground and trails.

**SAC**—Keep kids busy catching lots of largemouth at Black Hawk Lake, renovated in 2012. Spring and early summer walleye fishing has been great. Cast off of Ice House Point (part of Black Hawk State Park) for buckets of 8-inch bluegill and 10-inch-plus crappies. Fish indoors or outside around lots of habitat from the new accessible fish house. About half of the shore is public, with restrooms near most public accesses. Campgrounds on the ends of the lake make a perfect family getaway. Great playground in Speaker Park, across the street from the lake, and a new splash pad. Miles of hiking trails within walking distance and a paved bike trail runs 30-plus miles to Carroll.

# #MISSIONFISHIN

**SCOTT**—Fish are well-fed and growing fast at Lost Grove Lake, six miles east of Eldridge. Catch 8-inch bluegill, muskies up to 34 inches, 14- to 15-inch walleye, bass (some above 15 inches) and crappies (many 10-plus inches). Easy access with accessible fishing trails and jetties. Platforms help anglers get to deeper water. Spawning beds and culvert piles are within casting distance. Wayward Pines Point is loaded with structure such as brush piles, tree reefs, stump fields, hinged trees, and terraced lake bottom. Popular spot for canoe and kayak anglers.

**SHELBY**—Bluegills are big and largemouth bass aplenty in Prairie Rose Lake near Harlan. Quickly fill a stringer at the gravel spawning beds and rock reefs early May to mid-June. Abundant 12- to 14-inch bass provide great catch-and-release fishing (15-inch minimum length limit).

**SIoux**—Find good numbers of bass, bluegill and cats, and improved shore access, at Big Sioux Recreation Area. Concrete ramp for easy access to the Big Sioux River.

**STORY**—Excellent shore access to Dakins Lake, north of Zearing, with two fishing jetties and dock with a fishing cleaning station. Catch many bluegill and bass. Stocked in 2014, bluegills now push 9 inches. Camp in the well-kept county park.

**TAMA**—Easily catch hungry largemouth bass at Union Grove Lake around the fishing jetties and rocky shore. Loaded with 6- to 7-inch bluegill and 8- to 10-inch largemouth bass. Renovated and restocked in 2016. Hiking trail, camping and cabins.

**TAYLOR**—Reserve a cabin or campsite at Lake of Three Fires State Park—the region’s most scenic—northeast of Bedford. Catch 9- to 11-inch crappie with some over 12 inches, largemouth over 20 inches and lots of 8- to 9-inch bluegills. Antique shops and golf course nearby.

**UNION**—Green Valley Lake, north of Creston, was voted one of Iowa’s Best Family-Friendly Places to Fish and Boat in 2017. Cast for 14- to 18-inch bass, 6- to 8-inch bluegill, 7- to 9-inch crappies, and 12- to 15-inch walleye—some top 20 inches. Rent a pine log cabin, camp, walk lakeside trails, swim, or enjoy a picnic.

**VAN BUREN**—Enjoy a fun weekend at Lake Sugema Recreation Area. Campground and playground, plus excellent largemouth bass, crappie and bluegill fishing. Cast for just about any species on the Des Moines River next to Lacey Keosaqua Park. Campground, playground and hiking trail. Stroll the rustic Villages of Van Buren County—a tourism destination.

**WAPELLO**—The Des Moines River features excellent channel and flathead catfishing, especially below the hydropower dam. Also great fishing for walleye, white bass and hybrid striped bass. Best pursued in spring, sturgeon put up a fight. Bounce a crawler and slip sinker off the bottom.

**WARREN**—Lake Ahquabi State Park is a family destination five miles south of Indianola. Fishing pier, numerous jetties and trails provide great access. Catch bluegill, redear sunfish and crappie late April through early June. Rent a canoe, kayak or stand-up paddleboard. Explore nearby Annett Nature Center or attend outdoor events at the Warren County Izaak Walton League clubhouse, across the park entrance. Hooper Lake, across the road to the south has 8- to 12-inch crappie.

**WASHINGTON**—Thomas Marr Lake, near Ainsworth, is perfect for new anglers. A paved trail loops around the lake. Lots of submerged brush within casting distance of shore. Two jetties provide access to deeper water. Stocked with largemouth bass, bluegill, redear sunfish, channel catfish, and crappie. A few anglers had great success last summer using topwater baits that mimicked water snakes. Venture to Marr Park Pond to cast off the covered pier, visit the nature center, or spend a night camping.

