

MAY/JUNE 1998

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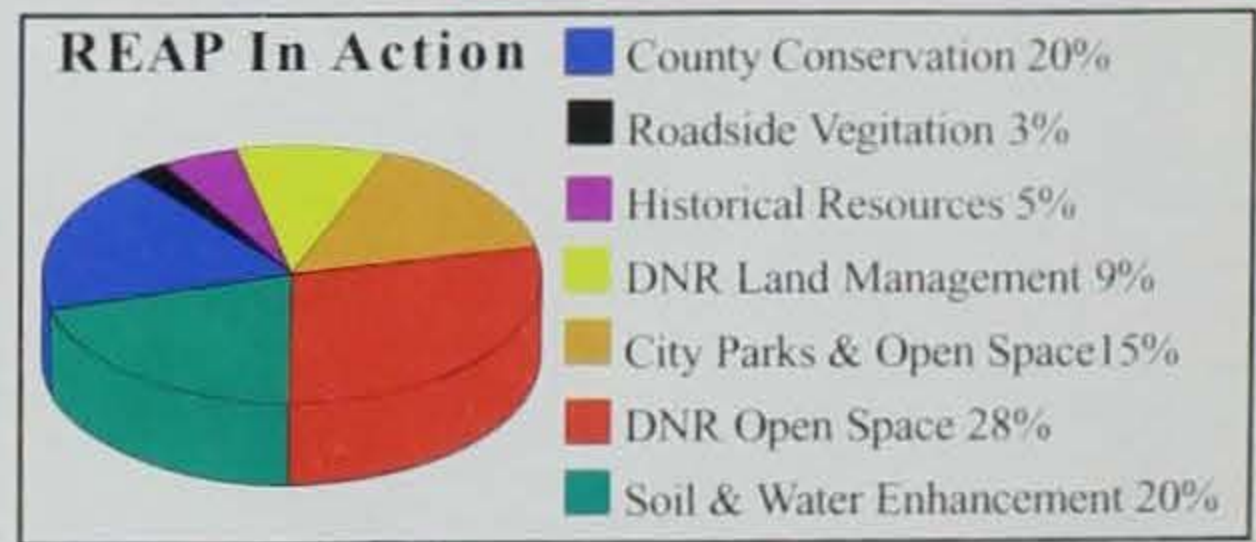
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May/June 1998
Volume 57, Number 3

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COVERS

FRONT — Adult female peregrine by Lowell Washburn
BACK — Stream fishing by Ken Formanek



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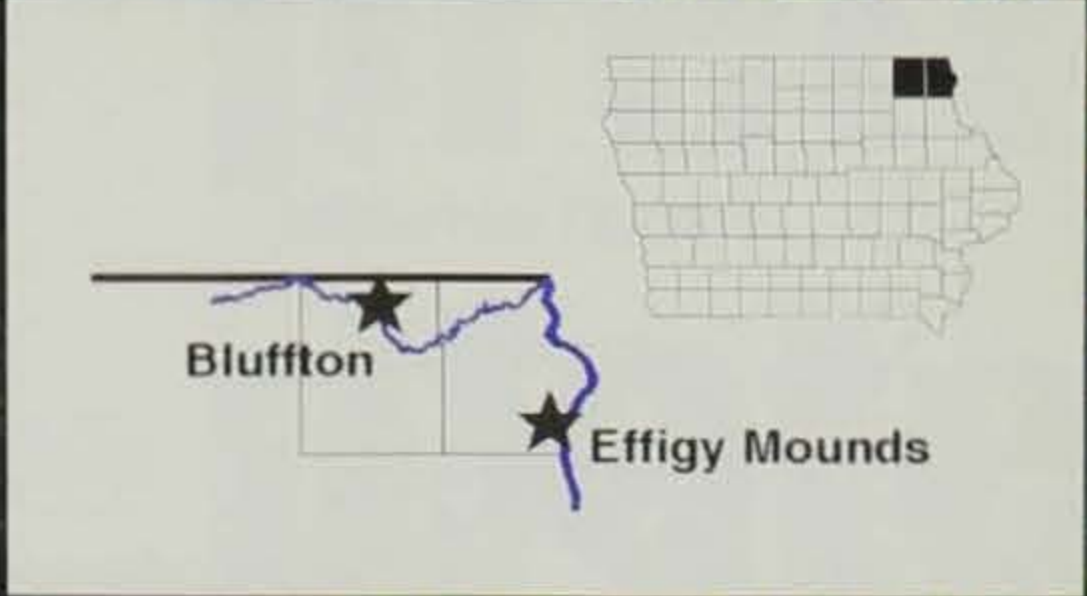
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When it comes to love, ocean liners or business ventures — the words “on the rocks” carry an extremely negative connotation. But when it comes to restoring an endangered bird species, one Iowan assumes a completely different viewpoint. His all-consuming desire is to restore a vanished population of cliff-nesting peregrine falcons. He will settle for nothing less than . . .

Hawks on the Rocks

Article and photos by Lowell Washburn

For countless centuries, the steep, rugged cliff faces of the upper Mississippi River were home to one of North America's greatest densities of wild peregrine falcons. Each spring the falcons would arrive “up river.” Within hours, the rock walls would reverberate with the distinctive wailing cries of the annual courtship ritual.

Until witnessed firsthand, the reckless, high-speed displays of courting peregrines cannot be fully appreciated. The species is nothing short of the planet's most dynamic bird form.

Ancient Mississippi River artifacts bear witness to the fact Iowa's earliest human inhabitants held the falcon in highest regard. When European explorers arrived on the scene, much later, they too were captivated by the dashing, aerial prowess of the peregrine.

Early development appears to have had little impact on breeding falcons. But as the insidious, post-World War II use of DDT began to exact its toll, peregrine populations plummeted. By the early 1960s, the species had all but



The site of the 1997 peregrine release -- a 150-foot high, mile-long cliff on the Upper Iowa River, north of Bluffton. Bob Anderson places a baby peregrine in the hack box at the Upper Iowa River release site. This is the first falcon released in a natural cliff setting.

disappeared from eastern North America.

In the summer of 1964, a single pair of falcons returned to their historic cliff eyrie near Lansing, Iowa. The last of a dying race, they were the only falcons to be documented anywhere along the Mississippi River that year. In addition to being the last known peregrines in the mid-continent, it now appears as if they may have also been the last survivors in the entire eastern United States. When the pair failed to return to Lansing in 1965, not a single wild peregrine could be found anywhere from the Mississippi to the Atlantic. The eradication of America's eastern population was complete. The peregrine falcon had vanished.

More than three decades later, the historic eyries remain silent and unclaimed. There are no wailing sounds of courtship, no spectacular

nuptial flights, no hunting falcons.

But one Iowan intends to change all that. His name is Bob Anderson.

Over the next three years, Anderson intends to recharge the cliff ledges of the upper Mississippi by releasing at least 60 captive-bred, peregrine falcon fledglings. If the plan is successful, these falcons will provide the foundation for a new population of free-flying breeders. Never before has such a large-scale effort been attempted. For Anderson, it is the culmination of more than 25 years of working to return falcons to the wild.

Anderson's recovery work began in the 1970s when he established a captive breeding facility in central Minnesota. The endeavor quickly became the Raptor Resource Project, a venture supplying captive-bred falcons for urban releases across much of the U.S.

"When the peregrine recovery began, everyone focused on the urban sites because of the absence of predators there," says Anderson. "There is no question that the success of those efforts has been extremely gratifying. But at the same time we also hoped that once the urban population was established that we'd see a natural cross over to the cliffs. We've had an urban population for 12 years now, and that's just not happening. The urban birds are clearly imprinted to urban habitats and it's become obvious that the only way to get peregrines back to where they belong is to release them there."

But while most experts viewed the various obstacles surrounding cliff releases as "insurmountable," Anderson never lost hope. He had begun toying with the concept almost as soon as he hatched his first captive-produced egg back in the 1970s. During the

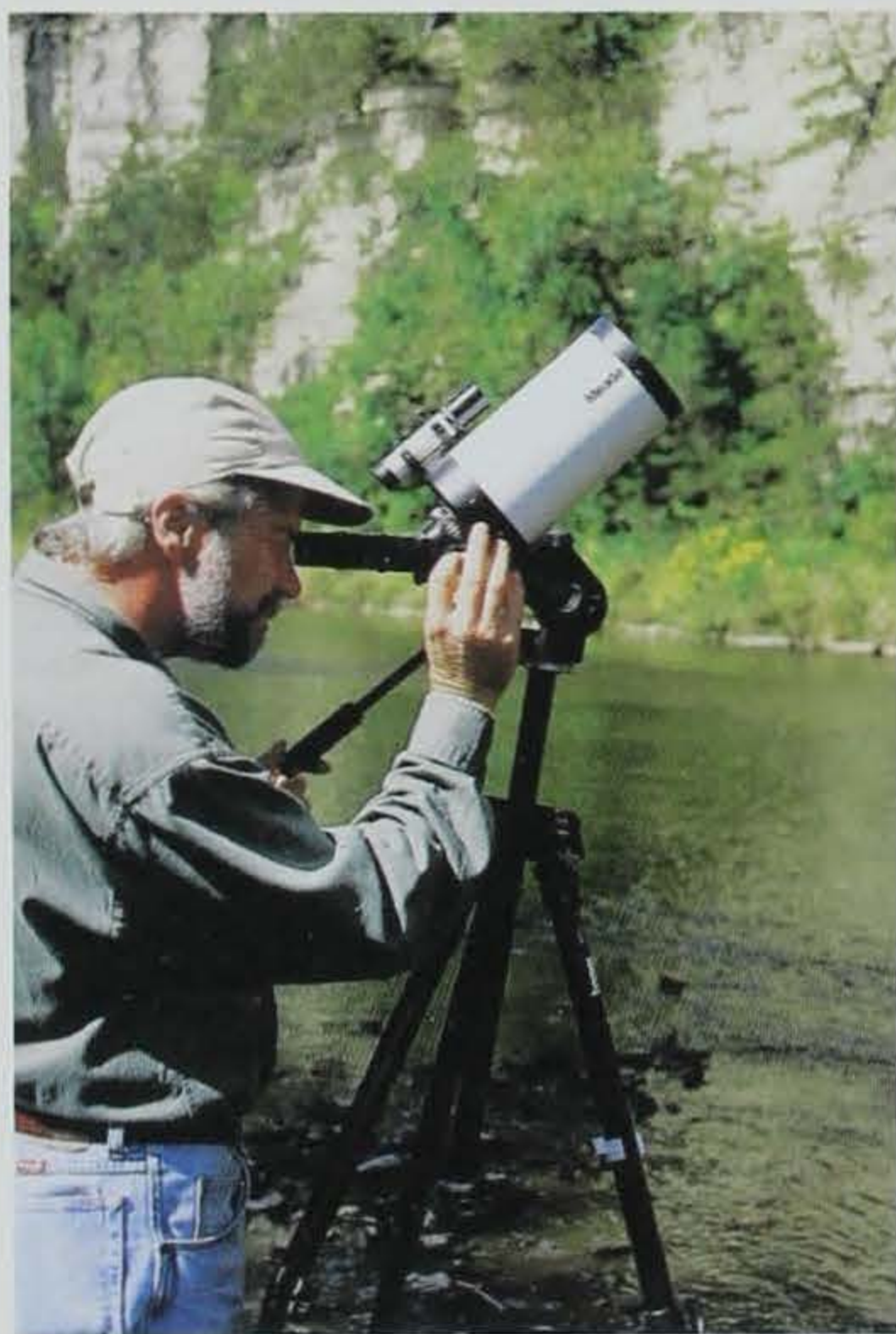
course of the decades, the dream had grown from passion to obsession. It is, in fact, what landed him in Iowa.

"I used to save up until I had

enough money to rent a helicopter, and then I'd fly up and down the river looking at cliffs," says Anderson. "I guess I was just searching for any hidden clue that would give me an idea on how to bring the birds back. One day, we had to land in Decorah for fuel," he adds. "I happened to mention that I was looking at cliffs, and one of the guys at the airport told me there were some really good ones just a few miles away along the Upper Iowa River near Bluffton. I took a look, and the second I saw those rocks I knew they would work. Two days later I was back in Iowa looking for a home."

Ironically, Anderson found an acreage for sale just one mile from the Upper Iowa cliffs. He struck a deal, and in November 1996 Anderson relocated his six breeding pairs of peregrine falcons to the Raptor Resource Project's new home near Bluffton. He was now closer than he'd ever been to fulfilling his dream of releasing falcons onto natural, cliff habitat.

But enticing peregrine falcons to breed in captivity is, at best, an iffy proposition. Moving the birds to a new location didn't help, and 1997 production proved dismal. Most of the young falcons produced were obligated through prior commitments to ongoing urban release sites. Nevertheless, Anderson managed to retain four fledglings for release on the Upper Iowa. Although the number of birds was limited, the initial experiment proved to be an indispensable primer for releasing peregrines in the cliff environment.



Bob Anderson monitors falcons at the Upper Iowa release site. Immature peregrine on the river cliff (above right). The natural setting presents new survival challenges for the birds.



The actual release took place just north of Bluffton in an incredibly beautiful setting, with a cliff ranging from 100 to 150 feet in height. That cliff runs for a full mile along the Upper Iowa River. "When compared to an urban release site, that rock is the equivalent of a 14- or 15-story building ten blocks long," says Anderson.

Once the site had been selected, the next order of business was to determine a safe location for installing the wooden hack box, which would serve as a temporary home during the falcons' first days on the cliff. The choice, nearly as incredible as the cliff itself, was a thin spire of chimney rock towering almost 150 feet above the river. In addition to providing high visibility for newly released birds, the chimney was virtually inaccessible to land-based predators such as mink and raccoons.

The actual installation of the hack box was not a job for the timid. A ladder was extended horizontally between the cliff face and the chimney. The bulky, four-foot-square structure was then slid across the "bridge."

Finally, in late July, the most precious cargo of all crossed the bridge — four baby peregrine falcon chicks. For the first few days, the falcons (two males and two females) were confined to the hack box and maintained on a diet of fresh quail. The moment of truth soon arrived, and the hack box's barred front was removed. The falcons were free.

At first, the birds simply fanned their wings at the edge of the box. Then, one of the females gingerly stepped out onto the rim of the chimney. For the first time in more than 30 years, the foot of a fledgling peregrine gripped the surface of an Iowa cliff. The release had begun.

"From almost the instant the birds ventured from the box, we began to observe some very amazing behavior," says Anderson. "One of the most interesting things was that, even before they were ready to fly, the birds began to pick their way down the cliff face. They ended up several yards below the top, often on what appeared to be the most crumbly and dangerous outcroppings that the wall had to offer. Equally interesting was that at sunset the birds would turn their streaked breasts outward, snuggle into a crack, and become completely invisible until dawn."

"We had never seen the urban birds display any of these behaviors," explains Anderson. "Instead, they always seemed to stay 'on top' of everything. Suddenly it became obvious. Nothing has changed. This is where the peregrines belong. When on a cliff, even the babies know which

spot is safest from predators. These birds are still hard-wired for life on the rocks."

Within a couple days of release, all four falcons had successfully tested their wings. Once again, the stark contrast between urban and cliff release sites became apparent. In spite of dawn-to-dusk surveillance, observations proved exceedingly difficult once the birds had dispersed along the mile-long cliff face. Young peregrines are cryptically marked with dark brown and buff plumage. Once the falcons were

on the cliff, a rich network of nooks, crannies and shadows absorbed the birds like a sponge. There were no window ledges, roof parapets or antennas here. Unless a loafing bird happened to stretch a wing or shift position, it just wasn't seen — period.

As the release progressed, the falcons continued to return to the hack box for handouts of fresh quail — but they did so with noticeably less frequency. The birds were catching at least a portion of their own food. After just eight days on the wing, the oldest

production will go to the cliffs. During June and July, he intends to release 20 young peregrines on the Mississippi River at Hanging Rock, part of Effigy Mounds National Monument near McGregor.

Hanging Rock is a highly visible, vertical outcropping that towers 450 feet above the Mississippi. The point is visible from much of Iowa and Wisconsin, and is within "spitting distance" of the Lansing eyrie where those last falcons nested during the 1960s. According to Effigy Mounds' Resource Management Specialist, Rodney Rovang, the area represents the "ideal site" for peregrine recovery.

"To me, it looks like Hanging Rock is a perfect place to begin the river work, and we are extremely pleased that Bob has chosen to release birds here," says Rovang. "The rock is a sheer, cliff-face outcropping that appears to be predator proof. In addition to that, Hanging Rock is as wild a looking site as there is on the Mississippi."

Accessing the point requires a full, 3-1/2 mile hike from the Effigy Mounds Visitor's Center. And although most visitors never hike that far, a fair number do.

"This summer we plan to restrict public access to Hanging Rock while the peregrines are being released," says Rovang. "What I mean by 'restrict' is that we'll erect barriers that will keep people back just far enough so that they can't look over the cliff and spook the birds. However, on an adjacent overlook there'll be a place where visitors can observe the falcons with binoculars or spotting scopes. This should provide a tremendous viewing opportunity."

In order to accommodate the large number of birds, two hack boxes (this year they have been made to resemble natural rock) will be used simultaneously. Flexibility is crucial, and alternate release sites may need to be developed as surviving peregrines begin returning to the river to establish breeding territories.



Eastern National

Hanging Rock at Effigy Mounds National Monument is the site of the next peregrine release. This Mississippi bluff is 450 feet above the river and within "spitting distance" of the historic Lansing eyrie.

female was observed catching a pigeon. Within two weeks on the wing, the falcons were entirely self sufficient. A few days after that, two falcons were seen soaring together above the cliffs. It was the season's last sighting. Iowa's first cliff release had become history.

This summer, all of Anderson's

"I don't think that there is any question that returning birds to the cliffs will be the most difficult aspect of the peregrine recovery," says Anderson. "We enjoyed very high success during the urban releases, but now we're going to get back into the real world. Out here [on the cliffs] there are raccoons, mink, owls and a host of other predators. The falcons will have to learn to contend with those things just as they did historically. Right now, we're releasing what are essentially unprotected fledglings. But we need to remain focused on our central objective, which is to establish pairs of breeding adults that will be able to deal with predators in a much more aggressive fashion."

"I think everyone realizes that we can't hope to achieve our ultimate goal without some initial losses," adds Anderson. "That's just a reality."

The cost for Iowa's three-year cliff release program is estimated at \$100,000. The single most expensive item are the birds themselves. Captive or not, peregrine falcons are still wildlife, offering no benefit of domestic genes. It takes three years of care before a falcon is ready to go into the project, and half of those will never breed. Most of the females that do lay eggs require artificial insemination. Each egg is placed into a sophisticated incubator where its daily progress is charted. To avoid imprinting, any chicks produced are returned to their parents for rearing. At approximately 32 days of age, the half-feathered nestlings are taken to their release site. Producing the 60 young falcons needed for Iowa's cliff project will run in the vicinity of \$90,000.

Unfortunately, no state or federal wildlife funds are currently available to assist the Iowa cliff work. And aside from what friends can afford to donate, the entire financial burden will be absorbed by Anderson.

Although it might seem highly irregular for a private citizen to tackle such a massive project single-handedly, Frank Taylor, Curator of Birds for the University of Minnesota's Raptor Center, isn't the least bit surprised.

"During the 1980s, Bob was instrumental in the urban peregrine

recovery here in Minnesota," says Taylor. "Not only did he give up an 18-year career at the 3M Corporation, but he also invested, and lost, virtually everything he had — his personal savings, his stocks, his IRAs. Everything went to the falcons. A lot of us thought he'd burn himself out on this thing, but he just kept going," Taylor adds.

"Most people recognize Bob as peregrine breeder, but there's been a lot more to his work," says Taylor. "Bob has logged in thousands of miles to install and maintain peregrine nest-boxes on skyscrapers and power plant smoke stacks across the Midwest. He once traveled 1,500 miles, round trip, to erect a nest box in Detroit because a pair of falcons showed up and there was no one else to do the work. Meanwhile, he was averaging two to three educational programs per week, informing the public on the plight of the peregrine."

"I could go on," says Taylor, "but the point is that the guy's energy is limitless. He has played a very crucial role in the urban peregrine recovery, and I can't think of anyone better qualified to attempt the cliff work along the Upper Mississippi."

After assisting at the project last summer, one volunteer relates a story about looking for some lunch in Anderson's refrigerator. "What we found was a half quart of milk, half a loaf of bread and a hunk of cheese. I got to thinking about it later," says the volunteer, "and I remembered that it was taking more than 20 fresh quail a day to feed the falcons. That's when it hit me — the birds were eating better than their caretaker. Any way you look at it, that's dedication."

"Here at Effigy Mounds, our primary job is to preserve ancient Indian burial mounds and the natural lands where they exist," says Rovang. "This [peregrine cliff release] work developed very quickly, and because of the current funding situation, its success is solely dependent upon Bob's commitment. It is very unique to have a private individual attempt something like this."

"In my opinion, this project goes well beyond returning an endangered bird to the cliffs," Rovang adds. "The people who built these mounds are gone. So are the peregrines. Some of these mounds are built in the shape of a falcon, and they were built where they are for a reason. They are also near the river for a reason. This project is special in that it actually has the potential to replace a missing piece of the cultural landscape puzzle," says Rovang. "This is a connection that doesn't get made very often. To me, that's pretty exciting."

It has not been easy for Anderson, and there are times when he gets discouraged. "But then I think of all those other [urban] falcons that were successful earlier in the recovery," says Anderson. "When I see those free-flying peregrines coming back to nest, I guess my batteries just sort of get all recharged and I'm ready to go again."

"But without continual [nest box] maintenance," continues Anderson, "the urban populations will not survive, and we cannot afford to depend solely on them. The cliff work is a final and required step in peregrine restoration. If what happens here at Effigy Mounds is successful, it will not only impact Iowa but could ultimately have an effect on populations in Wisconsin and Minnesota as well."

"Peregrines started out on the cliffs — and this is where they should end up. People took them away, and people can put them back," Anderson adds. "I've made a decision to do this. It's why I came to Iowa. The peregrines have come this far. I'm not about to quit now."

For more information about Iowa's peregrine falcon recovery write: Bob Anderson, Raptor Resource Project, 2580 310th St., Ridgeway, Iowa 52165

The Raptor Resource Projects' e-mail address is rrp@salamander.com or visit the project web page at: <http://www.salamander.com/~rrp>.

Lowell Washburn is chair of the Iowa Peregrine Falcon Recovery Committee and an information specialist for the department at Clear Lake.

JUMBO

A Runaway Artesian Well

by Robert D. Libra

Since the settlement of Iowa began in earnest over 150 years ago, tens of thousands of water wells have been drilled, bored, or dug. Drilling and construction of wells is at times a difficult and frustrating endeavor, as unseen conditions lying hundreds of feet below the land surface must be anticipated and dealt with. While the drilling of some water wells might be described as a "routine" operation, the drilling of others is decidedly not.

In the 1880s, a number of wells drilled north of Belle Plaine in Benton County encountered a sand and gravel aquifer at a depth of about 300 feet. The aquifer has since been shown to fill extensive parts of an ancient river valley, and to be overlain by relatively impervious glacial tills. These tills act hydrologically to seal the aquifer and create strong artesian pressures. The water levels in the wells north of Belle Plaine, which were located in the uplands above the Iowa River valley, rose to within 25 to 50 feet of the surface, depending on the surface elevation. These wells yielded large volumes of water that although somewhat salty, were acceptable to livestock.

In 1886, a well for a creamery was drilled at Belle Plaine in the Iowa River valley; this well also tapped the sand and gravel aquifer. The elevation of this well was about 100 feet lower than the previously drilled livestock wells, resulting in a strong flow of water from the well.



At the well head, the artesian pressure level of the aquifer was sufficient to lift the water 67 feet above the surface. Several other wells were drilled into the

aquifer at Belle Plaine, and while the strong flows complicated construction of the wells, they were completed without incident.