**WAYNE**—Excellent largemouth fishing at Humeston Reservoir will rekindle the joy of fishing for anyone who hasn’t dipped a line lately. Lots of bass up to 22 inches. Great crappie angling with fish up to 12 inches. Catch plenty of bluegill up to 9 inches. Nearby Seymour and Corydon reservoirs are also good for bluegills.

**WEBSTER**—Explore Brushy Creek’s abundant habitat. Fish areas where multiple habitats meet such as a weed line running into standing timber next to a rocky point. Home to very large walleye, monster cats, 40-inch-plus muskie and quality bluegill and crappie.

**WINNEBAGO**—Get away to quiet Lake Catherine, nestled in timber west of Forest City. Catch nice-sized bluegill in the spring and channel cat and largemouth as water warms. Two fishing jetties and an accessible pier provide easy access. Enjoy lake views from the cabin.

**WINNESHIEK**—Take someone new fishing to Lake Meyer. At 40 acres, it has plenty of water to pursue bluegill, crappie and largemouth. A concrete ramp provides easy boat use in addition to abundant shore access. Multiple fish attractors added during a recent drawdown provide lots of fishing spots. The park offers picnic areas, campground, playground and trails.



**WOODBURY**—Bacon Creek Lake, a fun family fishing destination on the east edge of Sioux City, features clear water, a paved loop trail, playground, restrooms, picnic area and dog park. Catch bluegills and crappie in shallow areas during the spawn (spring and early summer) then move to the deeper water in upper area of the lake. Cast for rainbow trout stocked each fall.

**WORTH**—Fabulous bluegill fishing at Silver Lake with lots

of 8- to 10-inch fish. Abundant 15- to 19-inch largemouth bass after renovations in 2013. Two jetties and a concrete ramp provide easy access. Spend the night at the county park on the north shore.

**WRIGHT**—Channel catfishing is excellent at Lake Cornelia off the north end jetty and north shore. Catch nice-size bluegill, 6- to 8-inch yellow bass and an occasional walleye. Hike the lake trails or spend a night at a lakeside camp. 🏕️

## PROTECT GROUND NESTING BIRDS, POLLINATORS WHILE SAVING TIME AND MONEY

Roadside ditches, while not optimal habitat, can be the only grassy areas around for ground-nesting birds. As spring progresses, birds such as eastern and western meadowlarks, Dickcissels, field and song sparrows, quail, gray partridge and pheasants, use these marginal areas to incubate eggs and rear young. The vegetation is also important to pollinators collecting nectar and for milkweed development critical for monarch caterpillars.

State law prohibits mowing roadside ditches between March 15 and July 15 to protect ground nesting birds and prevent nest destruction.

"It would help the cause if mowing was voluntarily delayed beyond the July 15 date to protect the late nesters and monarchs," says Todd Bogenschutz, DNR upland wildlife biologist. He says nearly 21 percent of pheasant nests are still active on July 15; that drops to 7 percent by August 1.

"It's not the best habitat, but we need to protect it for wildlife that depends on it," he says.

Mowing roadside vegetation on rights of way or medians of any primary highway, interstate or secondary road may be allowed prior to July 15 under the following exceptions:

- Within 200 yards of an inhabited dwelling.
- On right of way within one mile of corporate limits of a city.
- To promote native species of vegetation or other long-lived and adaptable vegetation.
- To establish control of damaging insect populations, noxious weeds and invasive plant species.
- For visibility and safety reasons.
- Within rest areas, weigh stations and wayside parks.
- Within 50 feet of a drainage tile or tile intake.
- For access to a mailbox or for other accessibility purposes.
- On right of way adjacent to agricultural demonstration or research plots.



Violations on county or secondary roads should be reported to the county engineer or roadside manager in the country where it occurred; violations on state highways or interstate highways should be directed to the Iowa Department of Transportation.

Mowing is allowed to resume after July 15.

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# CHICKADEE TAX CHECK-OFF DECLINES IN 2017



Last year, more than 7,500 Iowans helped boost wildlife conservation with donations to the Fish and Wildlife Fund on their state income tax form. But that's a decline of about 400 from 2016. Donors represent just 0.4 percent of total tax payers in Iowa.

"We are so thankful to all the people who choose to donate to wildlife conservation with their tax refunds," says Stephanie Shepherd, wildlife biologist with the DNR Wildlife Diversity Program. "Donations go directly to habitat development and restoration programs for some of Iowa's most vulnerable animal species."

The Fish and Wildlife Fund, nicknamed the "Chickadee Check-off," began in the 1980s for Iowans to donate to wildlife conservation on the Iowa state tax form.

Proceeds are one of the few means of support for the DNR's Wildlife Diversity Program, responsible for protecting more than 1,000 species of fish and wildlife. Donations improve wildlife habit,

restore native wildlife, provide opportunities for citizens to learn about our natural resources and much more.

Iowans donated roughly \$145,000 last spring when completing their 2017 tax forms, translating to an average gift of \$19.25 per donor. The number of donors has remained

steady or decreased but thanks to more generous giving, the amount donated has stayed level or even increased.

"The chickadee check-off is an inconspicuous line that is easy to pass over or forget, and many tax preparers may not remember to ask whether a client wants to donate," she says. "Ask your tax preparer, or make a point of looking for it whether on paper or

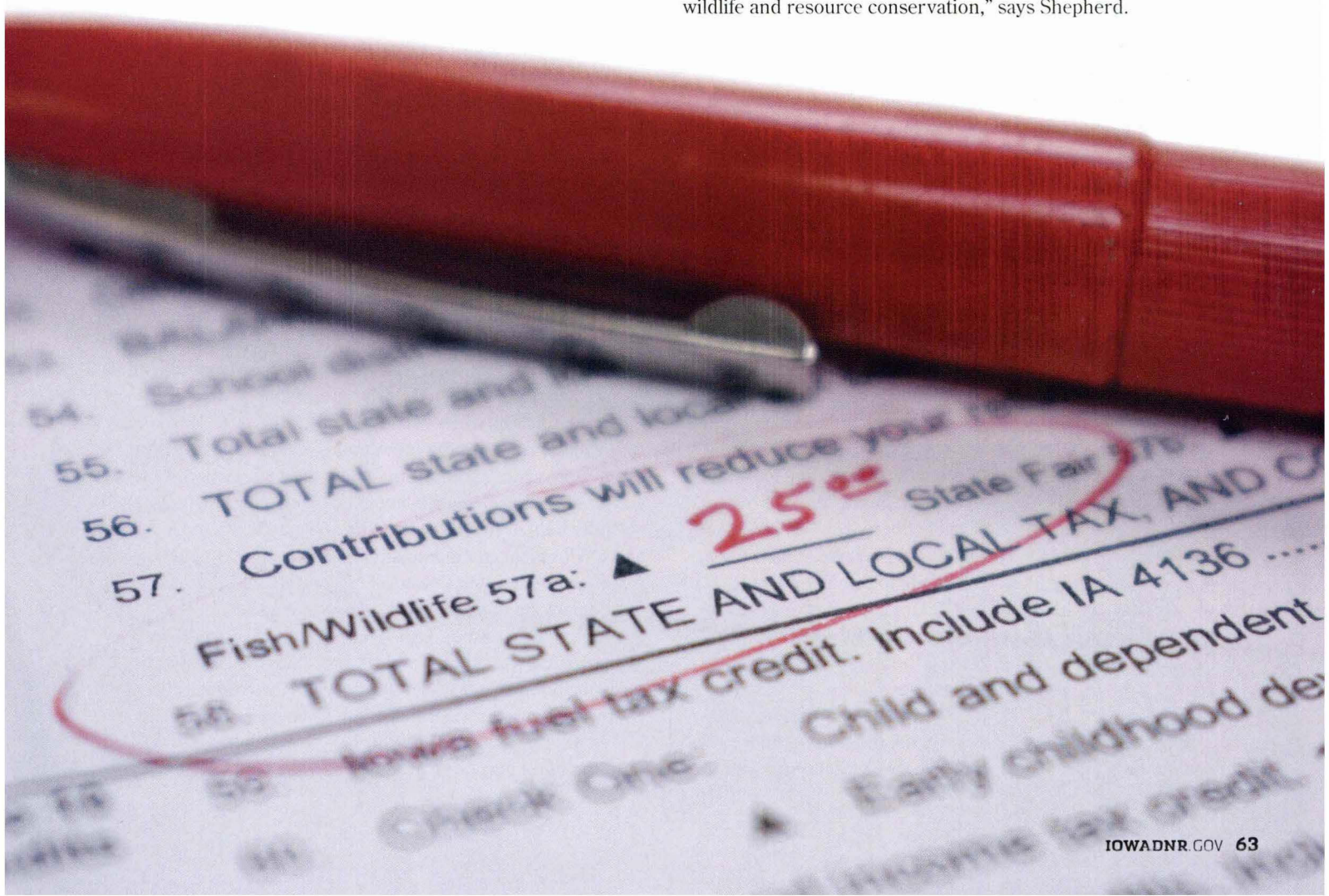
electronic filing."