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In August 1886, the city of Belle Plaine contracted to have a well drilled for fire protection. This well soon became widely known by the name "Jumbo." In the words of geologist W.H. Norton (1896): "The notoriety of Jumbo was strictly that of a member of the criminal class, and began with his resistance to control, and lasted only until his final imprisonment. The beginning of the trouble lay in the fact that the driller attempted to use the force of the flow in reaming out the two-inch bore, which he had put down for want of a larger drill, to three inches, the dimension specified in the contract. This task the water speedily accomplished in the unindurated clays and sands, but not stopping there went on and soon enlarged the bore to over three feet in diameter." H.R. Mosnat (1898) notes, "When the driller saw the result of his inexcusable carelessness, which result he ought to have foreseen, he hastily decamped and was not heard of until the popular excitement had subsided."

The flow from Jumbo roiled out of the three-foot bore in a fountain that stood five feet high. Estimates of the initial, maximum flows varied from 30,000 to 50,000 gallons per minute. The flow diminished rapidly, and two weeks later was calculated to be about 2,000 gallons per minute, by Professor T.C. Chamberlain from the University of Chicago. Along with the water came sand – an estimated 500 to 1,000 carloads of sand. "The quantity was certainly so great that only with the greatest effort could the ditches be kept open to carry off the water" (Mosnat, 1898). Chunks of fossil wood and stones weighing over two pounds were also hurled from the well.

Norton (1896) describes the effort to stem the flow, which ultimately took over 13 months: "During this time the well, 193 feet deep, devoured, as the local historian recounts, 163 feet

of 18-inch pipe, 77 feet of 16-inch pipe, 60 feet of 5-inch pipe, an iron cone 3 feet in diameter and 24 feet long, 40 carloads of stone, 130 barrels of cement, and an inestimable amount of sand and clay."

While Jumbo was obviously an unusual occurrence, Mosnat (1898) notes, "The accounts of the well given in newspapers were in many instances most sensational, their extravagance increasing according to the square of the distance from Belle Plaine. European papers published accounts of the water spouting hundreds of feet into the air, with a roar that could be heard for miles and even pictured people being rescued by boats from the third and fourth stories of houses!" Other reports connected Jumbo's unleashing with the great Charleston earthquake, which occurred four days later, and to renewed geyser activity in Yellowstone Park. This prompted Professor Chamberlain to comment "The only similitude of seismic disturbance, as the cause of this well, was in the moral faculties of said reporter."

Many other wells were drilled into

the buried sand and gravel within the Iowa River valley between Belle Plaine and Marengo, and were often allowed to flow relatively unchecked. The great artesian pressures have therefore been decreased over parts – but not all – of the area. As the Belle Plaine weekly newspaper noted in 1886, "Beneath this city lurks a monster discovered 100 years ago." The Geological Survey's research driller, Darwin Evans, found the aquifer was still a force to be reckoned with when he drilled a test hole into it in 1984. While his efforts to control and plug the hole took a few hours, as opposed to 13 months, the situation prompted him to comment: "We were about five minutes away from making 'Good Morning America.'" Meanwhile, in Belle Plaine, a bronze plaque attached to a granite boulder still marks the spot where the runaway artesian Jumbo entered the history books.

Robert D. Libra is a geologist for the department in Iowa City.

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Photos of "Jumbo" courtesy The University of Iowa Calvin Collection.

Following the soil-bank, set-aside days of the late 1950s, marginal woodlands were cleared to become improved pasturelands. Coyotes found the big "doze-piles" of trees ideal for denning sites and have rebounded on their own.



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Reweaving the Web

"Did you hear the coyotes howling last night?" exclaimed our neighbor. "Sounded like quite a 'convention' of them!" It's fairly common to hear and see coyotes today, but when this conversation occurred during soil-bank, grassland set-aside days in the late 1950s, a new critter was becoming established in western and southern Iowa. Similar to the adage "if you build it they will come" — provide habitat and wildlife will respond. As marginal woodlands were cleared to become improved pasturelands, coyotes readily accepted the big "doze-piles" of trees ideal for denning sites. Once rare in Iowa, coyotes have rebounded, on their own, to fill the grassland niche they historically occupied. Unlike the highly adaptive coyotes, however, there are certain species that do not "pioneer" well into suitable habitat. These species, such as otters and prairie chickens, require a *reintroduction* to Iowa.

Whenever a reintroduction (bringing animals from another region) or relocation (moving animals from within the state) are considered, certain criteria must be addressed. A source of animals is essential, and funds for project completion are necessary. Successfully bringing a species back to suitable habitat is a "numbers game" — there needs to be enough critters to establish a self-sustaining population and enough money to complete the project. A successful reintroduction can cost hundreds of thousands of dollars. Beyond dollars, it is important reintroductions be performed in such a manner that habitat requirements are met and the future of the species is not jeopardized.

What determines a species' merit for reintroduction? Considerations include: Does suitable habitat exist that is unoccupied by the species? Does the species pioneer well, or are we speeding natural processes that might occur when a species recovers on its own? And, is it practical? If animals are available and releases are taking place near Iowa, a coordinated regional effort among states can assist the recovery, ensure success and speed the process. Iowa is situated in the upper Midwest, and reintroduction efforts to our north of migratory species, such as peregrine falcons and trumpeter swans, should have a positive impact in Iowa.

Wild turkeys from Missouri, river otters from Louisiana, prairie chickens from Kansas, osprey from Wisconsin, sharp-tailed grouse from South Dakota and ruffed grouse from Wisconsin have been brought to Iowa because they were available for releases — there was a good source. Other species, such as barn owls and trumpeter swans, have been acquired from many national sources and have been propagated within the state prior to release. Some species, such as bald eagles and bobcats, have been recovering from near annihilation on their own. Since 1992, sandhill cranes have once again nested in Iowa. Cranes are dispersing from flocks in Wisconsin. Unfortunately, at this time, there are no sources of blue-spotted salamanders, short-eared owls, piping plovers, least terns or wood turtles available to bolster these populations.

"So what if a few species can't adapt to human impact on the land?" cynics might say. "What good are they anyway?" But, a species' ultimate fate

Article by Pat Schlarbaum
Photos by Roger A. Hill



Ron Johnson

Since 1985, 251 otters have been released at 13 sites around the state. Reproduction was documented soon after releases. Today, river otters are flourishing in some of Iowa's rivers, lakes and ponds, and sightings have been reported in 63 Iowa counties.

Beaver (below), now so abundant in Iowa, were once scarce due to unregulated hunting and trapping. Sandhill cranes (opposite page) are once again nesting in Iowa.



will affect human fate, because each contributes to the web of life in a unique manner. The web of life is strengthened by wildlife diversity, and when something is removed, the web is weakened. As naturalist John Muir stated, "When we try to pick out anything by itself, we find it hitched to everything else in the Universe." Determining which species can stay and which can go is dangerous tinkering.

When a species is lost from a region (extirpated), many times it's due to a loss of habitat, or from human persecution. Human progress has eliminated much habitat and misguided wildlife managers once believed that predator control would build up desirable wildlife populations. Many raptor species were nearly eradicated due to this myth. *Unregulated* hunting during the 19th and early 20th century also caused population declines. Following European settlement, white-tailed deer numbers declined dramatically until 1936 when Iowa had a low of 500 to 700. Today, hunters take 100,000 or so deer a year from a thriving population.

During the 1930s, beaver were scarce in many parts of the state due to indiscriminate taking in the late 1800s and early 1900s. In an effort to bolster their scattered population, beaver were relocated from areas of abundance to areas with few animals, particularly in southern Iowa. Drought years created an appreciation of water and wetland habitat the beaver provided. Likewise, conservation officers were responsible

for relocating ring-necked pheasants, a non-native species, from within Iowa in the 1950s. Today, millions of pheasant hunters have distinguished Iowa as the pheasant capitol of the nation. Pheasants and beaver were *relocated* around the state. Prior to the 1960s, giant Canada geese were virtually unknown in Iowa, as nesting species. Thought to be extinct but actually extirpated (no longer nesting here), *reintroduction* efforts have successfully restored this bird to its historic nesting range.

There's more. Years ago, it was believed wild turkeys required 10,000 acres of contiguous woodland habitat to prosper and would not survive in Iowa's terrain. Today, thanks to the dedication of many conservation organizations and DNR personnel, the turkey population is estimated in excess of 100,000 birds, and thriving. In fact, a very successful relocation program of Iowa turkeys to other states has been established. Funds generated have purchased additional woodland habitat.

Ruffed grouse have been relocated around the state with limited success, and sharp-tailed grouse reintroduction efforts in western Iowa are going slowly. Clearly, these efforts have enhanced our wildlife diversity and provided an opportunity for all Iowans to connect with wild areas. Today, when a bird flushes from the wild, depending on your location and habitat, you might see pheasant, gray partridge, turkey, ruffed grouse, sharp-tailed grouse, prairie chicken, bobwhite quail, snipe, rail or woodcock.

Wildlife Declines in Iowa 1860 - 1890

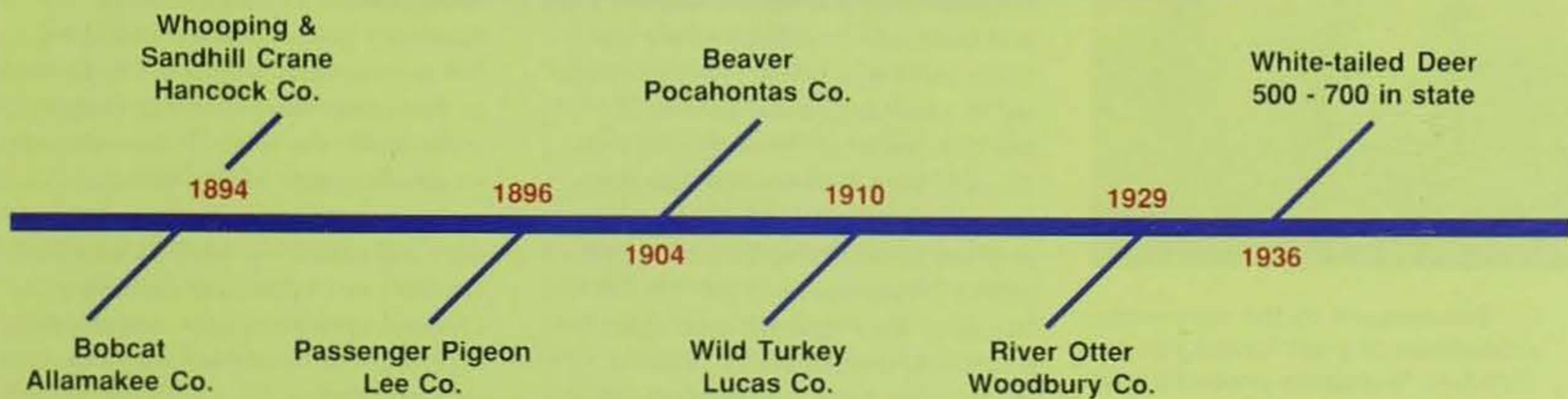


Often, it's the top-of-the-food-chain, or indicator, species that becomes endangered. Indicator species act as sentinels of the environment, warning something is amiss. What affects indicator species will ultimately affect humans, as was the case with DDT applications beginning in the 1940s. Amplification of poison in the food chain affected peregrine falcons and by the mid-1960s there were no wild nesting falcons east of the Mississippi River. Falconers began breeding private birds and releasing falcons back to the wild in the 1970s. Currently, Iowa has two nesting pairs of falcons, and the Midwest (Iowa, Minnesota, Michigan, Wisconsin, Indiana, Kentucky, Ohio, Illinois, Missouri, Kansas and Nebraska) has 35 pairs that produced 51 young in 1996. Peregrine falcons are acclimating to urban centers, with tall buildings that emulate the wild cliffs they once used for nesting. However, the peregrine population will not have truly recovered until these majestic birds occupy historic cliff-site eyries. To achieve this goal, efforts are underway to release falcons to wild areas in northeast Iowa, away from urban centers (see "Hawks on the Rocks, page 4).

The now-endangered barn owl, once more abundant in Iowa, has been challenged by changing agricultural practices. During the horse-drawn farming era, diversified farming provided the pastureland and hay ground for the barn owls' foraging. Meadow voles and mice constitute the



Wildlife Declines in Iowa 1890 - 1940





Encouraged by the successful restoration of giant Canada geese (above), biologists predict a wild nesting of swans in 1999.

bulk of barn owl's diet. There were 427 barn owls propagated and released between 1983 and 1987. A radiotelemetry study was conducted in 1985 and 1986 to determine habitat usage and mortality, and many predator-proof nest boxes were placed near suitable habitat. The Conservation Reserve Program idled 2.2 million acres of Iowa landscape into grasslands in the late 1980s and early 1990s. This replenishing of grassland habitat seemed to assist the barn owl recovery. In 1995, 12 nests were documented, however, the severe winter of 1995-96 seemed to decimate wintering barn owls as no nests were reported in 1996. In 1997, two nests were reported once again in southern Iowa nest boxes. This indicates the birds can bounce back if

grassland habitat and nest sites are available.

Greater prairie chickens were once prevalent to grassland areas of Iowa. Historic accounts describe vast flocks of these birds strutting their stuff on shortgrass lek sites. Between 1987 and 1994, more than 400 Kansas chickens were released in southern Iowa. Recovery prospects are encouraging, but prairie chicken habitat, closely tied to the Conservation Reserve Program, will provide the basis for this species' successful return. Good nesting weather in the spring — dry, warm days and nights — should bolster this species', and other birds', success. Guarded optimism could describe the hope of a prairie chicken return to southern Iowa.

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barometers of water quality and provide much enjoyment for wildlife enthusiasts.

The trumpeter swan, North America's largest waterfowl species, last nested in Iowa in Hancock County in 1883. Since 1994, Iowa has released 86 swans at nine sites around the state. Swan partnerships, many with breeding pairs, have been established at 33 sites across Iowa. Swan restoration efforts are encouraged by the success of the giant Canada goose restoration in the 1960s. Will trumpeter swans once again grace the skies of our state and "trumpet the cause" for the wetland habitat they require? Wild nesting of swans is anticipated in 1999.

Currently, efforts to bring osprey to Iowa from Wisconsin are underway. Ospreys are colonial nesting birds and do not disperse well from colony sites. Consequently, suppressed reproductive rates occur and the long-term productivity of the colony is undermined. By taking some birds to new environments in Iowa, population expansion will occur. The Macbride Raptor Project has spearheaded this work in the Coralville Reservoir area. Hopefully, Iowa's other major reservoirs will bring osprey to their sites soon.

What does the future hold for wildlife reintroductions and relocations? Hopefully, the habitat requirements of Iowa's 54 threatened and endangered birds and animals will be provided, minimizing the need for future reintroductions. Inventory is essential in determining population status of Iowa's endangered species. Surveys can illustrate the conditions of Iowa's frogs, toads, colonial nesting birds and sandhill cranes. But, there is much more required to adequately address the habitat needs of Iowa's 456 nongame wildlife species. Funding for this research is lacking. That's where the Teaming With Wildlife initiative holds so much promise for future wildlife diversity work. Clearly, efforts to protect our waters, lands and animals pay off in the long run. It's preferable, and generally more economical, to work with species' habitat before species become endangered.

After 1929, Iowa's river otters were found only along the Mississippi River in the northeastern part of the state. They did not "pioneer" well into new environments and were considered a good candidate for relocation. Hoping to emulate the success of wild turkey reintroductions, otters were brought to Iowa from otter-rich Louisiana in 1985. Since then, 251 have been released at 13 sites around the state. Reproduction was documented soon after releases. Today, river otters are flourishing in some of Iowa's rivers, lakes and ponds, and sightings have been reported in 63 Iowa counties. Although some watersheds are still lacking otters, with persistence, they may once again achieve statewide distribution. Otters are excellent



Historic accounts describe vast flocks of greater prairie chickens strutting their stuff in Iowa. Between 1987 and 1994, more than 400 Kansas chickens have been released in southern Iowa. Guarded optimism could describe the hope of a prairie chicken return to southern Iowa.

"When we try to pick out anything by itself, we find it hitched to everything else in the Universe."

John Muir



DNR

Sharp-tailed grouse (top) and barn owl (above) restorations have been met with limited success.



Wild turkey (above) restoration has been so successful in Iowa, birds are now trapped for relocation in other states.

Species' reintroductions are a component of an integrated plan to enhance wildlife diversity. A reintroduced or relocated species represents only one of many species. For a reintroduction to be truly successful, habitat that will benefit all similar species needs to be secure. The habitat benefiting prairie chickens should provide homes for henslow sparrows, bobolinks and northern harriers.

Lastly, a commitment to educate future generations is necessary to ensure wildlife will never again be endangered by habitat loss, environmental contamination or human persecution. Biologists can work to return a species and protect the habitat it requires, but society will ultimately decide the fate of that habitat and the restored species.

"There are some who can live without wild things, and some who cannot . . . Like winds and sunsets, wild things were taken for granted until progress began to do away with them. Now we face the question whether a still higher 'standard of living' is worth its cost in things natural, wild and free. For us of the minority, the opportunity to see geese is more important than television, and the chance to find a pasque-flower is a right as inalienable as free speech."

Aldo Leopold

A reintroduction slide program and more information about Teaming With Wildlife is available by contacting the Wildlife Diversity Program, Iowa DNR, 1436 255th Street, Boone, Iowa 50036; phone 515/432-2823.

Pat Schlarbaum is a wildlife technician for the department in Boone.



30 Years Of Ruffed Grouse Hunting

To most Iowa hunters, this October's three-decade anniversary of ruffed grouse hunting will not mean much. A few dedicated hunters -- some would say masochists -- participate in this most challenging of upland bird hunts. Those few know exactly what the anniversary means.

Thirty years of climbing northeast Iowa's steep, rocky, cramp-inducing limestone bluffs -- just to get up to a field edge to *start* hunting.

Thirty years of fighting thickets of prickly ash, raspberry and assorted other thorn bushes that make the best grouse habitat. Thickets that leave the unprepared hunter's hands and legs looking like he just lost a fight with an enraged tomcat.

Thirty years of shins barked on logs hidden in ferns, and ankles swollen from walking at 45 degree angles on side slopes.

Thirty years of *sound* flushes (was that a grouse?), quick glimpses of wings flashing through leafy underbrush and hurried shots to where a hunter *thought* the elusive bird was going.

by Terry Little



A male grouse stands upright on a log beating its wings. This "drumming" can be heard at quite a distance, and is used to attract a mate and to repel rival males.

Thirty years of walking all day (sliding would be more accurate) through late-season snow on rough, uneven slopes, just to see the only five grouse of the day flush at the same time, 50 yards in front of the dogs, disappearing across a deep ravine -- a ravine too steep to cross on bone-weary legs.

Ruffed grouse hunting, Iowa-style, is not for the faint-hearted. It's pure torture, some would say. But to the

dedicated grouse hunter, it has meant great rewards for all the effort and pain expended. Thirty years of spectacular views from atop northeast Iowa's river bluffs. Scenes of summer greenery turned red, yellow and gold by Jack Frost's early autumn hand, contrasting with the deep green of firs and cedars jutting skyward from rocky outcrops.

Thirty years of hearing a much-anticipated, muffled "brrrrmmm," as a

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Lowell Washburn

gray ghost explodes from a hiding place to disappear quickly behind a tree or bush (how did it know I couldn't shoot there?).

Thirty years of chest-swelling elation as a favored bird dog produces a solid, productive point or a carefully executed trail-and-flush right in front of your gun -- or better yet, your hunting partner's gun. The near-ecstasy produced by the occasional perfect wing shot at a grouse about to disappear from view.

Thirty years of laughing at, and commiserating with, hunting partners that walked all day without getting a shot -- or worse yet, missed a dozen in a row, even though the last two were wide open "gimmes."

Best of all, there have been 30 years of appreciating one of the greatest culinary delights available to an Iowa hunter. Nothing, not even the sweet taste of bobwhite quail, matches the delicate flavor and texture of a finely cooked ruffed grouse.

Not many of these trials or delights were anticipated when the first modern ruffed grouse season was opened in 1968. Ruffed grouse weren't new to Iowa -- they just hadn't been hunted in 45 years. They were originally found in nearly all the timbered regions of the state, but early settlers cleared much of the native forest and heavily pastured everything that was left. These actions eliminated the thick growth of shrubs and saplings ruffed grouse need to survive. By mid-century the birds were known to exist in only a few northeast Iowa counties.

In the mid-1960s, DNR biologists and graduate students from Iowa State University started several research studies to learn more about Iowa's ruffed grouse. Population surveys were developed to estimate annual changes in breeding populations. The most reliable survey took advantage of the breeding behavior of males. To attract mates and repel rivals, male grouse stand upright on a log or logs in their territory and beat their wings in mock flight. They do not fly off the log, or even elevate, but produce a *drumming* sound that can be heard at quite a distance. DNR biologists counted the number of drumming males heard at prescribed intervals along gravel roads transecting most of the best grouse habitat. Drumming males were also trapped and banded, nests were located, and broods found and banded.

These studies revealed that Iowa's ruffed grouse were about as numerous, and survived and produced young as

well, as ruffed grouse in nearby southeast Minnesota and southwest Wisconsin, where hunting had been allowed for decades.

In the fall of 1967, DNR biologists conducted a mock hunt to see what sort of opportunities the Iowa grouse populations might provide. The only thing missing from these trials was the shot. They found hunters could expect to flush a little more than one grouse per hour of hunting, with shots at half of the birds flushed. This compared favorably with hunting statistics from established grouse hunting states. With these facts in hand, a 16-day experimental ruffed grouse hunting season was initiated in 1968, with a three-bird daily bag limit and six allowed in possession.

Spring drumming male surveys were conducted for a number of years after hunting began, and volunteer grouse hunters were asked to keep diaries of their hunts. This information was used to monitor grouse populations and determine what level of success hunters were experiencing. Both sets of information revealed some surprising facts.

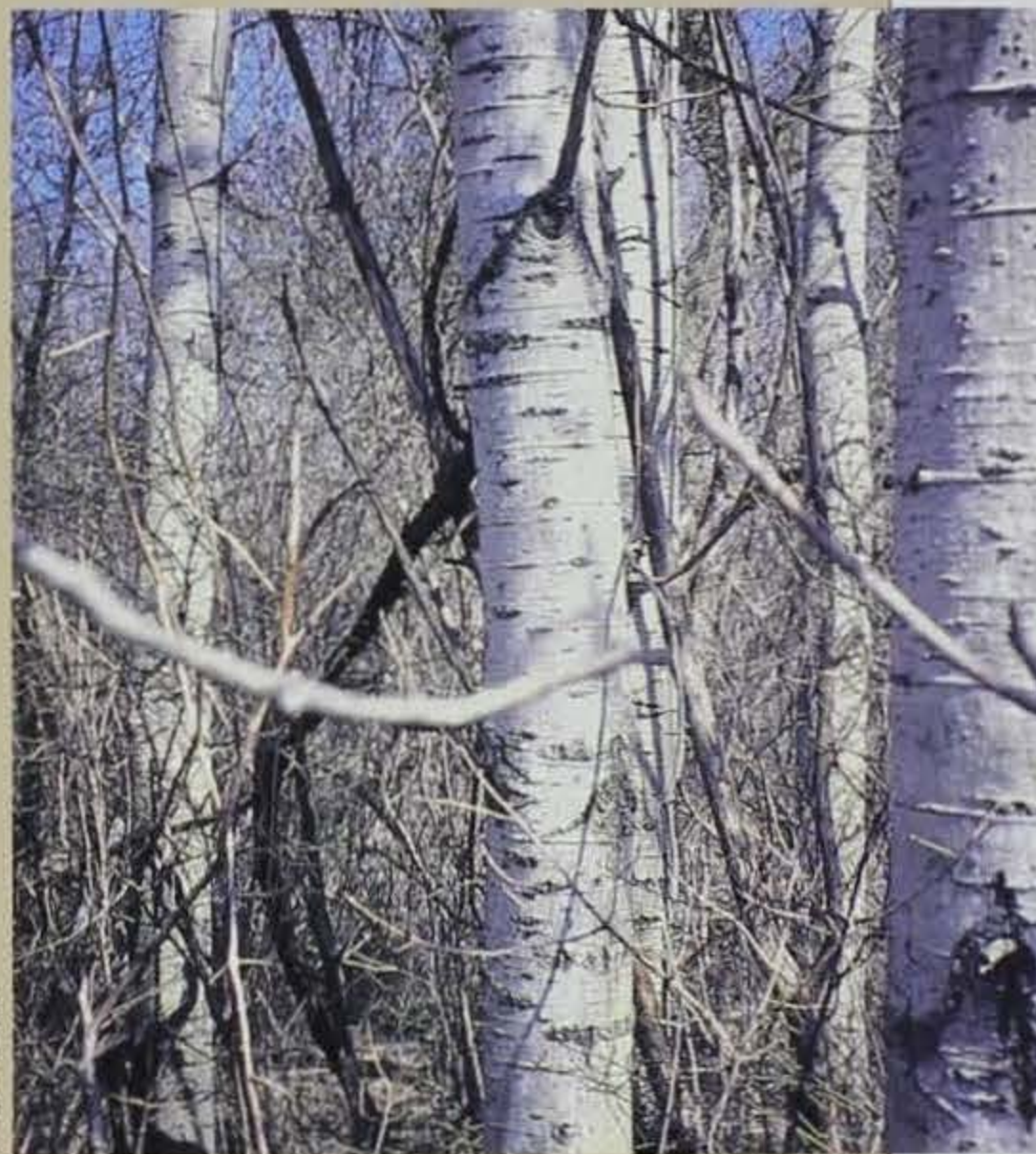
Throughout most of their primary range in the Great Lakes states and southern Canada, ruffed grouse go through a dramatic 10-year cycle in numbers. Populations build gradually for a period of years to peak numbers, then crash abruptly to a very low level. Then, they gradually increase again. Grouse are seemingly everywhere for two or three years around the peak, but nearly disappear immediately after the crash. Peak numbers occur on the average at 9- to 11-year intervals, with grouse often 6 to 10 times as numerous during peak populations as when numbers are low.

By contrast, drumming male surveys conducted from 1961 to 1978 revealed Iowa's ruffed grouse populations are surprisingly stable. Iowa grouse show only minor peaks or

Iowa's Ruffed Grouse Society is helping with habitat improvement projects on the DNR's Lansing Wildlife Unit in northeast Iowa. Aspen plantings, done with root cuttings (bottom), have had successful regrowth (below right).



Robert Kurtz



Robert Kurtz



Robert Kurtz

Ruffed Grouse Society Aids DNR

Although ruffed grouse hunters are few, they make up for small numbers by their intense dedication to preserving a very special brand of hunting. A group of grouse hunters from the Dubuque area formed the state's only chapter of the Ruffed Grouse Society of North America in 1993. Since then, they have actively helped the DNR's efforts at grouse management by volunteering to run drumming surveys and raising money for habitat management projects. In just three years, their efforts have led to habitat improvements on 83 acres at 23 sites on public wildlife management areas. These small steps represent a tiny fraction of the habitat work that needs to be done. Society biologists also provide technical advice on ruffed grouse habitat management to private landowners. For assistance, call 715/234-8302.

Hunters that would like to join in the Ruffed Grouse Society's efforts, and perhaps exchange a few stories, should contact the Society for membership information. The next fund-raising banquet is scheduled for August 22 in Dubuque. To find out how you can help raise money and assist in other ways, call 319/377-7102.

valleys in numbers when northern grouse are extremely abundant or extremely scarce. Most of the time there is little change from year to year, with peak numbers less than twice as high than in poor years.

Grouse hunting has also been fairly consistent from year to year, reflecting the stability in grouse numbers. Hunters' diaries collected from 1969 to 1978 revealed the average grouse hunting party of two or three hunted just four hours per day (probably because of the tiring terrain). The average party flushed 12 grouse and bagged about one bird per hunter, or one grouse for every five flushed.

Because of the physical challenge grouse hunting presents, the relatively low success it produces in terms of birds bagged, and the isolation of ruffed grouse range from our major cities, ruffed grouse hunting has never caught on as a major hunting sport. Only one in five Iowa hunters attempt to hunt grouse even occasionally, and the total harvest of 9,000 to 20,000 grouse a year is less than five percent of the typical harvest of ring-necked pheasants.

Because ruffed grouse populations and hunter success have remained fairly stable and hunting pressure is low, hunting seasons have gradually been lengthened, now beginning in early October and ending in late January. Most hunting pressure occurs in October before pheasant season opens, but

significant late-season hunting opportunities exist for avid grouse hunters willing to devote time to pursuing this most challenging and elusive game bird.

What does the future hold for ruffed grouse hunters? The years from 1988 to 1990 were the last peak population years in cyclic northern

comes a decline in habitat quality for ruffed grouse. As forests age, tree canopies close in, less sunlight reaches the forest floor, and shrubs and saplings begin to die. This reduces the high stem densities of shrubs ruffed grouse need to survive, meaning fewer flushes for the hunter. You may need to change hunting locations if this has

happened to your favorite grouse haunt. Look for young, brushy field edges, recently logged-over stands of timber or pastures reverting to brush.

On the positive side of the ledger, the DNR was involved in restoring ruffed grouse to southern Iowa in the 1980s. Wild-trapped grouse from Wisconsin, Michigan and Indiana were released at a number of locations in southern Iowa and, if habitat is suitable, should be

developing sustainable populations. Southern Iowa's oak-hickory forests are not as favorable grouse habitat as those found in northeast Iowa, but DNR biologists remain cautiously optimistic these releases will work. Whether they will produce huntable populations remains to be seen. Look for more information in future issues of the *Conservationist*.

Terry Little is the wildlife research supervisor for the department in Des Moines.



Ron Johnson

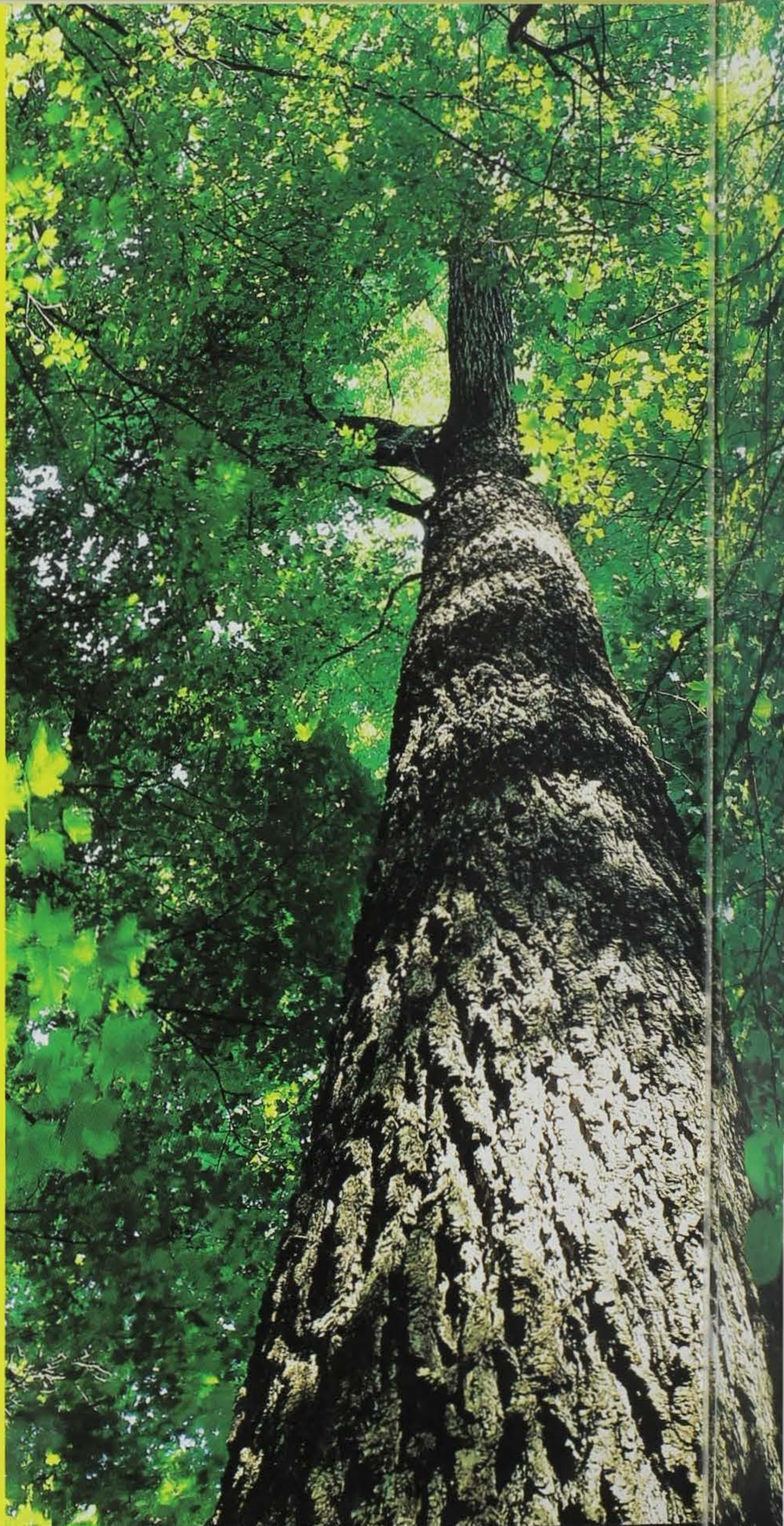
In the 1980s ruffed grouse were released in southern Iowa and monitored for a time with radio transmitters.

states, so 1998 to 2000 should be peak years there again. That means northeast Iowa's grouse population should be more numerous than the past few years. It may be difficult for most hunters to tell if numbers are up, however, because Iowa grouse fluctuations are minor.

Grouse habitat may not be as good at your favorite hunting spot as it was ten years ago. Forests inevitably mature over time, and with maturity

The End of An Era

by Gary Beyer





W

henever I was feeling low I would drive into Heery Woods south of Clarksville and walk up the trail to the large walnut tree — one of the best, 34 inches in diameter and 20 feet of clear wood. Walnut buyers drooled over this mammoth of the woods, but in state parks, trees are not harvested until they show signs of deterioration or pose a hazard to the public.

I prayed the tree would remain healthy — it not only offered a place for me to collect my thoughts, but showed the potential of Iowa's forests. This walnut tree was not a freak of nature, but what our woodlands could look like with proper forest management.

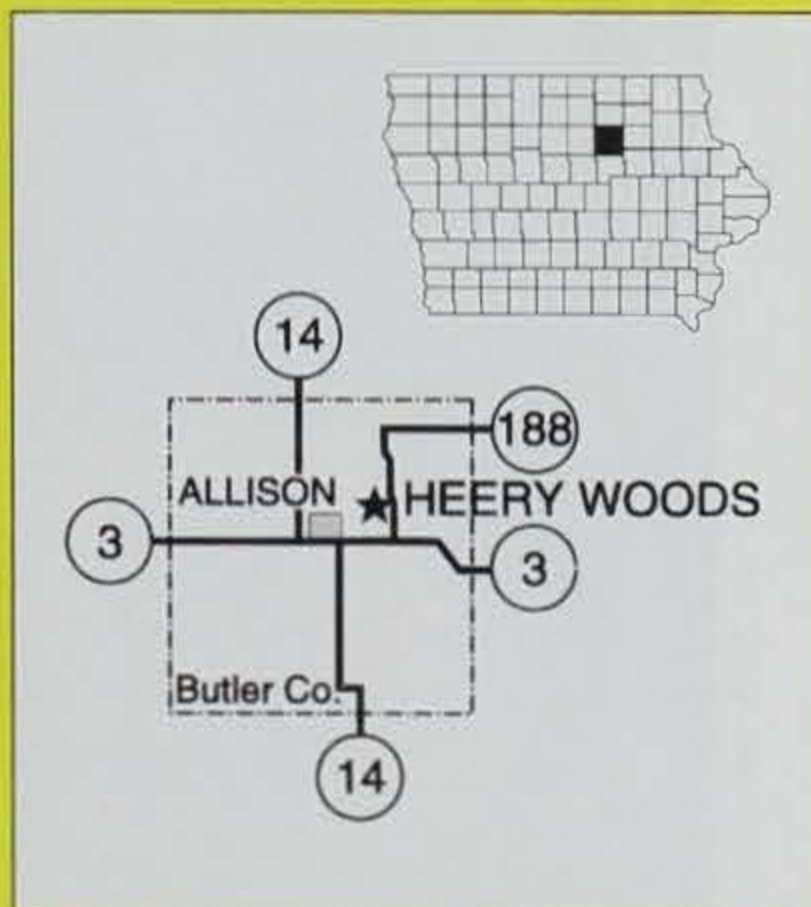
As nature constantly reminds us, trees do not last forever. Last spring, the bark on one-third of the circumference died and the root system was beginning to rot. It was time the walnut tree was harvested or the value would decrease rapidly. Bids were taken from several walnut buyers and the tree sold for \$15,000. The tree was shipped whole-length to Japan, where it would be sliced into veneer 1/20-inch thick.

I looked at the large stump and counted 150 rings. Native Americans

were still in the woods when the seedling sprouted. I was sorry to see it gone. But then I began to think of all the products to be made from this tree and the generations of families enjoying the beauty of Iowa walnut. The veneer from this one tree would cover more than half a football field. How many family gatherings, how many friends made, how many hours of enjoyment over the warmth of a walnut table from this tree? The walnut furniture from this tree would grace homes for centuries. As a tree, its future was limited, but the beauty of the wood could brighten peoples lives for hundreds of years to come.

The Butler County Conservation Board collected seed from "my" walnut tree and have seedlings growing, to be planted in openings in the woods. Hopefully, someday the offspring will provide someone else with the solace this tree provided me. It was the end of our era, but also the beginning of another one.

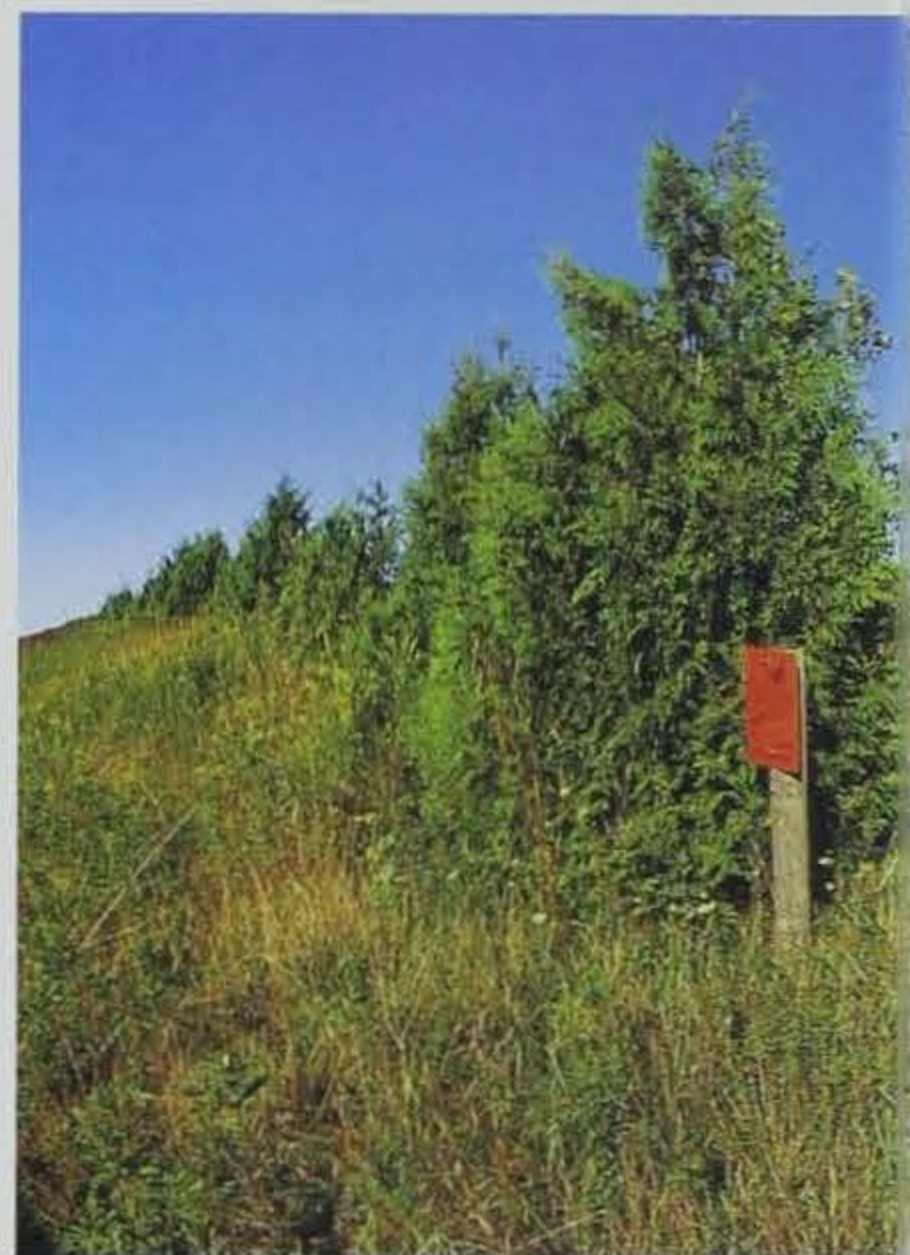
Gary Beyer is a district forester for the department located at Charles City.



Iowa Tree Farmers of the Year

Leaving a Legacy

Article and photos by Bruce Blair



The Kerns enjoy all their woodland has to offer, including tasty morel mushrooms (above).

The Kerns -- Jody and Jim, along with their children Madalyn, 3, Baili, 8, and Payson, 5 -- are proud of their tree farm and recent recognition.



Bradley Photography, Manchester, Iowa



On October 2, 1997, a friendly crowd of more than 200 guests descended upon a farm in northeast Iowa. A majority of these guests were tree farmers, invited to attend a Forestry Field Day in honor of the 1997 Iowa Tree Farmers of the Year, Jim and Jody Kerns of Edgewood. The day started clear, crisp and beautiful, with guests complementing the hosts on choosing such a beautiful day for the event. A few minor complaints were made about the late afternoon temperatures being "a bit on the warm side," but the children and trees didn't seem to mind.

The event was organized by the Iowa Tree Farm Committee in cooperation with the Iowa Department of Natural Resources, Forestry Division and Iowa State University Forestry Extension. Iowa's 1,024 certified tree farmers were all invited to the event.

As a district forester in northeast Iowa, I am often asked, "What does it mean to be a tree farmer?" Beyond the obvious planting and growing trees, a tree farmer is anyone who manages trees in a sustainable and responsible way. Additionally, there is a national organization called the American Forest Foundation that administers the Tree Farm program to recognize and reward individual tree farmers for their efforts. The American Forest Foundation is financially supported by many wood products industries. These industries recognize the value of supporting and thanking their many private woodland owning clients for supplying them with the resources they need. But tree farming *isn't* just about growing trees for fiber. The wonderful distinction in tree farming is the ability to produce wood fiber while simultaneously producing habitat for wildlife, quality water and recreational opportunities.

To qualify as a certified tree farmer, all you need is ten acres, or more, of well-managed woodland. A

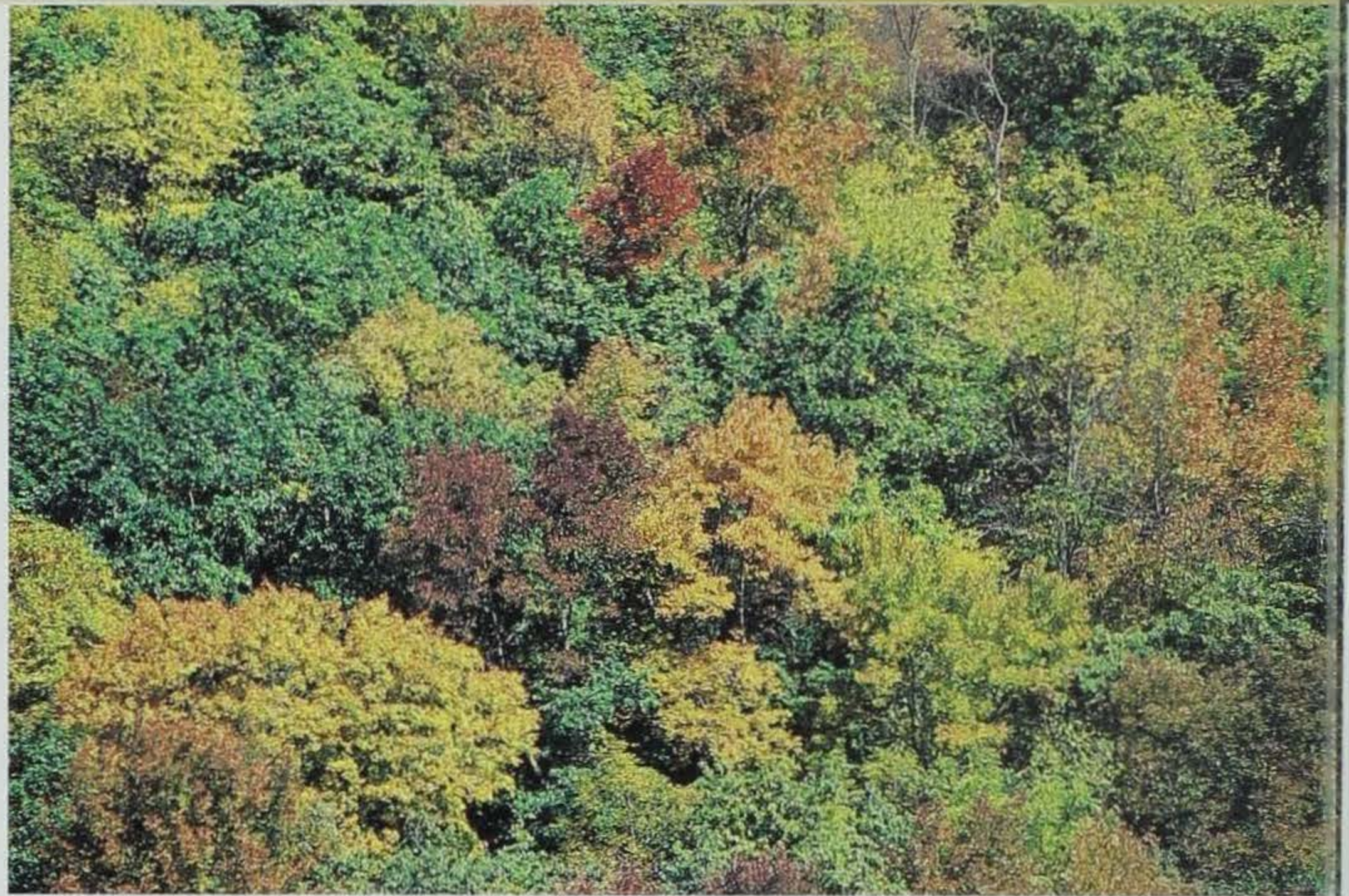
certifying forester must work with you to develop a comprehensive *forest stewardship management plan* for your woodland. The certifying forester can nominate anyone who proves they are serious about forest stewardship and are actively implementing their stewardship plan.