Donating is easy: simply write the amount to donate next to the Fish and Wildlife Check-Off, (line 57 on Form 1040), and the sum is either automatically deducted from the refund or added to the amount owed. With charitable giving, the amount is deductible from next year's taxes.

"If taxpayers donated just \$1, it would mean \$1.5 million for wildlife and resource conservation," says Shepherd.

"If every Iowa taxpayer donated just \$1, it would mean \$1.5 million for wildlife and natural resource conservation."

Stephanie Shepherd,  
Wildlife Diversity Program





## THE MYSTERIOUS CASE OF CRESTON WATER WORKS AND THE BROKEN FIBERS

“Thad and I have to go. We have to get to Creston,” says DNR Environmental Specialist Senior Keith Wilken one Friday morning in late May 2018. With that tone and choice of words, my only response is, “do you need anything from me?” because when staff say there’s a problem, I (try to) get out of the way, let them work their magic and help when needed. Little did anyone know, that day led to a water advisory lasting approximately 16 days, affecting nine counties and approximately 40,000 citizens in Southwest Iowa.

Once arriving on-site, Wilken and fellow environmental specialist Thad Nanfito, sensed something was not quite right with Creston’s water treatment system. Specifically, after reviewing its required daily testing, the system was not in compliance and the membrane filtration system was not functioning properly. But, why? Anxiously, the water supply operators wanted to get back online as quickly as possible.

A part of Creston’s water treatment is the use of membrane filtration. Like oversized blocks of woven noodles, membrane fibers filter partially treated water as it flows through the facility, one step of a multi-step journey, before finished water is piped to homes and businesses. But, on this day, SNAP! SNAP! PING! PING! The membrane fibers were breaking at a rate faster than Creston staff could fix. Because of membrane failure, the water was deemed not safe to drink and a boil advisory was decided as the best course of action collectively amongst the city, Creston Water Works, Southern Iowa Rural Water (SIRWA) and DNR staff until the mystery was solved.

So began the study of the membranes at a microscopic level. All hands on-deck: DNR staff, Creston and SIRWA water supply operators, respectively. Even the membrane filter manufacturer, SUEZ-Water Technologies & Solutions, flew its

engineers to Creston to assist. What did they find? Little cuts and scrapes strewn on membrane fibers; and, just enough cuts and scrapes to compromise their integrity. But, what in the world would make such a mark?

While broken membranes were analyzed, replacement membranes were ordered from the SUEZ plant in Hungary. Unlike the ease of replacing a burnt-out light bulb, membranes cannot be kept in the broom closet and pulled out when a replacement is needed. With an anticipated life expectancy of 10 years, costing thousands of dollars apiece and requiring to be kept moist, a membrane is ordered and built on an as-needed basis.

Fortunately, and unrelated to the situation in Iowa, another water treatment facility in Wisconsin had previously ordered similar membranes. Midwest ties run deep because when this connection was made, the Wisconsin facility sacrificed its membrane order to help the City of Creston.

Unfortunately, while enroute from Hungary to Wisconsin to Iowa, the replacement membranes were stuck in customs at the U.S.-Canadian border due to standard inspection protocols. Just another hurdle in this mystery to overcome. Ultimately, with the help of Iowa Department of Homeland Security, EPA, and DNR management explaining the need and importance of expedited delivery to Creston, the replacement membranes were finally on their way to the desired destination.

After working around the clock—nights and weekends—to analyze what was causing fiber breakages, wrestling with transportation issues, fielding questions from the public, and ensuring the water was safe to drink, the cause was finally identified! Something SUEZ staff confirmed with only ONE other incident occurring at a water supply facility in Utah.