The Kerns' started their tree farming endeavor in 1987, when they planted 15 acres of mixed hardwood seedlings. While most of Iowa was experiencing a drought that year, the Kerns' managed to establish all but 1.5 acres. The drought didn't dampen their spirits. If anything, the experience fired a passion for tree planting and woodland improvement work that has increased over the years. Since that first year, they have planted many more acres of highly erodible land with cover.

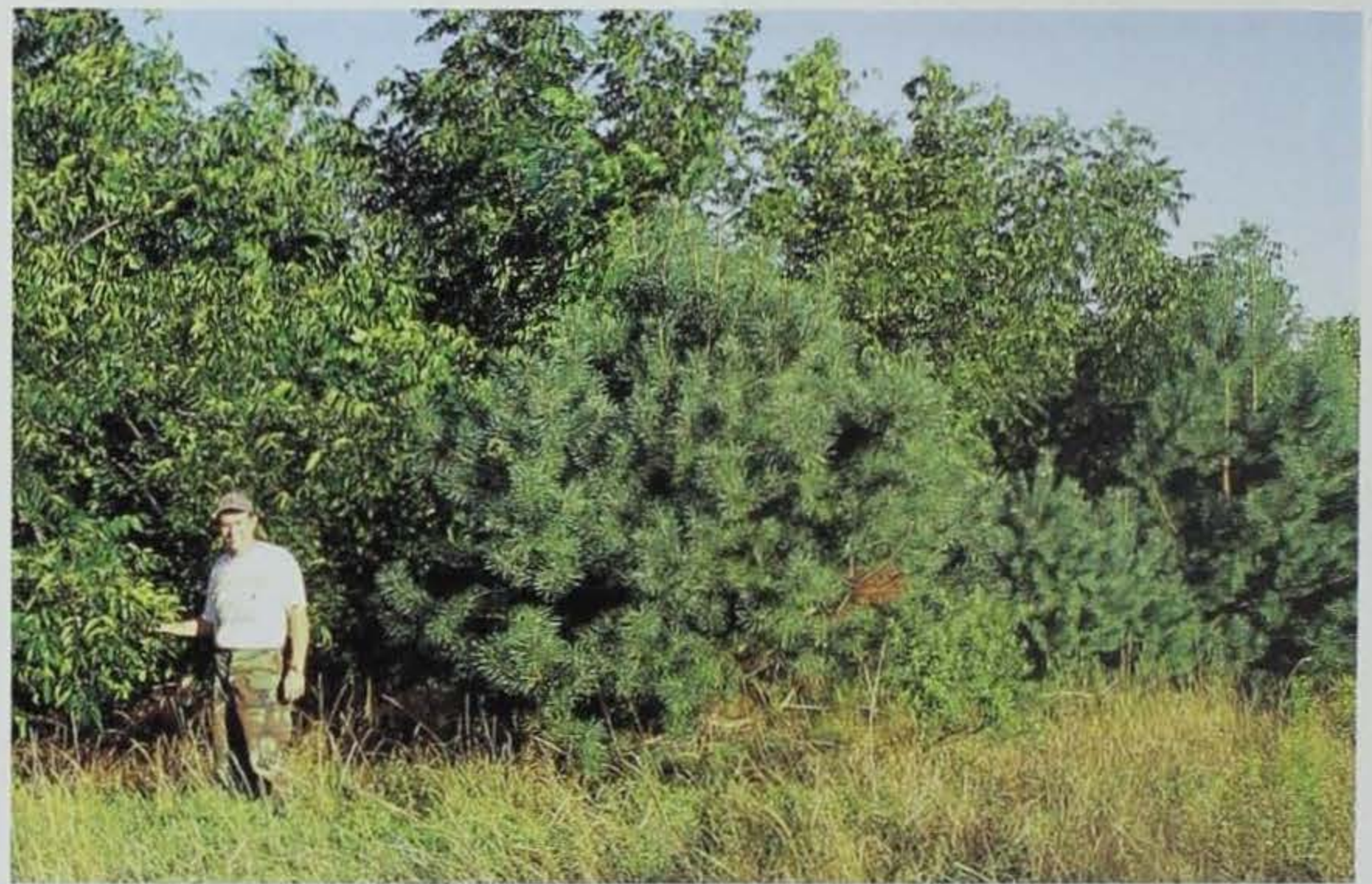
Jody Kerns recalls that first year very well. She was packing the soil down around the freshly planted seedlings while she was eight months pregnant. There is now a beautiful row of arborvitae along the road next to their farm. These trees were started from tiny inch-tall seedlings dug with a spoon from their natural nursery bed. It's obvious the Kerns' aren't afraid to innovate. One fall, they planted 20 acres using an old potato planter to drill the large tree seed. Fellow tree farmers in the neighborhood have borrowed that planter on many occasions, putting it to good use.

Jim and Jody have been very active in the local civic community as well as the forestry community. Jody helped to start a Trees Forever group in Edgewood. Jim is a longtime city councilman. For the past three years, they have volunteered to give talks at seminars updating landowners and conservation professionals on the status of their riparian buffer project along the Volga River (see sidebar article). They are also longtime members of the northeast Iowa Forest Advisory Committee. This group was formed to





Beautiful scenes like the one above are just one of the benefits of tree farming. The Kerns hope to leave a legacy of trees and important environmental lessons to their children. Jody and her children work on buffer plantings (above). Jim stands beside the first trees they planted (above right).



give suggestions and feedback to the DNR Forestry Division and other forestry professionals on issues concerning forest landowners. Both Jim and Jody are graduates of Iowa's acclaimed Master Woodland Manager Program.

Each spring, the Kerns' family hosts a field day for the local school district's fifth-grade class. The Kerns' understand the importance of a strong respect for the environment and want to share it with the students. They also want to show these fifth-graders that there are alternative, sustainable uses for the land other than row crop and livestock production.

Jody once heard a speech given by Nina Leopold, daughter of famed conservationist and author, Aldo Leopold. Nina talked about the legacy her father left on the worn-out farm the family bought when she was a child. Today, trees she and her father planted are now part of the buildings on this historic farm. Jim and Jody would like nothing better than to leave a similar legacy to their children and grandchildren.

Bruce Blair is a district forester for the department in Elkader.

Saving a Streambank

Article and photos by
Jeff Tisl

Soon after the Kerns' bought their farm, they noticed a severe streambank erosion problem along one of their fields adjacent to the Volga River. Each year, they were losing four to six feet of cropland to the encroaching river. After reading an article in the *Iowa Conservationist* about alternative forms of cost-effective streambank stabilization, the Kerns' contacted their local DNR district forester and Natural Resources Conservation Service (NRCS) office to see what assistance would be available.

After learning more about how and why rivers meander, the Kerns' realized streambank erosion and channel migration are natural processes. Because the previous landowners were farming up to the edge of the streambank, their rate of streambank erosion was magnified to more than 10 times the desired levels. After showing them how little streambank erosion was occurring in natural riparian areas just up and downstream of their farm, the Kerns' realized their solution was to change their land use pattern and install a riparian buffer.

Unfortunately, only a mature, fully functioning riparian area would provide the resistance needed to reduce the erosion rate to a tolerable level. At

best, the Kerns' would need 15 to 25 years to grow such a buffer. Therefore, to provide more immediate protection, they decided to install a streambank stabilization practice that would reduce the rate of channel migration long enough for their riparian area to mature.

The end result was a cost-effective streambank stabilization design incorporating willows and grasses. The design had limited rock riprap along the toe of the bank and an adjacent riparian forest buffer 150 feet wide, including four rows of trees and shrubs, and a native grass filter strip.

To help pay for this project, the Kerns' decided to enroll their riparian area into the USDA's Conservation Reserve Program (CRP). The program reimbursed the Kerns' 50 percent of the cost of planting the trees and prairie grasses, and will pay them rent on the areas enrolled for 10 years. The streambank stabilization component of the project was not eligible for CRP and was funded by other means.

A video was made of this project

by the Iowa Farm Bureau and is funded, in part, through grants provided by various state and federal agencies, as well as environmental and conservation groups from across Iowa. Copies of the video will soon be available to borrow from all Farm Bureau and NRCS offices across the state.

Jeff Tisl is a soil conservationist for the Natural Resource and Conservation Service in Elkader.



Streambank stabilization along the Volga was not easy for the Kerns. Planting willow posts along the streambank (left). A before (top) and after (bottom) look at the Kerns' Volga River streambank.

CARE FOR

Reuse your grocery bags, or buy a string bag that you can carry your groceries in.

Take showers instead of baths to save water and energy.

Minimize use of garden chemicals by weeding.

Be sure to return your recyclable cans and bottles for your deposit.

Share rides to work or use public transportation.

Buy a fuel-efficient car. Aim for 35 miles per gallon.

Walk or ride a bike instead of using the car for short trips.

Air-dry laundry when possible.

Turn off lights in rooms you aren't using.

Start a recycling program where you work.

Water lawns at night to limit evaporation.

Read labels and research the products you buy.

Buy products packaged in recycled paper or cardboard.

Insulate your basement to save 1/3 on your heat bill.

Take old tires to landfill or a processing center for proper disposal.

Don't use electric tools and appliances when hand-operated ones will do the job.

Take your own coffee cup to work instead of using a disposable.

Keep your car tires inflated to the proper pressure to improve fuel economy and extend the life of the tires.

1997

FISH AWARDS

The following list includes the top 10 entries and released of each species taken in 1997.
Current state records are in **bold** type. An (*) indicates a new record this year.

| WEIGHT/LENGTH | DATE | ANGLER, HOMETOWN | LOCATION, COUNTY |
|---|---------------|----------------------------------|--------------------------------|
| Bass, Largemouth (Minimum — 7 lbs. Or 22") | | | |
| 10 lbs 12 ozs 23.5" | 5/1984 | Patricia Zaerr, Davenport | Lake Fisher, Davis |
| 9lbs 4oz | 4/20 | Doris Schaller, Rock Island | Sand Pits, Muscatine |
| 7lbs 10oz | 7/3 | Dennis Cassady, Norwalk | Farm Pond, Madison |
| 7lbs 9oz | 5/16 | Larry Pavelec, Readlyn | Sweet Marsh, Bremer |
| 7lbs 9oz | 6/1 | Justin C. Johnson, Red Oak | Farm Pond, Page |
| 7lbs 6oz | 3/23 | Joseph Morgan, Waukee | Farm Pond, Decatur |
| 7lbs 5oz | 6/14 | Jason R. Carlson, Le Mars | Farm Pond, Woodbury |
| 7lbs 5oz | 7/10 | Charles D. Fletcher, Harlan | Farm Pond, Audubon |
| 7lbs 4oz | 6/18 | Bill Whitney, Emmetsburg | Pit, Palo Alto |
| 7lbs 2oz | | John Wooster Jr., Denison | Farm Pond, Crawford |
| 7lbs | 5/6 | Dick Janssen, Arnolds Park | West Okoboji, Dickinson |
| 7lbs | 10/16 | Dusty Mayer, Marshalltown | Green Castle, Marshall |
| RELEASED | | | |
| 26" | 9/4 | Arlie Vander Hoek, Pella | Rock Quarry, Poweshiek |
| 24" | 6/22 | Bryan Jacobs, Bellevue | Farm Pond, Fremont |
| 23.5" | 12/14 | James E. Laing, Wapello | Sand Pits, Muscatine |
| 23" | 5/13 | Mike Fiedler, Cherokee | Spring Lake Park, Cherokee |
| 23" | 3/28 | Ira Dunsworth, Davenport | Farm Pond |
| 23" | 6/7 | David A. Govig, Clarinda | Viking Lake, Montgomery |
| 23" | 4/29 | Mark Woldruff, Swisher | Farm Pond, Johnson |
| 23" | 9/12 | Gordon Mc Alpin, Villisca | Farm Pond, Montgomery |
| 23" | 7/26 | Daryl Petty, Oskaloosa | Farm Pond, Jasper |
| 22.5" | | Ron Russell, Albia | Lake Rathbun, Appanoose |
| 22.5" | 7/19 | Mathew Petty, Oskaloosa | Farm Pond, Jasper |
| 22.5" | 10/10 | Dean H Raddatz, Troy Mills | Pleasant Creek, Linn |
| 22" | 5/29 | Mitch Stoner, Williamsburg | Farm Pond, Iowa |
| 22" | 6/6 | Steve Faber, Inwood | Poofers Pond, Sioux |
| 22" | 4/18 | Mike T. Monteleone, Newton | Pond, Union |
| 22" | 5/1 | Gary W. Burns, Mount Pleasant | Geode, Henry |
| 22" | 7/20 | Randall R. Eilderts, Atlantic | Walnut Creek Marsh, Ringgold |
| Bass, Ocean-Striped (Minimum -- 5 lbs.) | | | |
| 9 lbs 4 ozs 29" | 7/1983 | Richard Pauley, Mystic | Lake Rathbun, Appanoose |

| WEIGHT/LENGTH | DATE | ANGLER, HOMETOWN | LOCATION, COUNTY |
|---------------|------|------------------|------------------|
|---------------|------|------------------|------------------|

Bass, Rock (Minimum — 1 lb.)

| | | | |
|------------------|--------|------------------------------|------------------------------|
| 1 lb 8 ozs 10.5" | 6/1973 | Jim Driscoll, Dubuque | Mississippi River, Dubuque |
| 1lbs 3oz | 5/10 | Debra R. Miller, Cedar Falls | West Fork, Butler |
| 1lbs 1oz | 6/8 | Dustin Cose, Waterloo | Wapsipinicon River, Buchanan |

Bass, Smallmouth (Minimum — 4 lbs. or 20")

| | | | |
|---------------------|--------|--------------------------------|------------------------------|
| 7 lbs 12 ozs 22.75" | 9/1990 | Rick Gray, Dickinson | West Okoboji, Dickinson |
| 5lbs 9oz | 7/17 | Donald D. Viet, Hampton | Iowa River, Hardin |
| 4lbs 13oz | 9/7 | David H. Rich, Sioux City | West Okoboji, Dickinson |
| 4lbs 8oz | 8/26 | Douglas A. Blunt, Charles City | Cedar River, Mitchell |
| 4lbs 7oz | 4/96 | Brian Gerber, Plainfield | Cedar River, Bremer |
| 4lbs 6oz | 5/3 | Mike Chinn, Cherokee | Big Spirit Lake, Dickinson |
| 4lbs 5oz | 8/13 | Randy Mc Connell, Decorah | Upper Iowa River, Winneshiek |
| 4lbs 3oz | 8/14 | Dana D. Dowd, New Hampton | Upper Iowa River, Howard |
| 4lbs 1oz | 5/3 | Jim R. Montgomery, Spencer | Spirit Lake, Dickinson |
| 4lbs 1oz | | Ron Bramlow, Lawler | Upper Iowa River |

RELEASED

| | | | |
|-------|-------|----------------------------|------------------------------|
| 22" | 9/18 | Chris Traeger, Dyersville | Maquoketa River, Delaware |
| 22" | 7/26 | John Walz Sr., Estherville | Spirit Lake, Dickinson |
| 21" | 9/13 | Joe Duda, Bettendorf | Northeast Iowa Stream, Jones |
| 21" | 8/01 | Justin Kirsch, Dyersville | Maquoketa River, Delaware |
| 21" | 5/6 | David P. Smith, Cherokee | Spirit Lake, Dickinson |
| 20.5" | 7/21 | Jeff Lenz, Milford | West Okoboji, Dickinson |
| 20" | 6/16 | Trent Hodne, Manilla | Big Spirit, Dickinson |
| 20" | 7/19 | Eric Lineweave, Milford | Spirit Lake, Dickinson |
| 20" | 9/14 | Gene Traeger, Dyersville | Maquoketa River, Delaware |
| 20" | 4/5 | Mark Beltz, Cedar Rapids | Maquoketa River, Delaware |
| 20" | 4/5 | Mark Woldruff, Swisher | Maquoketa River, Delaware |
| 20" | 7/14 | Brad Wittrock, Primghar | West Okoboji, Dickinson |
| 20" | 10/14 | Chuck Dlask, Cedar Rapids | West Okoboji, Dickinson |
| 20" | 6/4 | Jeff Gardner, Cedar Rapids | Maquoketa River, Delaware |

Bass, White (Minimum — 2.5 lbs.)

| | | | |
|---------------|--------|--------------------------------|----------------------------|
| 3lbs 14oz 20" | 5/1972 | Bill Born, Milford | West Okoboji, Dickinson |
| 3lbs 5oz | 10/3 | Gaylen Bond, Milford | West Okoboji, Dickinson |
| 3lbs 4oz | 10/19 | Dick Downey, Davenport | Mississippi River, Jackson |
| 3lbs 2oz | 9/24 | Jeff Lenz, Milford | West Okoboji, Dickinson |
| 3lbs 2oz | 1/23 | Bill Ferns, Spirit Lake | West Okoboji, Dickinson |
| 2lbs 13oz | 9/24 | John De Volder, Okoboji | East Okoboji, Dickinson |
| 2lbs 12oz | 12/19 | Betty M. Kruchten, Spirit Lake | Spirit Lake, Dickinson |
| 2lbs 9.5oz | 9/20 | Scott Soyer, Antioch | West Okoboji, Dickinson |

Bass, Wiper (Minimum — 4 lbs.)

| | | | |
|--------------------|--------|--------------------------------|-------------------------|
| *18lbs 15oz 33.25" | 9/1997 | Don Ostergaard, Des Moines | Des Moines River, Polk |
| 10lbs 8oz | 5/9 | Sidney Simpson, Des Moines | Des Moines River, Polk |
| 10lbs | 7/25 | Douglas Beckett, Polk City | Saylorville, Polk |
| 9lbs | 8/7 | Daniel Stoltze, Boone | Saylorville, Polk |
| 7lbs 10oz | 8/6 | Jerry Konecny, Dalhart | Saylorville, Polk |
| 5lbs 10oz | 3/12 | Thomas R. Sandersfeld, Elkader | Yellow River, Allamakee |
| 5lbs 6oz | 1/1 | Liming Hou, Ames | Des Moines, Polk |
| 4lbs 12 oz | 7/12 | Kevin J. Bley, Waterloo | Red Rock, Marion |
| 4lbs 2oz | 6/1 | Allen Hall, Victor | Red Rock, Marion |

| WEIGHT/LENGTH | DATE | ANGLER, HOMETOWN | LOCATION, COUNTY |
|--|---------------|--------------------------------------|-------------------------------------|
| Bass, Yellow (Minimum — .75 lb.) | | | |
| 1 lb 9 oz 14.5" | 4/1991 | Bill Campbell, Council Bluffs | Lake Manawa, Pottawattamie |
| 1lbs 4oz | | Don Graven, Sac City | Black Hawk Lake, Sac |
| 1lbs 4oz | 6/2 | Dann D. Cohrs, Ventura | Gravel Pit, Cerro Gordo |
| 1lbs 4oz | 4/22 | Ed Tomka, Carroll | Black Hawk Lake, Sac |
| 1lbs 2oz | 4/26 | Steve Olberding, Carroll | Black Hawk, Sac |
| 1lbs 2oz | 10/9 | Ronald Humbert, Columbus City | Lake Geode, Henry |
| 1lbs 2oz | 7/20 | Nick Philby, Red Oak | Sand Pit, Montgomery |
| 1lbs 1oz | | Kent Gray, Pomeroy | Arrowhead Lake, Sac |
| 1lbs | 9/12 | Justin Williams, Pocahontas | Black Hawk Lake, Sac |
| 15oz | 9/20 | Kenneth Nomann, Palmer | Black Hawk River, Sac |
| 15oz | 9/15 | Bill Haukap, Lake View | Black Hawk Lake, Sac |
| Bluegill (Minimum — 1 lb.) | | | |
| 3 lbs 2 ozs 12.75" | 7/1986 | Phil Algreen, Earlham | Pond, Madison |
| 2lbs | 6/14 | Daniel Westendorf, Waverly | Private Pond, Bremer |
| 1lbs 12oz | 6/7 | Terry Muckey, Hartley | East Okoboji, Dickinson |
| 1lbs 11oz | 9/7 | Dale R. Clausen, Holstein | Farm Pond, Ida |
| 1lbs 10oz | 5/19 | Lee Baker, Glenwood | Farm Pond, Mills |
| 1lbs 8oz | 6/7 | Ron L. Weber, North Liberty | Farm Pond, Johnson |
| 1lbs 8oz | 5/6 | Dan Crow, Cedar Rapids | Iowa Reservoir, Johnson |
| 1lbs 8oz | 5/31 | Nancy Lindsay, New Market | Farm Pond, Taylor |
| 1lbs 7oz | 5/10 | Mark J. Larson, Forest City | Farm Pond, Audubon |
| 1lbs 4oz | 6/13 | Judy Weber, North Liberty | Private Pond, Johnson |
| 1lbs 3oz | 8/9 | Virgil Kots, Spirit Lake | E. Okoboji, Dickinson |
| Bowfin/Dogfish (Minimum — 5 lbs.) | | | |
| 11 lbs 9 ozs 31.5" | 5/1989 | Bill Gretten, Blue Grass | Mississippi River, Clayton |
| 7lbs 15oz | 5/29 | Nick Ohde, Columbus Junction | Lake Odessa, Louisa |
| Buffalo (Minimum — 20 lbs.) | | | |
| 56 lbs 48" | 5/1996 | Terry J. Gann, McClelland | Manawa, Pottawattamie |
| 23lbs 14oz | 6/21 | Todd Rands, Davenport | Lake Odessa, Louisa |
| 23lbs 14oz | 6/21 | Terry Rands, Davenport | Lake Odessa, Louisa |
| Bullhead (Minimum — 2.5 lbs.) | | | |
| 5 lbs 8 ozs 22" | 1989 | Michael Hurd, Ellsworth | Farm Pond, Hamilton |
| 3lbs 12oz | 6/27 | Alan Hawkins, Omaha | Littlefield Lake, Audubon |
| Carp (Minimum — 25 lbs.) | | | |
| 50 lbs 44" | 5/1969 | Fred Houghland, Glenwood | Glenwood Lake, Mills |
| 35lbs | 3/9 | Bill Adams, Castana | Missouri River, Monona |
| Catfish, Blue (Minimum — 20 lbs. or 35") | | | |
| 62 lbs 46.5" | 9/1995 | Darrell E. Carter, Jefferson | Big Sioux River, Plymouth |
| Catfish, Channel (Minimum — 15 lbs. or 30") | | | |
| 36 lbs 8 ozs 40.5" | 8/1993 | Ronald Godwin, Earlham | Middle Raccoon River, Dallas |
| 25lbs 8oz | 9/13 | Gerald Kuhn, Ft. Atkinson | Volga, Fayette |
| 23lbs 4oz | 5/30 | Jeremiah Brainard, Luana | Mississippi River, Allamakee |
| 23lbs | 8/8 | Ray Siegried, Sumner | Volga Lake, Fayette |
| 16lbs 8oz | 6/28 | Dan Crow, Cedar Rapids | Coralville, Johnson |
| 16lbs | 9/1 | Tim T. Aberson, Paullina | Mill Creek Lane, O'Brien |

| WEIGHT/LENGTH | DATE | ANGLER, HOMETOWN | LOCATION, COUNTY |
|---------------|------|------------------|------------------|
|---------------|------|------------------|------------------|

Catfish, Flathead (Minimum — 20 lbs. or 35")

| | | | |
|-------------------|---------------|---------------------------------|-------------------------------|
| 81 lbs 52" | 6/1958 | Joe Baze, Chariton | Lake Ellis, Lucas |
| 52lbs | 6/14 | Jamie Wriedin, Keokuk | Des Moines River, Lee |
| 48.3lbs | 8/21 | David Lee Anderson, Boone | Des Moines River, Boone |
| 47lbs | 9/23 | Kenneth D. Avery Jr, Des Moines | Raccoon River, Polk |
| 45lbs | 3/2 | Daryl R. Bazal, Vining | Des Moines River, Polk |
| 43lbs 8oz | 7/10 | James R. Jungk, Dubuque | Mississippi River, Dubuque |
| 42lbs 7oz | 9/7 | Dennis Steele, Council Bluffs | Missouri River, Mills |
| 38lbs 14oz | 6/3 | R. McClelland, Council Bluffs | Missouri River, Pottawattamie |
| 36lbs | 6/18 | Shane Powers, Manson | Des Moines River, Webster |
| 36lbs | 8/01 | Garyl Woody Sr., Council Bluffs | Missouri River, Pottawattamie |
| 35lbs 9ozs | 8/20 | Jeremy Anderson, Boone | Des Moines River, Boone |

Crappie (Minimum — 2 lbs.)

| | | | |
|---------------------------|---------------|------------------------------------|------------------------------------|
| 4 lbs 9 ozs 21.25" | 5/1981 | T. Trowbridge, Marshalltown | Green Castle Lake, Marshall |
| 3lbs 12oz | 3/29 | Mike L. Sorenson, Castana | Farm Pond, Mona |
| 3lbs 6oz | 5/20 | Harley Kuiper, Pella | Red Rock, Marion |
| 2lbs 15oz | 5/20 | Ralph Hoagland, Monroe | Des Moines River, Marion |
| 2lbs 13oz | 6/2 | Julie Cerretti, Saint Charles | West Lake Osceola, Clarke |
| 2lbs 9oz | 3/3 | Kevin Nye, Clear Lake | Farm Pond, Cerro Gordo |
| 2lbs 8oz | 9/22 | Leroy Smithson, Missouri Valley | Louisville Bend, Mona |
| 2lbs 8oz | 3/27 | Roger Eddy, Anita | Lake Anita St Park, Cass |
| 2lbs 7oz | 6/14 | Gary W. Burns, Mount Pleasant | Geode, Henry |
| 2lbs 7oz | 5/23 | Debbie Himes, Cedar Rapids | Coralville Res, Johnson |
| 2lbs 5oz | 12/12 | Bill Ferns, Spirit Lake | Big Spirit, Dickinson |
| 2lbs 5oz | 10/3 | Billy Krefft, Clear Lake | Big Blue Pits, Cerro Gordo |

Freshwater Drum (Minimum — 15 lbs.)

| | | | |
|---------------------|----------------|-----------------------------|-------------------------------|
| 46 lbs 38.5" | 10/1962 | R F Farra, Clarion | Spirit Lake, Dickinson |
| 19lbs 8oz | 7/20 | Denise Morrison, Manchester | Mississippi River, Allamakee |
| 19lbs | | Eric Smith, Manchester | Mississippi River, Allamakee |

Gar, Longnose (Minimum — 6 lbs.)

| | | | |
|-------------------------|---------------|----------------------------------|-----------------------------------|
| 17 lbs 8 ozs 51" | 9/1992 | Kevin Riley, Cedar Rapids | Mississippi River, Clayton |
|-------------------------|---------------|----------------------------------|-----------------------------------|

Gar, Shortnose (Minimum — 2 lbs.)

| | | | |
|--------------------------|---------------|------------------------------|---------------------------------|
| 4 lbs 7 ozs 28.5" | 2/1996 | Mark Lindeman, Dysart | Des Moines River, Marion |
| 2lbs 9oz | 8/15 | Larry D. Petersen, Atlantic | Quarry, Cass |

Goldeneye/Mooneye (Minimum — 1.25 lbs.)

| | | | |
|--------------------|---------------|------------------------------|------------------------------------|
| 2 lbs 4 ozs | 4/1992 | Mark Ekle, Farmington | Des Moines River, Van Buren |
|--------------------|---------------|------------------------------|------------------------------------|

Muskellunge (Minimum — 15 lbs. Or 40")

| | | | |
|-------------------------|---------------|--------------------------------------|-------------------------------|
| 45 lbs 9 ozs 52" | 9/1995 | Jerry L. Curry, Mitchellville | Spirit Lake, Dickinson |
| 40lbs 9oz | 10/24 | John Anderson, Estherville | Spirit Lake, Dickinson |
| 32lbs 15oz | 6/13 | Joe Kepford, Omaha | East Okoboji, Dickinson |
| 28lbs 11oz | 11/28 | Orville Belken, Arnolds Park | West Okoboji, Dickinson |
| 19lbs 6oz | 5/21 | Larry Towne, Hartley | West Okoboji, Dickinson |
| 17lbs 2oz | 8/5 | Dave Swanson, Alta | Little Sioux, Buena Vista |
| 16lbs 6oz | 3/30 | Brad Tiedemann, Mason City | Clear Lake, Cerro Gordo |
| 15lbs 15oz | 9/27 | Aaron Hultquist, Red Oak | West Okoboji, Dickinson |
| 15lbs 10oz | 1/3 | Tony Moore, Lake Park | East Okoboji, Dickinson |
| 15lbs 1oz | 7/23 | Bob Dezeeuw, Gilbert | West Okoboji, Dickinson |

RELEASED

| | | | |
|-------|-------|-----------------------------|-------------------------|
| 48.5" | | Marc/Robert Clough, Ventura | Clear Lake, Cerro Gordo |
| 48" | 10/11 | Todd Witt, Spencer | West Okoboji, Dickinson |
| 46" | | Eric M. Kennedy, Gretna | West Okoboji, Dickinson |

| WEIGHT/LENGTH | DATE | ANGLER, HOMETOWN | LOCATION, COUNTY |
|---------------|------|------------------|------------------|
|---------------|------|------------------|------------------|

Muskellunge, Tiger (Minimum — 15 lbs. Or 40")

27 lbs 2 ozs 47" 8/1989 Shannon Green, Spencer Spirit Lake, Dickinson

Northern Pike (Minimum — 10 lbs. Or 34")

| | | | |
|------------------|--------|------------------------------|------------------------------|
| 25 lbs 5 ozs 45" | 2/1977 | Allen Forsberg, Albert City | West Okoboji, Dickinson |
| 21lbs 13oz | 1/4 | Jim Ver Steeg, Sibley | West Okoboji, Dickinson |
| 18lbs 2oz | | Sandra Mc Grath, Eagle Grove | Iowa River, Wright |
| 15lbs 13oz | 5/25 | Jared Wolthuis, Okoboji | West Okoboji, Dickinson |
| 15lbs | 2/17 | Derek Evanson, Mona | Mississippi River, Allamakee |
| 14lbs 12oz | 8/31 | Ben Corell, Strawberry Point | Mississippi River, Allamakee |
| 14lbs 8oz | 8/24 | John N. Larsen, Nashua | Crystal Lake, Hancock |
| 13lbs 10oz | 6/23 | Cecil Glawe, Corwith | Lost Island, Palo Alto |
| 13lbs 3oz | 6/27 | Roger Stanley, Sgt Bluff | Snyder Bend, Woodbury |
| 13lbs 2oz | 10/28 | Robert Tran, Algona | Lost Island, Palo Alto |
| 13lbs 1oz | 6/20 | Tim Stellmach, Milford | Spirit Lake, Dickinson |

RELEASED

| | | | |
|-------|-------|--------------------------------|------------------------------|
| 43" | | Barbara Boose, Urbandale | Des Moines River, Polk |
| 40" | 6/14 | L. Mendoza, Council Bluffs | Blue Lake, Monona |
| 36.5" | 5/24 | Les Forbes, Coralville | Iowa River, Johnson |
| 36" | 4/20 | Marty Cundiff, Pocahontas | Lost Island Lake, Palo Alto |
| 36" | 6/4 | Shane Mc Govern, Waterloo | Mississippi River |
| 35.5" | 9/13 | Rick Miersen, Strawberry Point | Mississippi River, Clayton |
| 35" | 3/24 | Leo Matties, Cedar Rapids | Mississippi River, Allamakee |
| 35" | 9/21 | Scott Soyer, Antioch | West Okoboji, Dickinson |
| 35" | 12/27 | Brett K. Monteleone, Newton | Red Rock Dam, Marion |
| 34.5" | 5/24 | Sherri J. Thompson, Mallard | Lost Island Lake, Clay |
| 34" | 12/27 | Mike T. Monteleone, Newton | Red Rock Dam, Marion |
| 34" | 12/28 | David L. Wolfe, Newton | Red Rock Dam, Marion |
| 34" | 8/24 | Robert Coleman, Iowa City | Cedar River, Linn |
| 34" | 2/23 | Bob Schroeder, Postville | Mississippi River, Allamakee |

Paddlefish (Minimum — 25 lbs.)

107 lbs 69.5" 3/1981 Robert Pranshke, Onawa Missouri River, Monona

Perch, Yellow (Minimum — 1 lb.)

| | | | |
|--------------------|--------|-------------------------------|------------------------|
| 2 lbs 3 ozs 14.75" | 3/1994 | Daniel Borchardt, Mason City | Morse Lake, Wright |
| 1lbs 10oz | 3/17 | Mick Raper, Marathon | Silver Lake, Palo Alto |
| 1lbs 10oz | 3/23 | Mrs. Bert Baxter, Spencer | Silver Lake, Palo Alto |
| 1lbs 9oz | 11/18 | Rod Douma, Sanborn | Silver Lake, Palo Alto |
| 1lbs 8oz | 1/27 | Tim Murphy, Ruthven | Silver Lake, Palo Alto |
| 1lbs 8oz | 1/14 | Bruce Loring, Ruthven | Silver Lake, Palo Alto |
| 1lbs 8oz | 5/3 | Cork Rozeboom, Sanborn | Silver Lake, Palo Alto |
| 1lbs 7oz | 1/27 | Gene Hall, Dickens | Silver Lake, Palo Alto |
| 1lbs 6oz | 3/8 | Jesse D. Fields, Greenville | Silver Lake, Palo Alto |
| 1lbs 6oz | 12/26 | Keith Hulsebus, Harlan | Silver Lake, Palo Alto |
| 1lbs 6oz | 1/27 | Mike Tuttle, Durant | Silver Lake, Palo Alto |
| 1lbs 6oz | 1/27 | Greg Reylds, Wilton | Silver Lake, Palo Alto |
| 1lbs 5oz | 3/1 | Darren Honsbruch, Kingsley | Silver Lake, Palo Alto |
| 1lbs 5oz | 1/30 | Shayne Pomery, Ayrshire | Silver Lake, Palo Alto |
| 1lbs 5oz | 3/7 | Scott D. Johnson, Albert City | Silver Lake, Palo Alto |

| WEIGHT/LENGTH | DATE | ANGLER, HOMETOWN | LOCATION, COUNTY |
|---------------|------|------------------|------------------|
|---------------|------|------------------|------------------|

Sauger (Minimum — 2.5 lbs. Or 18")

| | | | |
|----------------|---------|--------------------------------|----------------------------|
| 6 lbs 8ozs 25" | 10/1976 | Mrs. W. Buser, Sloan | Missouri River, Woodbury |
| 4lbs 8oz | 3/28 | Dave Huberty, Dyersville | Mississippi River, Clayton |
| 4lbs 7oz | 10/19 | Le Roy J. Guffy, Sioux City | Missouri River, Woodbury |
| 4lbs 2oz | 5/8 | Dale Divis, Sioux City | Missouri River, Woodbury |
| 3lbs 8oz | 10/28 | Dan Crow, Cedar Rapids | Iowa River, Johnson |
| 3lbs 8oz | 11/25 | C. Kauffmann, Strawberry Point | Mississippi River, Clayton |
| 3lbs 6oz | 11/7 | Alan Andresen, Lost Nation | Mississippi River, Jackson |
| 3lbs 6oz | 11/16 | Mike Fischer, Manchester | Mississippi River, Clayton |
| 3lbs 5oz | 10/5 | Tyler J. Guffy, Sioux City | Missouri River, Woodbury |
| 3lbs 4oz | 12/4 | Donald L. Ringier, East Moline | Mississippi River, Jackson |
| 3lbs 4oz | 3/25 | Tim Lawson, Manchester | Mississippi River, Clayton |
| 3lbs 4oz | 7/11 | Lurlin Schermer, Charles City | Mississippi River, Clayton |
| RELEASED | | | |
| 24.5" | 10/30 | Paul Kiecksee, Cedar Rapids | Mississippi River |
| 22" | 3/31 | Greg Buckendahl, Manchester | Mississippi River, Clayton |
| 21.5" | 3/22 | Larry Goranson, Manchester | Mississippi River, Clayton |
| 21" | 3/29 | M. Schumacher III, Dubuque | Mississippi River, Dubuque |
| 21" | 7/19 | Bob Dupont, Dubuque | Mississippi River, Dubuque |
| 20.5" | 11/1 | James A. Egan, Dubuque | Mississippi River, Dubuque |
| 19.5" | 11/8 | Adam Dupont, Dubuque | Mississippi River, Dubuque |
| 18" | 6/22 | Bill Ginter, Dubuque | Mississippi River, Jackson |

Saugeye (Minimum — 6 lbs. Or 25")

| | | | |
|-----------------|--------|-----------------------------|----------------------------|
| 9 lbs 2 ozs 27" | 4/1996 | M. McGilligan, Webster City | Des Moines River, Polk |
| 6lbs | 6/11 | Joe B. Ross, Grant City | 12 Mile Lake, Union County |

Sturgeon, Shovelnose (Minimum — 3 lbs.)

| | | | |
|------------|--------|-------------------|-----------------------------|
| 12 lbs 33" | 4/1974 | Randy Hemm, Douds | Des Moines River, Van Buren |
|------------|--------|-------------------|-----------------------------|

Sucker (Minimum — 4 lbs.)

| | | | |
|--------------------|--------|--------------------------------|-------------------------|
| 15 lbs 1 oz 32.25" | 9/1983 | Glen E. Dittman, Onawa | Missouri River, Monona |
| 5lbs 10ozs | 3/12 | Thomas R. Sandersfeld, Elkader | Yellow River, Allamakee |

Sunfish (Minimum — 1 lb.)

| | | | |
|-----------------------|------|------------------------------|------------------|
| *1 lbs 14 ozs 11 3/8" | 6/3 | Russ Farrell, Prairie City | Farm Pond, Union |
| 1lbs 6oz | 6/3 | Dave Peters, Creston | Farm Pond, Union |
| 1lbs 5oz | 6/3 | Gary W. Rosenkrans, Waterloo | Farm Pond, Union |
| 1lbs 4oz | 6/3 | Douglas Farrell, Forest City | Farm Pond, Union |
| 1lbs 1oz | 8/16 | Mitch Geers, Cedar Rapids | Pond, Linn |

Trout, Brook (Minimum — 1.5 lbs. Or 15")

| | | | |
|--------------|--------|---------------------------------|----------------------------|
| 7 lbs 19.75" | 7/1996 | Doug Kovarik, Marion | Fountain Springs, Delaware |
| 5lbs 8oz | 7/12 | Kurt Paulsen, Des Moines | Trout Run, Winneshiek |
| 5lbs | 6/4 | Wayne D. Genz, Mona | Big Paint Creek, Allamakee |
| 3lbs 7oz | 5/2 | Maurice E. Garrison, Bettendorf | Dalton Lake, Jackson |
| 2lbs 5oz | 3/28 | Gary Gress, Waterloo | Village Creek, Allamakee |
| 1lbs 13oz | 6/19 | Mark Berkenbosch, Newton | Fountain Springs, Delaware |
| 1lbs 13oz | 12/24 | Corey K. Meyer, Calmar | South Bear, Winneshiek |
| 1lbs 9oz | 6/4 | Josh Hazen, Muscatine | Joy Spring, Fayette |
| 1lbs 8oz | 8/20 | Sarah Myhre, Decorah | Cae Creek, Winneshiek |
| 1lbs 8oz | 8/1 | Merle Kaesser, Waverly | Joy Springs, Clayton |
| RELEASED | | | |
| 17" | 5/14 | Richard O. Andrus, Carlisle | Little Paint, Allamakee |
| 15" | 7/3 | Bob Hansen, Cedar Falls | Wexford, Allamakee |
| 15" | 11/21 | Jamie Mincks, Decorah | Trout Run, Winneshiek |

| WEIGHT/LENGTH | DATE | ANGLER, HOMETOWN | LOCATION, COUNTY |
|---|--------|---------------------------------|------------------------------|
| Trout, Brown (Minimum — 3 lbs. Or 18") | | | |
| 15 lbs 6 oz 29" | 6/1995 | Gerold Lewis, Gladbrook | N. Prairie Lake, Black Hawk |
| 10lbs 6oz | 7/9 | Scott Echelberger, Otho | Upper Swiss, Dubuque |
| 9lbs 4oz | 6/29 | Mary Kay Spahn, Dubuque | Bankston, Dubuque |
| 9lbs 1oz | 3/25 | Caleb C. Schnitzler, Decorah | Coldwater, Winneshiek |
| 7lbs 9oz | 6/4 | Thomas Z. Watkins, Cedar Falls | Joy Springs, Clayton |
| 7lbs 9oz | | Ron Bramow, Lawler | North Bear, Winneshiek |
| 7lbs 3oz | 6/15 | Rich Kuehl, De Witt | Little Mill, Jackson |
| 6lbs 2oz | 3/16 | Harry J. Meek Sr., Independence | Maquoketa River, Clayton |
| 6lbs 1oz | 3/2 | Dana Dowd, New Hampton | Waterloo, Allamakee |
| 6lbs | 6/13 | Robert Reeder, Northwood | South Bear, Winneshiek |
| 5lbs | 5/19 | Maurice E. Garrison, Bettendorf | Dalton Lake, Jackson |
| Trout, Rainbow (Minimum — 3 lbs. Or 18") | | | |
| 19 lbs 8 ozs 35" | 7/1984 | Jack Renner, Waterloo | French Creek, Allamakee |
| 13lbs 1oz | 8/6 | Brett Daryl Bolson, Lansing | Clear Creek, Allamakee |
| 12lbs 13oz | 8/5 | Mike Amundson, Waterloo | Wexford Creek, Allamakee |
| 12lbs 10oz | 8/19 | Bryan Timmermann, Waterloo | Coldwater Creek, Winneshiek |
| 12lbs 8oz | 7/17 | Cyril Platten, Harpers Ferry | Wexford Creek, Allamakee |
| 12lbs 2oz | 6/22 | Matt Mc Cloud, Oskaloosa | Richmond Springs, Delaware |
| 11lbs 3oz | 5/21 | Scott Shifflett, Webster | Sny Magill, Clayton |
| 10lbs 8oz | 3/3 | Marvin L. Janis, Perry | North Bear, Winneshiek |
| 10lbs 6oz | 8/7 | Josh Decker, Evansdale | French Creek, Allamakee |
| 10lbs 6oz | 5/18 | Todd Passig, Spring Grove | Waterloo Creek, Allamakee |
| 10lbs 2oz | 6/7 | Rob Grangaard, Waterville | Big Paint, Allamakee |
| 9lbs 12oz | 6/13 | Barbara Ann Sprague, Delmar | Big Mill, Jackson |
| 9lbs 12oz | 7/30 | Nick Decker, Evansdale | Glovers Creek, Fayette |
| RELEASED | | | |
| 28" | 8/25 | Rick Hokenson, Oelwein | Sny Mygill, Clayton |
| 27" | | Raymond Blanchard, Decorah | Coldwater, Winneshiek |
| Walleye (Minimum — 8 lbs. Or 28") | | | |
| 14 lbs 8 ozs 30.5" | 9/1986 | Gloria Eoriatti, Ankeny | Des Moines River, Polk |
| 12lbs 6oz | 3/30 | Brad Krousie, Marion | Mississippi River, Allamakee |
| 12lbs 4oz | 4/2 | Joe Nelson, Greene | Shell Rock River, Butler |
| 11lbs 12oz | 3/31 | Scott Grapp, Cedar Falls | Mississippi River, Allamakee |
| 11lbs 5oz | 11/8 | Robert (Rocky) Saland, Waterloo | Mississippi River, Allamakee |
| 10lbs 15oz | 3/9 | Marc A. Clark, Spencer | Silver Lake, Dickinson |
| 10lbs 13oz | 1/30 | Doyle Leiss, Spirit Lake | West Okoboji, Dickinson |
| 10lbs 13oz | 4/5 | Randy Simmen, Central City | Wapsipinicon, Linn |
| 10lbs 11oz | 3/28 | Todd Jeffery, Wyoming | Mississippi River, Jackson |
| 10lbs 8oz | 6/28 | Ted J. Godden, Waukon | Mississippi River, Allamakee |
| 10lbs 8oz | 12/19 | Eugene Riley, McGregor | Mississippi River, Allamakee |
| 10lbs 8oz | 2/24 | Tony Yeggy, North Liberty | Iowa River, Johnson |
| 10lbs 4oz | 3/9 | Doug Clark, Bellevue | Mississippi, Jackson |
| RELEASED | | | |
| 29" | 7/21 | Dan Cahey, Sherrill | Mississippi River, Dubuque |
| 29" | 9/25 | Mike Dennert, Lake Park | Silver Lake, Dickinson |
| 28.5" | 9/1 | Tyler Corell, Strawberry Point | Mississippi River, Allamakee |
| 28.5" | 9/6 | Robert G. Hansen, Lansing | Mississippi River, Allamakee |
| 28.25" | 6/6 | Mark Mitchell, Estherville | Little Spirit, Dickinson |
| 28" | 6/14 | Steve Pfiffner, Harper Ferry | Mississippi River, Allamakee |
| 28" | 6/22 | Bill Ginter, Dubuque | Mississippi River, Jackson |
| White Amur (Minimum — 25 lbs.) | | | |
| 53 lbs 48" | 5/1996 | A. Benton/WG Jr, Bridgewater | Lake Greenfield, Adair |
| 48lbs | 7/6 | Clint Engle, Adair | Farm Pond, Adair |
| 33lbs 12oz | 4/30 | Todd Rettig, Robins | Pleasant Creek Lake |
| 31lbs | 6/15 | Jeff Powell, Casey | Bridgewater Lake, Adair |

IOWA CONSERVATIONIST MAGAZINE

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1997 FISH AWARDS

IOWA CONSERVATIONIST MAGAZINE

If you catch a fish eligible for submission for a big fish award, please fill out this entry blank. For many of the predator species, you may release the fish and still receive a big fish award by meeting the listed length limitations. One witness must attest to the weight of the fish to the nearest ounce on scales legal for trade, or to the length, which is measured from the tip of the snout to the tip of the tail (total length). If there is some doubt in species identification, the angler should contact the nearest DNR personnel in the area for verification.

New all-time record fish must be examined and verified by DNR personnel.

The entry blank should be filled out and mailed with a photo or color slide of the angler and fish to: Fish Records, Iowa Department of Natural Resources, Wallace State Office Building, Des Moines, IA 50319-0034. Photo will be returned to angler. Large fish will be recognized for each year as well as all-time records over a period years. An angling award certificate and shoulder patch will be sent to the angler for each qualifying entry. The top 10 record fish and released of each species are listed each year in the *Iowa Conservationist*.

ENTRY BLANK FOR IOWA RECORD FISH
(One entry per species, per year. Please print.)

Name _____
 Street/RFD _____
 City _____ State _____ Zip _____
 Species _____ Date _____
 Name of lake/stream _____
 County where caught _____ Total Length _____
 Weight _____ Bait or lure used, etc. _____
 Was this fish released (circle one)? Y N
Witness
 Name _____
 City _____ State _____ Zip _____

(Entries of fish caught during the current year must be sent to the Iowa Department of Natural Resources by January 15 of the following year.)

YOUR EARTH

Reuse aluminum foil and plastic wrap, or avoid them completely by using plastic containers.

Use cold water rather than hot water whenever possible for kitchen tasks and laundry.

Don't use excessive amounts of detergent. Presoak dirty laundry.

Install water-conserving showerheads and sink-faucet aerators.

Insulate your water heater.

Limit or eliminate your use of "disposable" items.

Minimize the use of garden chemicals by weeding.

Caulk and weather-strip doors and windows.

Compare Energy Guide labels when buying appliances.