Because of favorable weather conditions in early spring and summer of 2018, the caddisfly population flourished at Three Mile Lake and without a mechanism to filter them out, SCRAPE, SCRAPE! MUNCH, MUNCH! The caddisfly cut into the membrane fibers with their hook-shaped teeth, assuredly to build a cocoon, which lead to damaging all of the facility's membranes, leaving the water treatment facility out of compliance and, more importantly, unable to deliver drinkable water.

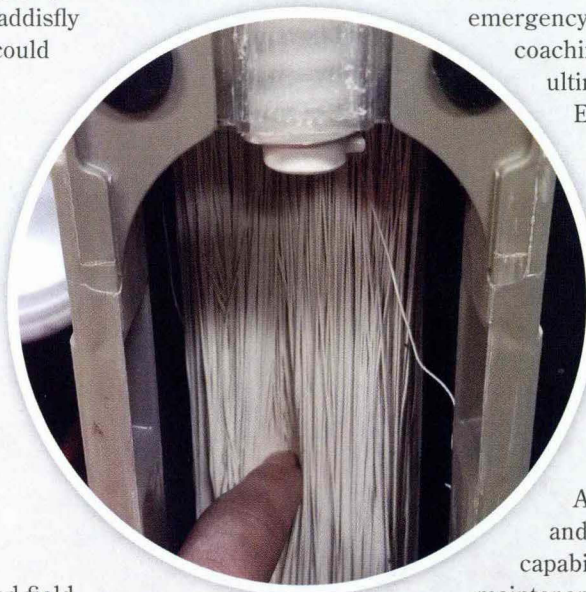
Once realized, water supply operators took measures to eliminate the caddisfly larvae so the boil advisory could be lifted. While DNR staff recognize a boil or bottled water advisory can be a huge inconvenience to residences and businesses, including restaurants and hospitals; one of DNR's goal, however, is to protect the environment and human health.

The Water Quality Bureau, within the Environmental Services Division, is home to engineers, permit writers, scientists, administrative and field staff; many of whom work with local tap water providers to ensure water sourced from lakes, rivers or groundwater meet standards set within the Safe Water Drinking Act. DNR engineers ensure facilities are built to acceptable construction standards. DNR permit writers set forth parameters for treating and testing water. Administrative staff process required monthly operation reports (MORs). Scientists work with labs and communicate with EPA officials. Last, DNR field office staff ensure facility

compliance by reviewing MORs and permit requirements and inspecting a facility. If a facility struggles to comply with its permit or experiences an emergency, as Creston did, field staff assist, coaching it back into compliance. All with the ultimate goal of delivering safe drinking water. Every day.

After the water advisory was lifted and Creston operations normalized, the DNR's Area-Wide Optimization Program (AWOP) Team conducted a Comprehensive Performance Evaluation (CPE) at the Creston water treatment facility. The AWOP is a unique, multi-state partnership helping improve water treatment processes and, if possible, optimize a facility's performance; and, a CPE is one of many tools in the AWOP toolbox used to thoroughly review and analyze a facility's performance-based capabilities and its administrative, operation, and maintenance components. The desired outcome after this highly technical and thorough evaluation—any potential factors or issues adversely impacting a facility's ability to achieve permit compliance and optimal performance can be remedied.

Moving forward, the CPE Team tasked the City, Creston Water Works, and SIRWA officials to address limiting factors identified during the AWOP CPE and work together to ensure safe drinking water to its customers in the most efficient manner possible. 🐞



## Eastern Shooting Star

(*Dodecatheon meadia*) has many common names including pride of Ohio, birdbills, American cowslip, roosterheads and Indian chief. The species is named after Dr. Richard Mead, an English doctor to royalty in the 18th Century who advocated the use of cowpox as a way to vaccinate against smallpox. He supported botanical exploration and this plant was named after him.

### FLOWERS

Flowers bloom from late April to early June depending on how far north they are in Iowa and springtime weather variations. Petals are united at the base and range from white, lavender, light purple to red-purple or pink. Buds start out vertical, but arch down by the time the flower opens. Petals curve back from the stamens and ovary, reminding some people of a shooting star.

Flowers are on a scape—a plant stem that lacks leaves. A plant can have a few flowers to as many as 125, but 12 is average in Iowa. The scape can be taller than 2 feet, but is often less than 18 inches.

### BUZZING FLOWERS

Flowers do not produce nectar and are pollinated by bees which hang upside down from the flower and buzz. The vibrations shake pollen out in little clouds from the anthers onto the belly of the bee. The bee moves pollen by using its legs to place it in yellow pollen baskets on its hind legs.

### SEEDS

The seed capsule has valves that open at the top to scatter seeds if blown by the wind or bumped by animals. The seeds require cold weather over the winters to become viable. They germinate the following spring and take up to five years to reach blooming size in the wild.

### LEAVES

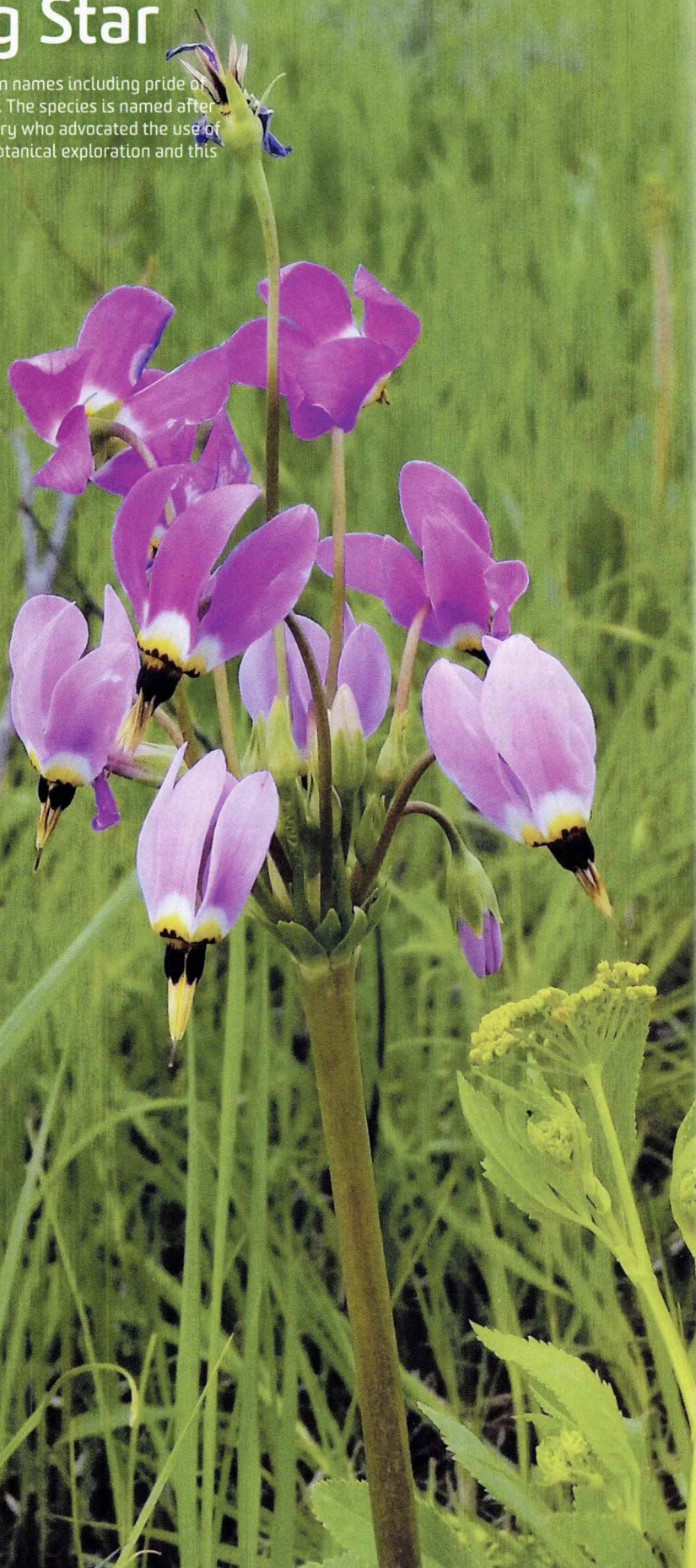
Leaves emerge in the spring, then die back by mid-summer—an adaptation to avoid dry conditions and competition for light as the canopy closes in a forest or taller plants overtop them in a prairie setting later in the season.

### ROOTS

Long, white, string-like roots are attached to a caudex—a compact stem below the soil surface. The roots can contract to pull the caudex deeper into the ground to place it in moister soil as the growing season progresses.

### DISTRIBUTION AND HABITAT

Shooting star is infrequent in Iowa and found primarily in the eastern half of the state in prairies and sometimes deciduous forest. A spring display of shooting star is an impressive sight.





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