Buy rechargeable batteries.

Tune up your car regularly for maximum gas mileage.

Don't speed; accelerate and slow down gradually.

Share rides to work or use public transportation.

Run your dishwasher only when full.

Avoid products made from tropical rainforest woods.

Run your dishwasher only when full and use the energy saver cycle.

Choose a light-colored car with tinted glass to lessen the need for air conditioning.

Use mulch and natural ground covers in gardens to contain moisture and conserve water use.

Replace incandescent bulbs with more efficient screw-in compact fluorescent bulbs or fluorescent fixtures.

To The Rescue

Black Hawk Lake Gets Some Much-Needed Help

by Lannie R. Miller



Ron Johnson

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Black Hawk Lake, near Lake View in Sac County, has been around for a long time. A natural lake, Black Hawk was formed about 14,000 years ago when the last glacier moved across northwest Iowa.

Core sample borings revealed the lake was never very deep, probably 15 to 20 feet at the deepest. With the arrival of the Europeans and modern farming practices, Black Hawk Lake began a downward trend in both water quality and water volume. A portion of the lake was dredged by the Iowa Conservation Commission in the 1930s,

but by the early 1970s this area was silted in and the average depth of the lake in 1979 was 5.5 feet.

Because of low oxygen levels in the winter months, fish kills occurred frequently in the late 1960s and early 1970s. A severe fish kill occurred in 1974 which decimated the game fish and left a huge population of stunted carp, buffalo and bullheads. Although game fish were stocked the next spring, partial winter kills in 1976 and 1977 again reduced their numbers drastically.

A long-range plan was started in 1978 to improve Black Hawk Lake.

That year, a winter aeration system -- the first in Iowa -- was installed in the Town Bay area to help reduce or eliminate winter kill problems by keeping a portion of the lake ice-free. This proved to be very successful and in the fall of 1979, the entire fish population of Black Hawk Lake was chemically renovated and game fish were restocked.

Although the problem of low oxygen levels in the winter was controlled, shallow water depths and continued siltation still affected the water quality and recreational potential



Lannie Miller

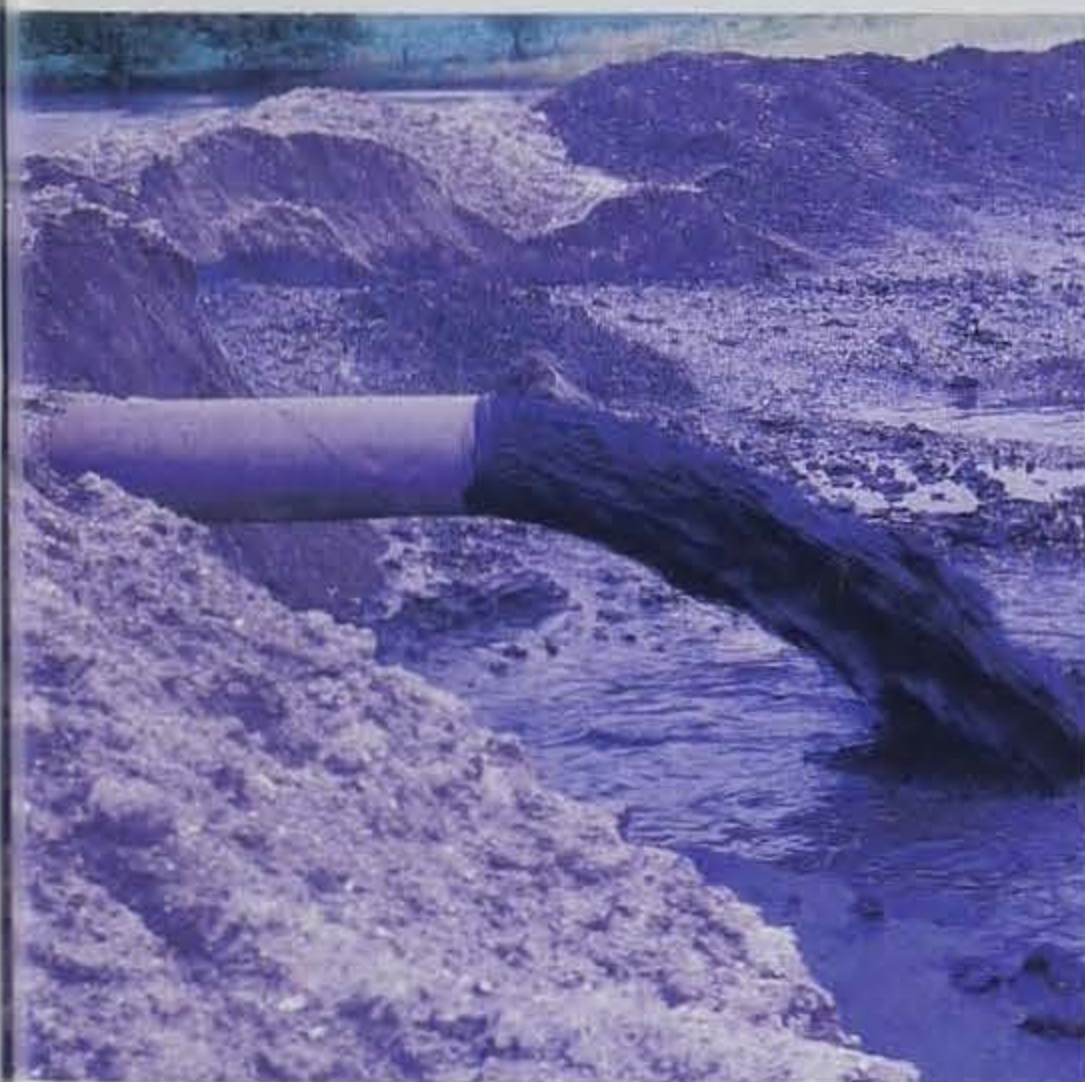
Clockwise beginning at left: Water quality was monitored before and after the dredging project. Water quality is noticeably improved.

Hydraulic dredge in operation on Black Hawk Lake. Rocky fish habitat being placed in the lake. Four such structures were added for anglers' benefit.

Silt being pumped into a spoil site. More than one million cubic yards of sediment were removed from Black Hawk.



Lannie Miller



Lannie Miller



Lannie Miller

Fish kills, due to low oxygen levels in the winter months occurred frequently. In 1978, a winter aeration system was installed to help reduce or eliminate winter kill problems by keeping a portion of the lake ice-free.



Ron Johnson

of this natural lake. More remedial work would have to be done to save one of Iowa's natural treasures.

In the late 1970s, the Iowa Conservation Commission, in conjunction with the Environmental Protection Agency, began a study of lakes in Iowa. Under the Clean Lakes Program, this study was designed to identify problem lakes and to recommend remedial action. Three restoration measures were suggested to help improve Black Hawk Lake. The first step was to continue the winter aeration project to protect aquatic life throughout the winter months.

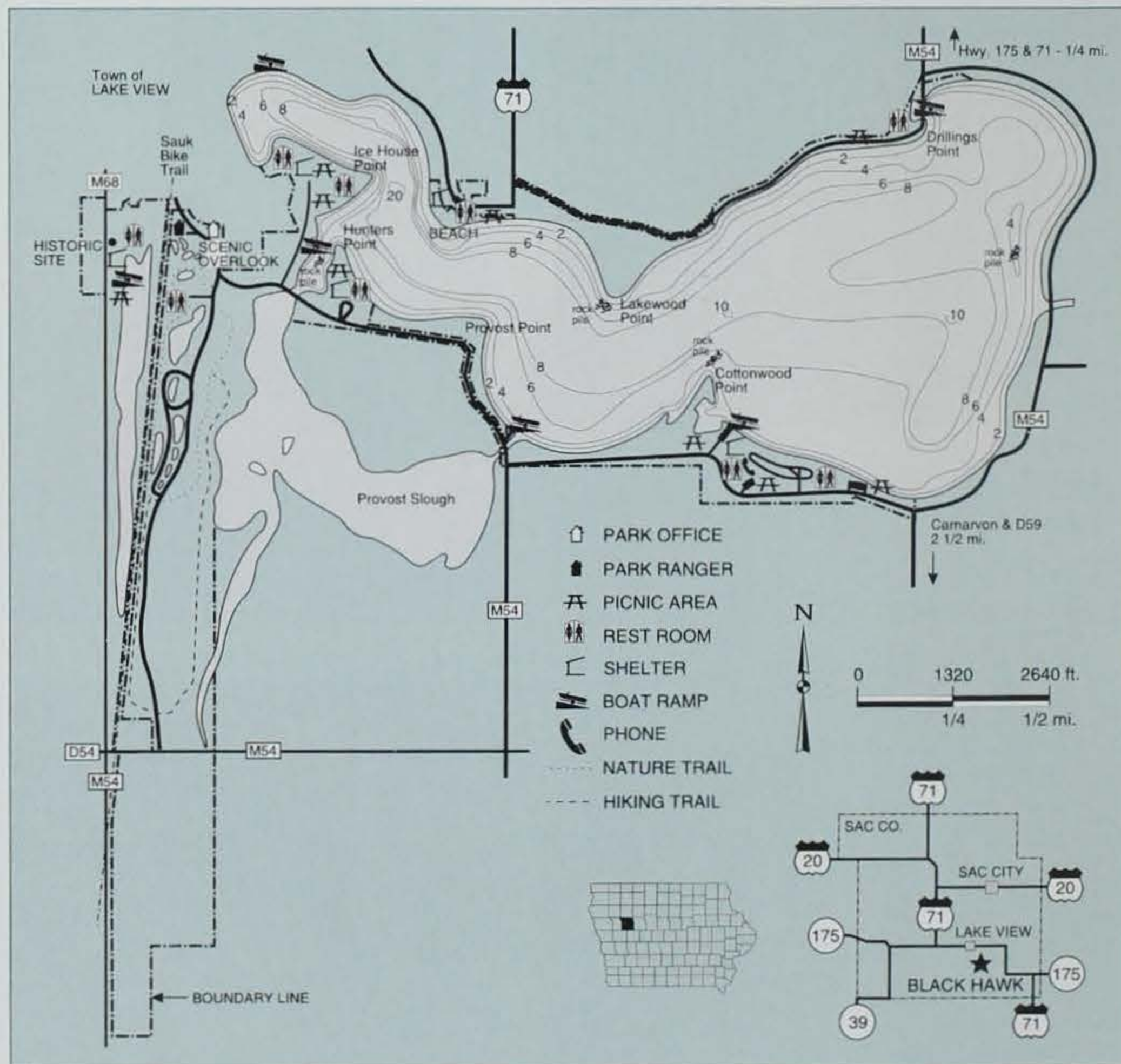
The second measure was to intensify conservation practices within the watershed. It would do little good to dredge if the lake continued to silt in at the present rate. The Soil Conservation Service (SCS) reported that soil loss on cropland in the watershed was 7.7 tons per acre per year. Approximately 76

percent of the watershed is in intensive cropland. Construction of terraces and grassed waterways was suggested as a practical means of reducing soil erosion.

The third measure to restore Black Hawk Lake was in-lake dredging, a logical step to follow erosion control. A portion of the lake was to be dredged to a depth of eight feet, helping to prolong the useful life of the basin.

The soil conservation work on the watershed began in 1986. Expenses were cost-shared with private landowners on a 75/25 percent basis, with landowners paying the lesser amount. More than 115,000 feet of terraces and 34 acres of waterways, were built during the project, along with several other conservation methods.

The first phase of the hydraulic dredging began in 1991 and ended in 1993, with L.W. Matteson Company removing 589,125 cubic yards of silt



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Ren Johnson

from approximately 240 surface acres. The spoil site was purchased from a local landowner south of the lake. One fish habitat structure, made up of 200 tons of native fieldstone, was placed in Black Hawk Lake during the first dredging operation. Additionally, a hole 20 feet deep was dredged off Ice House Point to provide deep-water habitat.

The second phase of the dredging was begun in 1993 and completed in 1995. Monies left over from the initial dredging project, state legislative appropriations and local contributions were used to dredge more areas in the lake proper. Magruder Construction Company removed 448,721 cubic yards of silt and placed three additional fish habitat structures, consisting of 650 tons of fieldstone, during the second phase of dredging.

Chemical and physical water quality parameters were sampled in Black Hawk Lake from 1986 to 1995 to determine long-term water quality trends and to document improvement in water quality. Water clarity steadily increased over the study period while chlorophyll-a and phosphorus measure-

ments decreased. Since chlorophyll-a is an indicator of algae growth and phosphorus is an important limiting factor in the growth of algae, these trends are positive for the health of Black Hawk Lake.

Since the Clean Lake Program's inception in 1986, the fish population has been monitored to note changes. Walleye, catfish, bullheads, crappie and perch are now abundant and have made Black Hawk Lake an anglers paradise once again. In 1996, anglers fished a total of 64,497 hours and harvested 26,834 fish. In 1997, they fished a total of 170,577 hours and harvested 34,115 fish.

The restoration of Black Hawk Lake through the Clean Lake Program has been a huge success. The lake dredging projects removed more than one million cubic yards of sediment from the lake. Water quality is noticeably improved and the fishing in Black Hawk Lake is reminiscent of the "good old days." Our old friend has been given a new life.

Lannie R. Miller is a fisheries biologist for the department located at Lake View.

The restoration of Black Hawk was a huge success. Fishing is now reminiscent of the "good old days," with walleye, catfish, bullhead, crappie and perch at abundant levels.



MY MEMORIES OF THE VOLGA

by Roger Matz

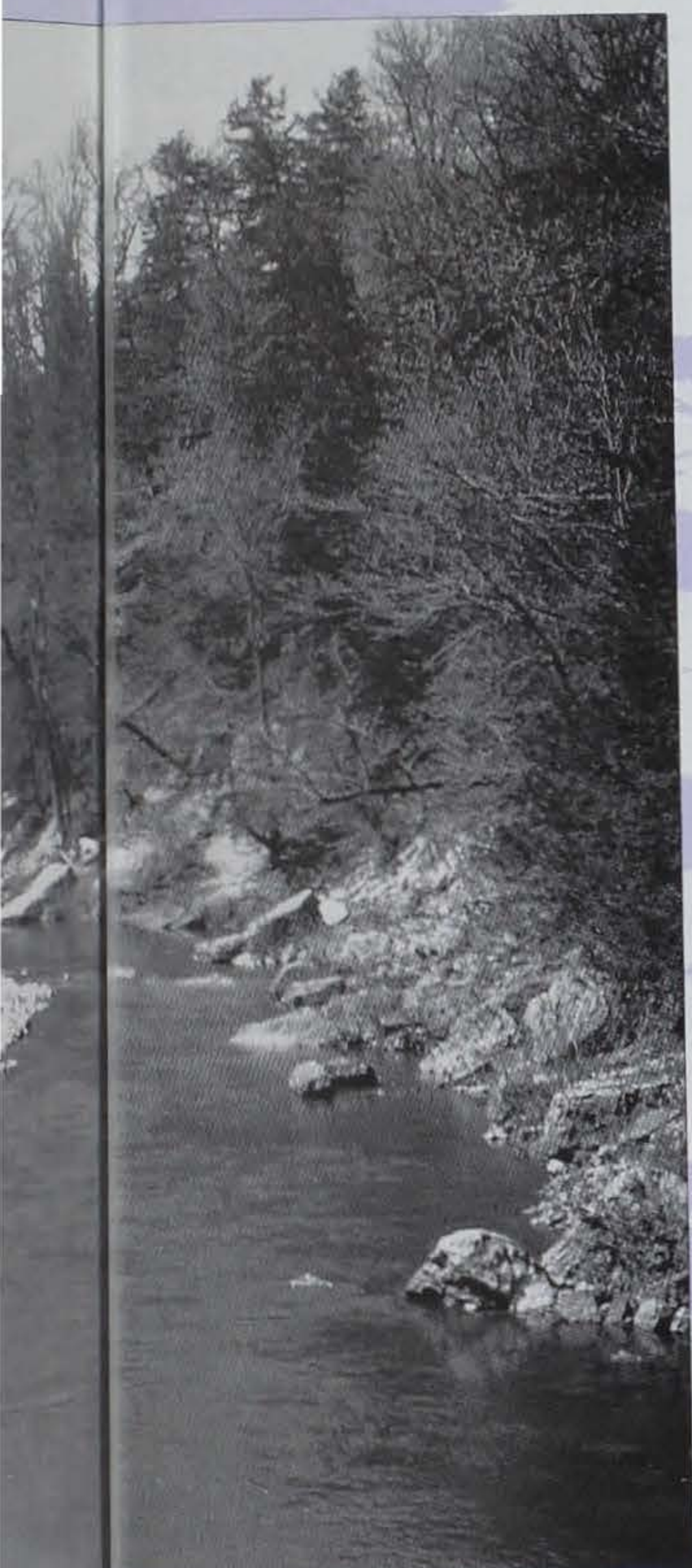
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DNR Photo

It was 44 years ago, but I can still feel the bamboo flyrod flexing, still hear the worn, chipped line rattling through the guides, still see the tiny green popper arching above a shallow pool on the Volga River near Fayette.

A smallmouth saw this popper coming. A swirl roiled the surface, and instant tension came on the leader as I raised the tip, set the hook and began gathering line. It wasn't much of a smallmouth, maybe eight or nine inches, but beautifully colored, strong and full of fight. For a 15-year-old Waterloo boy more accustomed to nightcrawlers and bullheads, it was an adrenaline-pumping thrill. Several smaller bass followed the struggling fish, telling me there were more to catch from that pool later in the day.

Who knows how many smallmouth and rock bass my two junior high classmates and I caught during that three-day camping trip in 1954? The aggressive bass, the clean, cold water, the melody of riffles, the solitude, the immense limestone bluff near our campsite, all branded my soul. The Volga became the yardstick by which I measured every river I've waded and fished during the past four decades.

After that camping trip, I fished other stretches above and below Fayette and angled for trout in three of the Volga's tributaries—Grannis Creek, Frog Hollow Creek and Brush Creek. I also slung my .22 over my shoulder and hunted red and gray squirrels along the wooded banks and timbered bluffs overlooking some of northeast Iowa's most scenic terrain.

In 1966, I left Waterloo on a nomadic 30-year journalism career leading across southwest Minnesota, northeast South Dakota, northwest Iowa, then back to Minnesota. My Volga experience languished as a once-upon-a-time memory, a long-ago chapter in my life, but always remained a comparative benchmark.

Like a good book, that chapter itched for a rereading, a revisiting of "my spot" on the river. What might it be like today? Still pristine or polluted? Would there be bass, smallmouth and rock, streaking

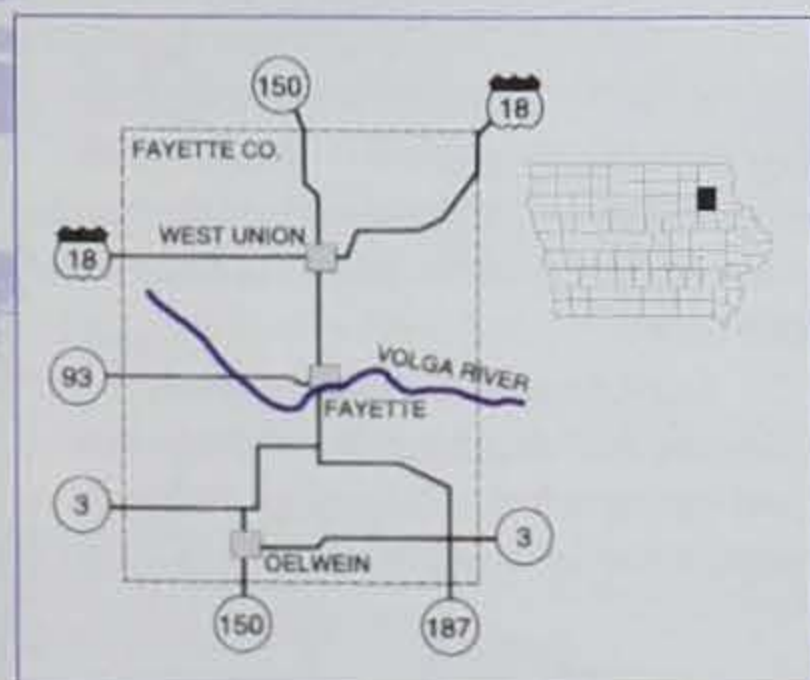
through the riffles, or would it be populated only by suckers? After all, my memories of the Volga implanted themselves when fence row-to-fence row farming was just starting in earnest, before four-wheel drive tractors ruled the fields, before barrels of insecticides and herbicides gushed over the land.

The urge to know, to journey back in time, grew stronger. Returning from a visit to Waterloo two years ago, I detoured 30 miles off Highway 63, taking Highway 93 through Tripoli and Sumner to Klock's Island City Park at the west edge of Fayette. Then I turned south on what I remembered as a half-mile dead-end gravel road leading to a pasture sloping down to the river. We'd carried a heavy canvas wall tent through that pasture, then waded across to establish camp on a high, flat bank.

Memory is imperfect. The road was twice as long as I remembered. It ended in a turnaround I didn't recognize. The pasture, overgrown with brush and trees, no longer provided a view of the river or the limestone face of an immense bluff near our campsite. Worse yet, NO TRESPASSING signs lined the turnaround, emphatic and insistent in their redundancy. I made a slow loop and headed back, feeling empty and disappointed. My detour had been a waste of time and 60 miles.

But the notion of re-visiting this spot grew stronger when we moved a year later to Stewartville, south of Rochester, Minnesota. The topography and geology of my new surroundings, with clear streams and limestone bluffs amidst the prairie landscape, constantly reminded me of my boyhood forays in northeast Iowa. One Sunday afternoon in June 1997, after landing a three-pound smallmouth in the Zumbro River, I decided to put a Volga visit on my summer calendar. Two months later, on a weekday morning, my 13-year-old stepson and I loaded waders and a pair of light spinning rods into the car, and headed south. What better person to share this adventure with than a youngster who is about the same age as I was when the Volga left an indelible mark on me?

Fishing the Volga, circa 1950.





Jarred Hurras



Roger Matz



Roger Matz

At the end of the gravel road, the proliferation of NO TRESPASSING signs turned us back to Klock's Island City Park, where we began our upstream march. The water was low and clear and I felt sure an hour's wade would bring us to that long-ago campsite. My stepson, Jarred, carried our tackle — small Mepps spinners, a few jigs and some little spoons — in a plastic box slung over his shoulder with twine. I carried my 35-mm camera around my neck. We brought no stringer, intending this to be a catch-and-release trip, more of a hike backward in time than a fishing expedition.

We did much more wading than casting, aiming our lures into only the most promising riffles and pools. I splashed a Mepps within inches of an overhanging bank, and was rewarded by the solid slam bass I'd caught in the Volga as a youth. Jarred, who is more attuned to playing electronic games than fishing, was impressed. I handed him the camera with hasty suggestions on how to compose the picture, posed self-consciously while he pressed the shutter, and then released the bass. Rather than streak to deeper water, the smallmouth tagged along behind Jarred as he waded upstream, sometimes almost at his heels. "He's adopted you," I laughed.

The Volga twisted and turned, but nothing seemed familiar. Vibrations from highway traffic faded, leaving us with the sounds of birds, rustling leaves, humming insects and the splashing, sucking noise of our wading. After two hours, we came upon a pair of cement piers from an abandoned railroad bridge, a bridge that surprised me. We never heard a train on that long-ago camping trip. In one of the piers, a date had been cast — 1945. "Wow, that's really old," Jarred observed. "Yes, it is," I agreed, mentally calculating that this bridge was relatively new when I was Jarred's age, a major investment by a railroad company that couldn't predict its own rapidly approaching collision with the trucking and airline industries.

I cast 15 yards to the first pier, banging the Mepps against the concrete and letting it sink in a deep, gray-hued pool. I barely made one turn of the reel

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handle before a smallmouth grabbed the spinner and dove for the bottom. Another exhilarating struggle, another "wow" from Jarred, and I released a smallmouth nearly as nice as the first.

The answers to my questions were beginning to come. Yes, smallmouth still inhabit the Volga. Even in our hurry, we caught eight, including the two 13-inchers. Jarred landed a rock bass, a reassuring catch because the presence of that species indicates good water quality. Yes, the water was still clear, although there seemed to be more silt carpeting the stream bed than I remembered. And solitude still reigned. No footpaths had been tramped along the banks and we saw only one faint imprint of tracks left by another wader. Perhaps I wasn't looking close enough, but the small crayfish we'd hunted for live bait on that camping trip appeared to be absent. However, there were plenty of clams, dragging themselves along the sandbars in curious, circular patterns. We laughed at the aimless tracks they left in the soft bottom, joked about them "driving drunk."

After three hours of wading, Jarred and I arrived at what was, unmistakably, my spot. What a feeling of triumphant arrival, of mission accomplished! My mind began slipping back and forth, juggling the past and the present. The small bluff on my right seemed somewhat diminished, less striking than I remembered. Trees and brush overwhelmed the former pasture on both sides of the river. It would take an hour's hacking with an ax to clear enough space for the cumbersome tent erected there in 1954. But the big bluff, the one that seemed to stand 75 feet tall and stretch endlessly upstream, was still impressive. It formed half a canyon, curving at the end to dump the constricted river into what we called the "flats," a wide, shallow stretch ideal for fishing with poppers and dry flies. Boulders that could have broken from the bluffs eons ago clogged the stream as it exited this half-canyon, creating rushing, tumbling rapids and deep hiding spots for bass.

I stood on one of those boulders, sweating and tired, with a feeling of accomplishment, of discovery, experiencing a moment of *déjà vu* that was "worth

the trip." Then I set on another wide rock, more to reflect than to rest, and transported myself back in time. Fuzzy memories began to clarify. I sniffed for the smell of our campfire, listened for the splashes of tail-walking bass, strained to hear the voices of my friends. Their names, Mike Flaherty and Ralph Potter, had youthful faces once more. They seemed within casting distance of the rock where I sat. I felt that nine-foot bamboo rod in my hand again and heard the whistling of my back-casts.

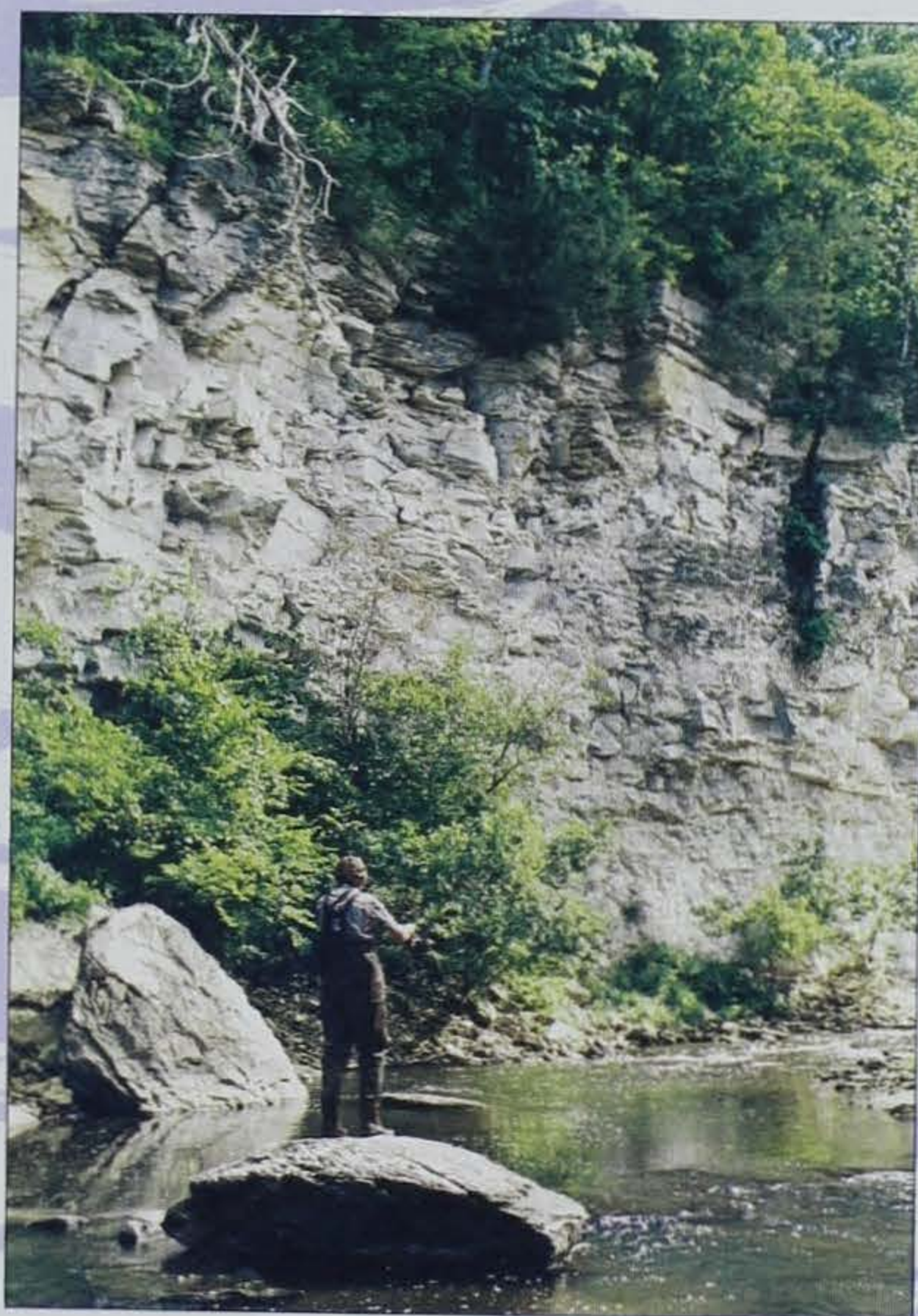
How blessed I was to have this experience in my youth, how fortunate I was now to rediscover the well-hidden spot with Jarred. Will he someday have a son — and a private outdoor haunt to share?

Given more time — and more stamina — I would have marched on to find a spring further upstream, curious to know if it still boiled from the base of the bluff or if its aquifer had been depleted during the past four decades. But the camera around my neck seemed as cumbersome as a chunk of stone. My rubbery legs felt as if I'd been doing wind-sprints for hours. Even my glasses weighed heavily on my ears and nose.

So, with one backward look, perhaps my final look at that spot, we turned downstream and waded another three hours back to the park and the end of my nostalgic adventure, Jarred's introduction to a long-lost chapter in my life.

Roger Matz specializes in medical and business writing and is the head of Matz Media in Stewartville, Minnesota.

"It was 44 years ago, but I can still feel the bamboo flyrod flexing, still hear the worn, chipped line rattling through the guides . . ."



Above: Matz casts into a pool at the base of a bluff where he camped with two friends in 1954.

Opposite Page (top to bottom): This 13-inch smallmouth is bigger than any bass Matz caught 44 years ago. Clams trace circular tracks in shallows of the Volga River. Jarred Huiras retrieves his lure from the depths next to a pier from an abandoned railroad bridge on the Volga near Fayette.

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*Called beggars' ticks, Spanish needles, tick-
seed sunflower or bur marigolds, these flowers
produce barb-covered, two-pronged fruits.*

Hitching a Ride

by Craig Anderson
photography by Jim Rathert

Plants use those pesky, sticky seeds and fruits to expand their range.


In the late 1940s a Swiss engineer was taking a nature walk with his dog when he noticed cockleburs sticking to his pants. The engineer was curious about these “sticky seeds” and took a closer look at them using a microscope. He found something that gripped him: the burs were covered with hooks that stuck in the fibers of his clothes. He was fascinated by this finding, began experimenting and, a few years later, he patented a product called Velcro®.

Why would cockleburs go for a ride on a Swiss engineer? If we want to go somewhere, we have lots of choices. We can walk, bike or go by car. Plants, if you'll pardon the pun, are more rooted. When a plant needs to move it has to do so vegetatively, such as when strawberry plants send out runners, or go by seed. The movement of a seed from its parent to another place is called seed dispersal.

There are many different types of “sticky seeds” in Missouri, some of which are seeds and others that are actually fruits. Some common ones are beggars' ticks, Spanish needles, tick trefoil, cheatgrass, needlegrass, burdock and cocklebur. Seeds of broad-leaved plantain are about as small as the head of a pin, while the fruits of cockleburs can be as wide as a nickel. The fruits of burdock are shaped like a top and others,



Plants use anything that moves—dogs, animals or people—to help them distribute their seeds.



such as beggars' ticks' fruits, are long and flat.

Whatever their shape, fruit and seed hitchhikers have one thing in common: they all can latch onto passing animals, including you and me. Sometimes, the fruits seem to leap out and attach themselves. And how the hitchhikers attach themselves is another story. Some use hooks or barbs while others use sticky fluids.

You can find sticky fruits and seeds throughout Missouri, from the prairies of the southwest and north to the forests and glades of the Ozarks, maybe even in your own backyard. Some of the common ones are in a group of plants called tick trefoils. Tick trefoils belong to the same family as the garden pea and string bean and have small purple to white, pealike flowers.

Some tick trefoils sprawl across the ground, while others grow waist-high or taller. A whole tick trefoil fruit looks like a flattened string bean pod with a narrow waist between each seed. Tick trefoil fruits are covered with hooked hairs. They grow in many types of

places and start to produce sticky fruits early to mid-summer.

Burdock, which is in the same family as daisies and sunflowers, also has sticky fruits. Its tube-shaped purple flowers resemble a thistle. But burdock leaves are large and soft, while thistle leaves are jagged with sharp points on the edges. Burdock fruits are some of the largest in the state and are covered with stiff hooks that easily grab fur or clothing.

Burdocks are weeds that originally came from Europe and are a good example of how sticky fruits and seeds move across long distances. Maybe when cows or horses were shipped from Europe to America, some of the animals had burdocks stuck to them. When the animals arrived in the New World, a settler may have picked off the fruits and tossed them where they could grow.

In Missouri, burdocks mostly are found in places associated with humans, such as old fields, along roads and in vacant lots. They flower and make fruit from late summer until late into fall.



Hedge parsley



Hedge parsley flower



Broad-leaved plantain

Seeds grow inside of fruits, and then the fruits help the seeds disperse. Some fruits, such as apples or tomatoes, are large and sweet, and their seeds are carried in the stomachs of animals. Other fruits, like those of dandelions, have "parachutes" that use the wind to move their seeds. Still others, like beggars' ticks, move by sticking to people or other animals.



Tick trefoil flower. The fruits are shown in the enlarged photo at left.



Porcupine grass



Stickseed or beggar's lice



Cocklebur



Cocklebur

Agrimony belongs to the same family as the apple, but instead of bearing applelike fruits, it has a small, greenish to brown fruit. Agrimony can grow as tall as 6 feet or as short as 1 foot, but it generally grows to about waist height. Agrimony is another example of a fruit that uses hooks, and it is hard to remove. What a wonderful way for an agrimony fruit to go to market: get attached to a cow in a pasture and then be whisked away to a livestock market. And then, if lucky, germinate in a place that has lots of fertilizer and moisture.

Beggars' ticks, Spanish needles, tickseed sunflower and bur marigolds are all synonyms for a group of plants with sticky fruits that are related to sunflowers. They have bright yellow flowers and produce fruits that are long and flat with prongs. When those prongs work through your socks, they can make you want to scratch your ankles. Most of the beggars' ticks grow in damp areas in Missouri, such as low sites around streams, marshes or ditches.

Not all sticky seeds use hooks or prongs to get on board a passing animal. Like many other plants, the broad-leaved plantain has its seeds in a fruit. However, after the seeds mature, the fruit breaks open, and the seeds are released. When the seeds get wet, they become coated with a sticky, jellylike fluid. The fluid is sticky enough to attach the seed to a passing body. Broad-leaved plantains grow in fields, yards, gardens, moist woods and along railroads throughout Missouri.

It seems as if most any place you go in Missouri, you're likely to pick up a sticky seed or fruit. Most of them are easily removed (at least from your pants) by carefully scraping or picking them off with your fingers. Removing them from behind a dog's ears may be another matter.

As you remove your unwanted guests, stop and think for a moment about how you've moved these hitchhikers to a new place. Who knows, maybe this new spot has what it takes for that little seed to grow up to an adult plant. ▲



Sand bur



Sand bur



Agrimony



Agrimony

Burdock fruit



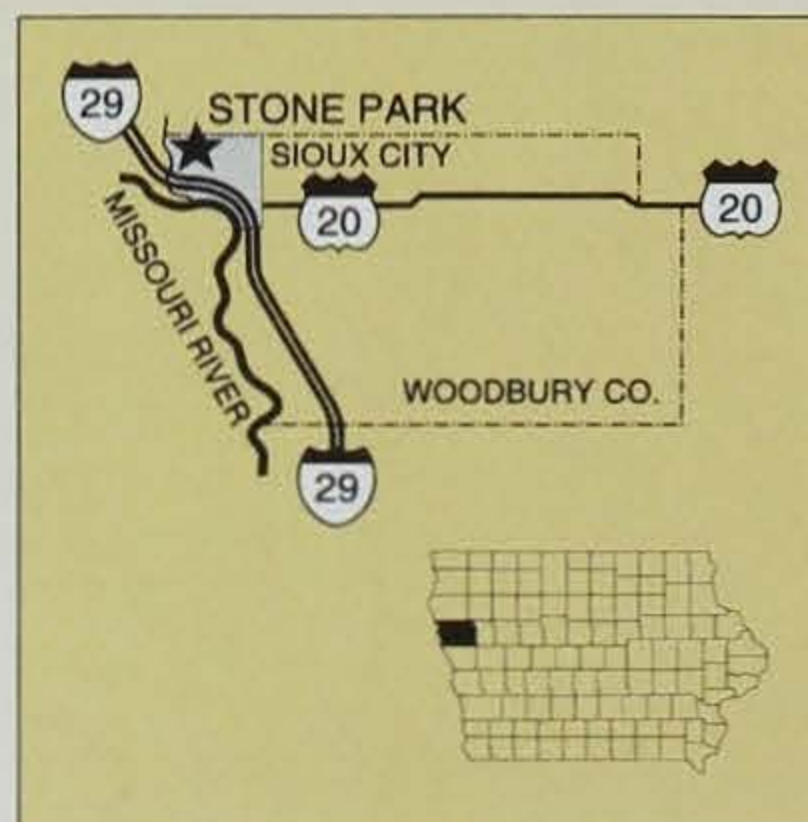
Burdock



From ancient geological formations, to modern-day multi-use trails and amenities, this state park has what you are looking for.

Stone State Park

Article and photos by Kevin Pape



Dakota Point in Stone Park is one of many scenic overlooks in a park rich in vistas. If you are standing in this spot, you can look straight down the Big Sioux River towards the Missouri River. The Big Sioux, about 250 feet below, empties in to the Missouri 2.5 miles further downstream. Across the river, the expansive floodplain below belongs to our neighbors in South Dakota.

From this vantage point, you can see agricultural land mixed with expanding residential and commercial development. On the western horizon, the steep wooded hills in Nebraska are visible. The Missouri itself can't be seen from this spot today, but in the past it was in plain view. An old oxbow of the river, called McCook Lake, can be seen just beyond busy Interstate 29.

To the south and east, the park hills are mostly covered in bur oak, basswood, ash and black walnut. Pockets of ridge-top prairie hang on where the hot, dry conditions make life difficult for the moisture-loving trees. The prairie produces a spectacle of flowering plants throughout the year. To the north, the rolling treeless loess hills go on for miles.

Millions of park visitors have absorbed this view since Stone Park was established in 1912. It is a place that people are drawn back to, visiting repeatedly over their lifetimes. I suspect that most people visit this point as a change of scene from their everyday view out their office or kitchen window. I am lucky enough to live and work here.

Although one can see three states at one time, what seems more important is the historical aspect of this spot. Human lives are short compared to the geologic time it took to form this land. To put our lives in perspective, it is interesting to look back at the long written and unwritten history of this place where two rivers form the borders between three states.

LOOKING BACK

The pre-history of Dakota Point is evident 100 feet below in the Cretaceous bedrock. Layers of limestone are

Park visitors can enjoy a stunning view from Stoney Point.

exposed in the road cut of state highway 12. Interesting rock formations have attracted students, teachers and others interested in geology. Approximately 135 million years ago, this area was at the edge of an expansive sea, stretching from here to Utah. This sea was present before the Rocky Mountains were formed.

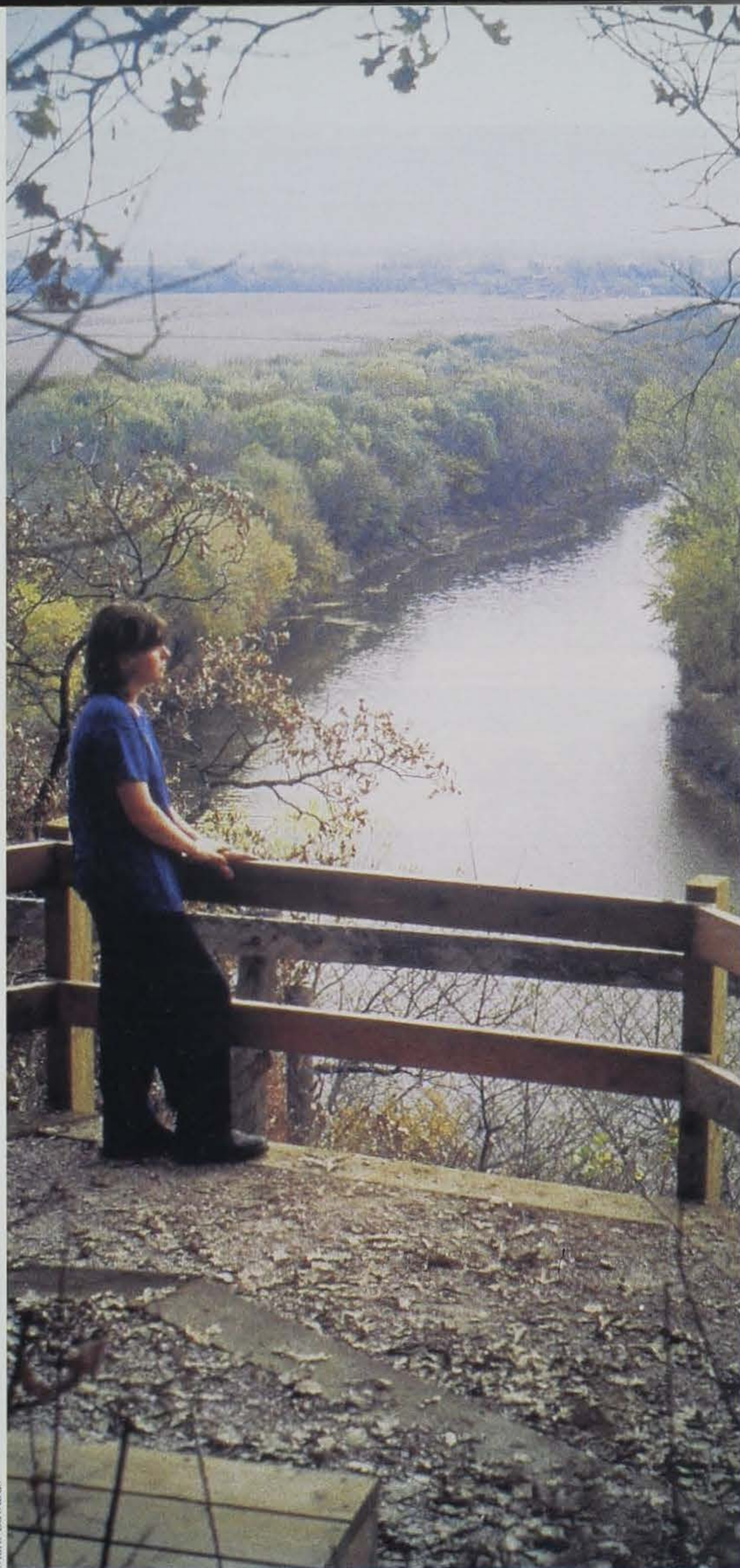
According to Newell F. Guernsey, author of *The Geology of Stone State Park*, "the park occupies a peculiar position since it was close to the shore line of the sea during its early stages. Later, the shore line extended into Central Iowa, so that in Stone Park we have evidences of both the shore line deposits and those of shallow sea water."

Fossilized fish and numerous fossilized clams have been found in the park. Vertebrae of a large marine reptile, a plesiosaur, were uncovered in the late 1800s, north of the park. The vertebrae are displayed at the Sioux City Public Museum.

The loess hills were created between 18,000 and 150,000 years ago. During this period, glaciers ground up rock into a fine powder. The powder was washed downstream as the glaciers melted. In cold periods, the water stopped flowing and the silt was exposed to strong winds. The winds were predominantly out of the north and west, therefore the silt was blown south and east of the river valley. The majority of the deposits were made close to the river valley, in drifts of up to 200 feet.

In the distant past, Native Americans would naturally have stood and looked out at the same broad expanse of plains. Large herds of bison, incredible flocks of migrating waterfowl, soaring birds of prey and other wildlife undoubtedly could be seen. The Dakotah, Ioway, Winnebago, Sauk and Fox may have enjoyed an unspoiled view from this spot. We will never know what role this place played in their livelihood, religion and wars with others.

Lewis and Clark's Corps of Discovery may have been the first people of European descent to pass this way in



Mark Edwards

Rustic Bridge, Stone Park, Sioux City, Iowa.



BIG SIOUX RIVER SEEN FROM STONE PARK, SIOUX CITY, IOWA

CC-92875

1804. (An interpretive sign at Elk Point overlook commemorates the passage of the expedition.) At that time, the Missouri River ran a different course, a bend in the river would have been clearly visible from present day Stone Park. A notation was made in their journal on August 21, 1804.

"... We set out verry early this morning and proceeded under a Gentle Breeze from the SE... passed the Soues River S.S. this river is about the Size of the Grand river and as Mr.

Durrien our Soues interp. says navigable to the falls 70 to 80 Leagues and above these falls Still further, those falls are about 200 feet or thereabouts & have two principal pitches, and heads with the St. Peters passing the head of the Desmoien, on the right below the falls a Creek Coms in which passes thro Cliffs of red rock which the Indians make pipes of, and when the different nations Meet at those queries all is piece..."

In the first half of the 19th century,

Postcards show views of the park from the 1930s. The top illustration is a view from Stoney Point -- more of a prairie knoll at the time. (See current Stoney Point view on previous page.)

the Big Sioux River was also known as the Calumet River. A calumet is a long-stemmed sacred pipe carved by Native Americans and used for ceremonial purposes. Early travelers could follow the Calumet River and portage to Pipestone, Minnesota. The quartzite stone at Pipestone has a softer layer of catlinite prized by the Indians for making pipe bowls. Catlinite was extensively traded by North American Plains Indians for centuries.

Daniel Hector Talbot was an early settler in the Sioux City area. Talbot was reportedly worth \$50,000 at the age of 34. He had made his fortune buying and selling land scrips from Civil War veterans. Talbot began buying land in the late 1870s and early 1880s on the northwest corner of Sioux City. The Talbot farm comprised about 800 acres by 1885. Living in Sioux City, Talbot hired a caretaker for his farm. The first telephone exchange west of Chicago ran between Talbot's home and the farm.

In 1895, Talbot had financial trouble and Thomas Jefferson Stone, president of the First National Bank of Sioux City, acquired the land. Stone's son Edgar began developing the area into a park after his father's death in 1904. The Stone family deeded the property to Sioux City in 1912.

An old postcard photograph taken from nearby Stoney Point (circa 1930) shows barely a tree in the foreground. At that time, Stoney Point was a prairie knoll, not the woodland it is today. Remnants of prairie still cling to life on the edge of the cliff, but succession has replaced most of the prairie with trees and brush. According to Guernsey, the spot was so called because of a great stone at that point. The stone has since rolled down the cliff and vanished from view. No description of the stone was ever recorded.

The Civilian Conservation Corps

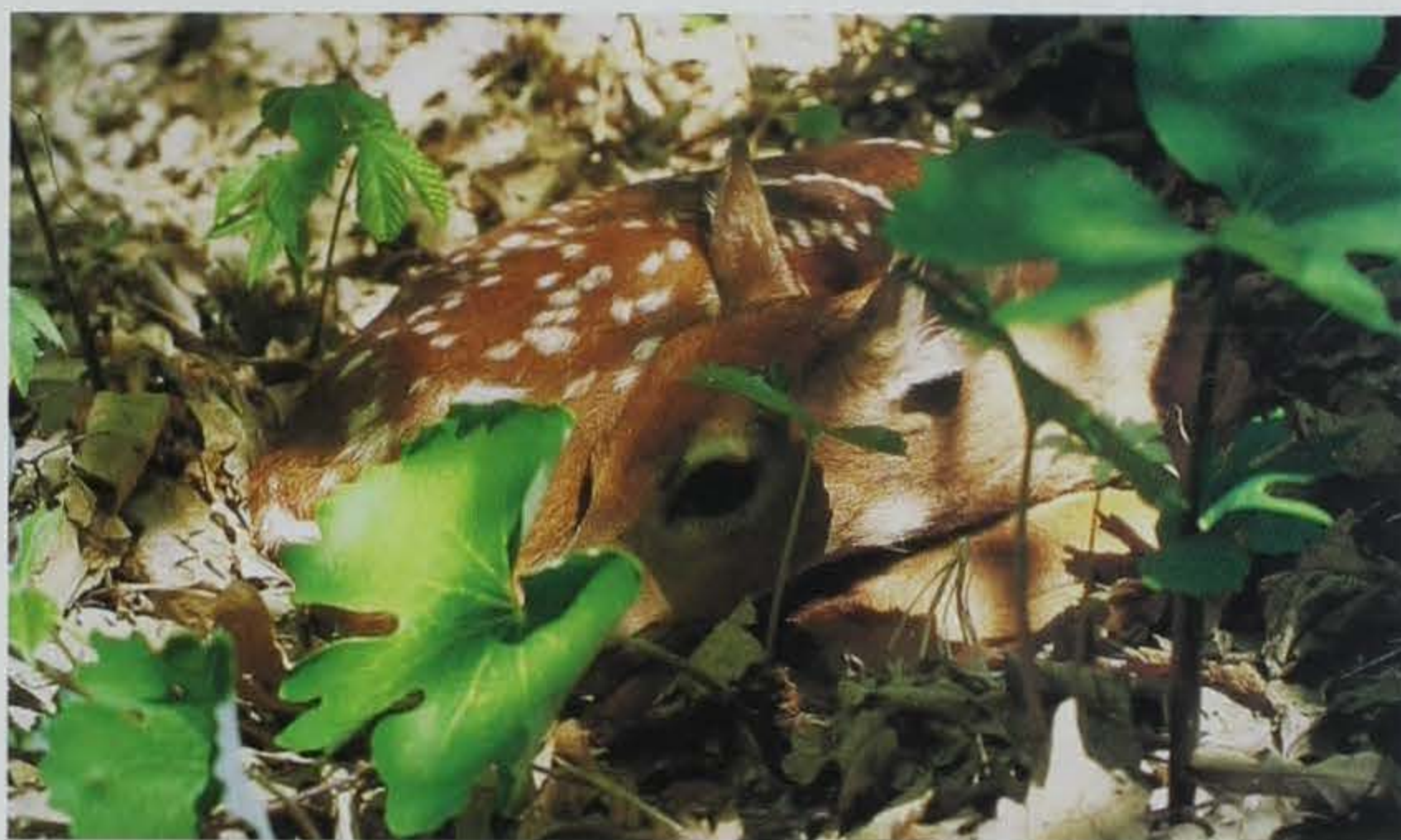
(CCC) worked in the park from 1935 to 1939. The CCC used rose-colored Sioux quartzite as a building material. Workers built two park residences, trails, roads, rest rooms, a tunnel and three picnic shelters. The rustic stone lodge continues to be popular for picnics, 63 years after it was constructed.

PRESENT DAY

Two of the CCC shelters are currently under renovation, funded with \$233,830 from the state's Restore the Outdoors program. The stone lodge has undergone extensive renovations and is expected to be completed in June. The Calumet Shelter will be completed this October. These two renovations will help preserve the historical integrity of these buildings for years to come.

Stone Park visitors have welcomed the recent addition of the Dorothy Pecaut Nature Center. The center is managed by the Woodbury County Conservation Board. The center opened in 1995 as the Loess Ridge Nature Center and served 8,000 visitors the first year. The center was recently renamed to honor the late Dorothy "Dottie" M. Pecaut of Sioux City, an active community leader and enthusiastic supporter of the nature center.

Visitors will gain a better understanding of the park and the loess hills in general after viewing the nature center exhibits. Excellent dioramas portray the formation of the loess hills and the plant and animal life found



here. Interesting photographs displayed in the center document the history of Stone Park. The nature center offers classrooms, a resource library and several hands-on exhibits for children. Regular educational programs are offered by the center's naturalists.

The nature center staff have been busy developing trails and adding other features around the outside of the building. Two miles of trails are currently under development around the center. Footbridges, stairs, benches and erosion-control structures have been added with donated funds and grant money. An accessible concrete walk to a new amphitheater was added in 1997. The trails range in difficulty, with the very steepest going to the top of Loess Ridge for a grand view from a new deck.

Perhaps the best part of Stone Park is viewed from the 14 miles of trails.

Six miles of trails are open for horseback riding, mountain biking, and snowmobiling. The trails allow visitors an opportunity to escape from the pressures of everyday life. The eight miles of hiking trails include the Carolyn Benne self-guided trail where you can learn about the park's natural history at your own pace.

Stone Park has many spectacular natural features. Spring hikers will find flower-carpeted rolling hills (below left) and beautiful spiderwort flowers (below right). A fortunate few may get a glimpse at a fawn taking a mid-afternoon nap (above).



A \$100,000 trail renovation project began in 1996. The project is funded from a combination of federal and state monies. Railroad tie steps, hand railings, benches and trail surfacing have been added to trails around the scenic overlooks of Dakota Point, Elk Point and Stoney Point. These improvements have made the trails safer and more accessible for people. Another part of the three year project has involved repairing portions of the park's six miles of multi-use trails. In 1997, extensive grading and reshaping of the multi-use trails has helped counteract years of erosion.

To revegetate areas that were disturbed during the trail project, Sioux City Eagle Scout Jacob Gunia rounded up 30 friends to collect prairie seed. Gunia and his friends hand-collected seed in the park, saving the park money and perpetuating plants already adapted to the site.

Maintaining trails in the rugged topography of Stone Park is a challenge. Much of the park has slopes of 30 percent or more. The fine loess soil dries quickly, leaving a trail surface similar to whole wheat flour. Subsequent rains easily wash this loose soil away. Visitors to the park are asked to stay on the designated trails.

Stone Park has a small, but attractive modern campground that is surrounded by mature bur oak trees. Although best suited for tents, the campground does have nine electric sites and can accommodate small- to medium-sized travel trailers and motor homes. Many campground users describe it as quiet and uncrowded, however, it is not uncommon to have



wild turkeys wake you up on spring mornings with their gobbling.

Bird-watchers can search for scarlet tanagers, ovenbirds, indigo buntings and rufous-sided towhees. The spring warbler watching can be superb. Turkey vultures regularly roost in the park and spend the days riding the thermals over the park's hills. Early morning risers can glimpse these magnificent birds sunning themselves in cottonwoods along the park roads.

For the prairie enthusiast, Stone Park can be one stop in a tour of the northern loess hills. The park includes the 90-acre Mt. Talbot State Preserve. The preserve is an excellent example of a xeric loess hills prairie. Look for a brilliant show of pasque flower in early spring, followed by hoary puccoon, yucca, pale purple coneflower, Great Plains ladies tresses and a hundred other species. Examples of oak savanna can still be seen in Stone Park. Within a 20-minute drive of Stone Park, you can visit three other prairie preserves — Sioux City Prairie, Five Ridge Prairie and Broken Kettle Grasslands.

The rugged topography of Stone Park provides for interesting views of the surrounding hills and the distant plains of Nebraska and South Dakota. This landscape has seen dramatic

Turkey vultures sun themselves in a tree at Stone Park.

Volunteers repair a portion of the park's six miles of multi-use trails.

changes over time, from ancient seas, to glaciation and the wind-deposited drifts of loess soil. The park has been set aside for protection for only the past 86 years — one human lifetime. People tend to be short-term thinkers when it comes to life in general and natural resource conservation in particular. Ordinarily, we only absorb the view in terms of what we see in front of us at the present time.

G.K. Chesterton, author of *All I Survey*, (1933) said, "The disadvantage of men not knowing the past is that they do not know the present. History is a hill or high point of vantage, from which alone men see the town in which they live or the age in which they are living."

I invite you to come explore Stone Park. Bring a picnic lunch, visit the nature center, hike to one of the high vantage points and take some time for thought.

Kevin Pape is a park ranger with the department at Stone State Park.



How to Rescue a Fawn

Article and illustration
by Ron Starner

Hold two lead pencils side by side. Lay them on the ground and then pick them up together by the eraser ends. Push the points slightly into the ground. You will create an impression closely resembling the track of what most people consider the forest's most intriguing creation -- a whitetail fawn. The whitetail deer, *Odocoileus virginianus*, is found in all of the lower 48 states and as an adult, will vary in size from a large dog to some 500-pound monsters. In Iowa, we are lucky to have some of the best whitetails found anywhere.

Most people experience deer as a ghostly flash of white tail in the forest, or an explosion of motion from the edge of a farm pond, or bounding muscles gracefully clearing a fence. The whitetail does not start life as the magnificent animal it becomes. It starts as a small bundle, seemingly a handful of hair and pencil-thin legs, legs that leave tracks easily covered by a penny. Most fawns are born five to seven pounds. Although they can stand almost from birth, fawns are still very dependant -- spending most days curled up for warmth and protection.

Too often, a newborn fawn will be found, to a well-meaning "rescuer," on the verge of death -- every rib in its body showing, ears held tight against its neck, appearing on its last leg of life, no mother to be seen. It is entirely normal for the person to become upset. How could such a beautiful creature be left to perish? Instinct almost demands it be rescued.

There is, however, an almost fool-proof method of rescue. It is very simple, if followed exactly. Should you happen upon such a sight, be aware the life of this creature is now in your hands. By now, you are probably kneeling next to the fawn, watching the huge eyes. The next

steps should be handled in the following order.

While it's not apparent, the fawn's heartbeat is now racing at well over 200 beats per minute, as it strains to remain motionless. Take a few short moments to take in the sight. Slowly and quietly stand, move back a step or two and carefully look around you.

You are now looking for the fawn's mother. In all likelihood, you will not see her. So far, so good. If everything you have read so far is exactly as you find it, everything is *entirely* normal. Instinct has taught the mother to keep well away because her scent is much stronger than the fawn's and may draw a predator to it. The mother will return about every four hours to feed the fawn and clean up any waste it creates. Even though you may not see her, it is likely she has seen you.

The very next step in the rescue is probably the hardest, but is also the most important. Quietly walk away from the fawn. You may decide to look back a time or two as you retreat. I would do the same. If you have a camera, take a picture or two but regardless of how hard it might be, do not go home to get one. Let the image

burn in your memory and realize you are one of the elite few who have had the privilege to see such a sight. You will have a story to tell when you get home.

Tell everyone about your rescue -- how you personally kept the fawn from dying. Know that every time you are in the vicinity of the rescue, you will remember the fawn, hidden in the landscape -- the fawn only your sharp eyes were able to find. In the following years, every time you see a deer, you will wonder if it is the one you rescued in the woods that day.

Spring is the season for animal babies. Intervention by a well-meaning "rescuer" all too often results in disaster -- either with the death of the animal or a handful of trouble. Wild animals are exactly that -- "wild." They do not make good pets and it is illegal to take and keep them as such. Please leave baby animals where you find them. Someone is probably watching -- most likely their mother.

Ron Starner is a licensed game breeder from Indianola. He has been observing wildlife all his life.



Practical Conservationist



Baby Names

Matching Game

- | | |
|-------------------|--------------|
| 1. fox | A. kit |
| 2. woodchuck | B. cygnet |
| 3. goose | C. fledgling |
| 4. deer | D. fawn |
| 5. eagle | E. poult |
| 6. turkey | F. cub |
| 7. swan | G. tadpole |
| 8. bird (general) | H. kitten |
| 9. beaver | I. eaglet |
| 10. frog | J. gosling |
| 11. bobcat | |
| 12. rabbit | |
| 13. raccoon | |

Answers: 1-A, 2-A, 3-
1, 4-D, 5-I, 6-E, 7-B,
8-C, 9-A, 10-G, 11-H,
12-H, 13-A or F



Wild animals are exactly that -- "wild." They do not make good pets and it is illegal to take and keep them as such.

Photos by Roger A. Hill

Test Your Collective Knowledge

- | | |
|------------------------|----------------|
| 1. _____ of birds | A. Scattering |
| 2. _____ of squirrels | B. Spring |
| 3. _____ of trout | C. Cast |
| 4. _____ of crows | D. Hover |
| 5. _____ of bears | E. Sloth |
| 6. _____ of ducks | F. Bevy |
| 7. _____ of fox | G. Convocation |
| 8. _____ of quail | H. Bale |
| 9. _____ of moose | I. Dray |
| 10. _____ of pheasants | J. Herd |
| 11. _____ of weasels | K. Flock |
| 12. _____ of herons | L. Pack |
| 13. _____ of teal | M. Troop |
| 14. _____ of eagles | N. Flight |
| 15. _____ of turtles | O. Gaggle |
| 16. _____ of minnows | P. Murder |
| 17. _____ of hawks | Q. Steam |
| 18. _____ of geese | R. Nest |

Answers: 1-N, 2-I, 3-D, 4-P, 5-E, 6-K, 7-M, 8-F, 9-J, 10-R, 11-L,
12-A, 13-B, 14-G, 15-H, 16-Q, 17-C, 18-O



Soil Shakes! *by A. Jay Winter*

Introduction:

The average soil erosion on cultivated crop land in the state of Iowa was 9.6 tons per acre in 1982. This would total roughly 245 million tons of eroded soil across the state of Iowa. This amount of soil would fill ten million semis in one year (enough to go around the earth 4.5 times at the equator if they were bumper to bumper). This would account for the loss of half of our topsoil in the last 150 years. By 1998 this number has been reduced by approximately 25 percent due to the Conservation Reserve Program and the current farming practices being implemented. The farmers and landowners can be congratulated for reducing this rate in the last 16 years, but there is still a long way to go.

Erosion occurs when soil moves downhill, mostly by the action of water and wind. This results in sediment being deposited in waterways and fencerows. This is a major problem for Iowa's aquatic resources. When sediment reaches waterways, sight-feeding fish are not able to see their prey and plants do not receive the sunlight necessary to grow.

Iowa is fortunate to have very fertile soil, allowing us to grow plentiful crops. We produce approximately one tenth of the nation's food supply and one fifth of the nation's agricultural exports. It is important we take care of the resources we possess so we will have them for future generations.

During the following activity, students will observe that soil is composed of different materials. These materials will form layers in the container after the soil and water are shaken. The layers will settle out at different times with the coarsest layers first and the finest layers last. There may also be some organic material, such as dead plants, floating in the container during this activity.

Procedures:

1. Bring three samples of different types of soil into the classroom or allow the students to collect samples around the school.
2. Lay out newspapers on the tables, along with the soil samples and containers for each group.
3. Allow the students to feel the different types of soil. Instruct them to make the following observations for the different types of soil:
 - What materials can you see in the soil?
 - What color is the soil?
 - When you roll the soil into a ball, will it stay in that shape?
 - If you add water to the soil does it change?
 - Will it stay in a ball when it is wet?
4. Instruct students to fill each container 1/4 full of soil, continue with the other two containers, so you have three containers each 1/4 full of a separate soil sample.
5. The students will then fill the containers with water until they are 3/4 full of the soil and water mixture.

Ages:

All

Length of Activity:

Part of two class periods (total of 45 minutes)

Materials:

Three clear containers with secure lids for the soil and water mixture
Three samples of different types of soil
Water
Newspapers or scratch paper

Objectives:

1. Students will be able to recognize the different soil components.
2. Help students understand soil erosion and how it affects the environment.

Classroom Corner

Extension:

Have students look at different soils under a dissecting scope or microscope.

References:

Earth Team Consultant's Guide; A guide to setting up and presenting the Keep Our Water Clean and Save Our Soil programs developed by the Louisa County Soil and Water Conservation District in cooperation with the Louisa County Conservation Board (CCB). For more information contact the Louisa CCB, PO Box 261, Wapello, Iowa 52653; phone 319/523-8381.

Procedures (continued):

6. The lids should then be placed **tightly** on all three containers.
7. Shake the containers to mix the soil and water thoroughly.
8. Set the containers where they will not be disturbed, and allow the soil to settle.
9. Observe the settling process over time and allow the containers to sit until the next class meeting.
10. When the class meets again, have students look at the containers and answer the following questions:
 - Did it take some samples longer to settle than the other samples? Why or why not?
 - How might water entering a lake influence the lake if it contains sediment?
11. Look through the containers to examine how clear the water is. Imagine being an aquatic animal or plant, and living in this water.
12. Allow the samples to sit for an extended period and see if the particles ever completely settle out of the water.
13. Have students dispose of the samples outdoors and wash the containers.

Vocabulary:

Conservation Reserve Program (CRP) -- a government program that pays landowners to take highly erodible land out of production to prevent erosion

Erosion -- wearing away of the earth's surface by water, wind, etc.

Nonpoint source pollution (NPS) -- pollution that does not come from an exact source (example would be the soil from a field)

Parent material -- the layer below the subsoil containing the minerals that are breaking down to form soil

Sediment -- soil deposited by water or wind

Silt -- fine soil particles

Soil -- a dynamic mixture of broken down rocks, air, water, plant and animal material

Subsoil -- a lighter-colored layer of soil located between the parent material and topsoil

Topsoil -- the layer of dark soil located on top of the other soil layers



Ron Johnson

A. Jay Winter is a training officer at the department's Springbrook Conservation Education Center in Guthrie County.

Zimmerman Receives 1998 Brass Bluegill Award

Since 1992, Tom Zimmerman has taken more than 1,600 kids fishing.

Zimmerman, a Council Bluffs physical education teacher, includes the *Fish Iowa!* program in his physical education class. *Fish Iowa!* is an angling education program targeting junior high students. It consists of five units: history, regulations, fish identification, spin casting equipment and skills and caring for the catch.

Because Zimmerman's class sizes have grown so much, a separate class was designed to allow more students a better learning experience. Three Wilson Junior High teachers will work with the students this spring, providing an educational opportunity that not only interests students, but also teaches lifetime activities. Zimmerman is especially proud of the spincasting unit, which includes students as teachers. He also likes the part when students make "aquariums" out of shoe boxes to show the kind of habitat fish need to survive.

Zimmerman was given the 1998 "Brass Bluegill" award this spring by the DNR Natural Resources Commission. Zimmerman received a plaque commending his contributions to *Fish Iowa!*, and the Outdoor Technologies Group of Spirit Lake, donated 24 spincasting rods and reels to his school for use with the *Fish Iowa!* program.

"My students seem to be amazed that I know more than how to do a correct push up! Fishing education will give the kids an opportunity to pursue a lifetime leisure activity," Zimmerman stated.

Besides his work with Wilson students, Zimmerman has recruited and trained more than 30 educators and youth leaders in the *Fish Iowa!* program. Based on *Fish Iowa!* use surveys, this translates to programs involving about 3,000 students per year.

Zimmerman has been employed by the Council Bluffs Public Schools for the



L-R: Tom Monroe, chair of the DNR's Natural Resources Commission; Tom Zimmerman, Brass Bluegill Award recipient; Barb Gigar, aquatic education program coordinator

past 30 years and has been a physical education teacher at Wilson Junior High for the past 12. Wilson has nearly 800 students who reside at Carter Lake as well as the west end of Council Bluffs.

The "Brass Bluegill" was initiated in 1997 by the Iowa DNR Aquatic Education Program and Outdoor Technologies Group located in Spirit Lake, IA, the nation's largest fishing tackle manufacture. The award is used to recognize outstanding contributions by educators and youth leaders using the *Fish Iowa!* program.



*Catch a Smile by Celebrating
National Fishing Week
May 30 through June 7*

As part of National Fishing Week, the Iowa DNR has designated June 5, 6 and 7 as Free Fishing Days. Fishing license requirements will be waived for Iowa residents during these three days. All other regulations apply.

For the latest information on fishing hotspots, call
1-800-ASK-FISH

Conservation Update

Fishing Clinics

| <u>County</u> | <u>Type of Event</u> | <u>Date</u> | <u>Location</u> | <u>Contact</u> |
|---------------|--------------------------------------|----------------------|---|----------------------|
| Benton | Clinic/Youth | 5/23/98 | Rodger's Park, Vinton | 319/472-5301 |
| Black Hawk | Clinic/Youth | 6/18, 19 & 20 | Hartman Reserve, Cedar Falls | 319/277-2187 |
| Black Hawk | Clinic/Youth | 7/8, 16, 20, 21 & 22 | Hartman Reserve, Cedar Falls | 319/277-2187 |
| Black Hawk | Clinic/Youth | 6/6/98 | Black Hawk Park, Cedar Falls | 319/266-6813 |
| Butler | Clinic/Youth | 6/6/98 | Wilders Pond, Allison | 319/278-4237 |
| Carroll | Tournament | 6/6/98 | Swan Lake, Carroll | 712/792-4614 |
| Cass | Clinic/Youth | 6/6/98 | Cold Springs Park, Lewis | 712/243-3542 |
| Cerro Gordo | Clinic/Youth | 6/6/98 | McIntosh State Park, Clear Lake | 515/357-3517 |
| Cerro Gordo | Clinic/Youth | 6/7/98 | East Park, Mason City | 515/421-3673 |
| Cerro Gordo | Clinic/Youth | 6/8/98 | Clear Lake | 515/357-7010 |
| Chickasaw | Clinic/Youth | 6/5/98 | Split Rock Park, Fredericksburg | 515/394-4714 |
| Chickasaw | Clinic/Youth | 6/6/98 | Airport Lake Park, New Hampton | 515/394-4714 |
| Chickasaw | Clinic/Youth | 6/7/98 | Cedar Lake Park, Nashue | 515/394-4714 |
| Clay | Clinic/Youth | 5/12/98 | Stolleys Park, Spencer | 712/933-5532 |
| Clayton | Clinic/Youth | 6/6/98 | Osborne Pond Area, Elkader | 319/245-1516 |
| Clinton | Tournament | 6/27/98 | Malone Park, DeWitt | 319/847-7202 |
| Crawford | Clinic/Youth | 5/25/98 | Nelson Park, Dow City | 712/263-3740 |
| Crawford | Tournament | 7/4/98 | Yellow Smoke Park, Denison | 712/263-3740 |
| Crawford | Clinic/Youth | 6/6/98 | Yellow Smoke Road, Denison | 712/263-3409 |
| Davis | Clinic/Youth | 6/6/98 | McGowen Rec. & Wildlife Area, Bloomfield | 515/664-2572 |
| Des Moines | Clinic/Youth | 6/6/98 | Kevin Gahn Wildlife Refuge, West Burlington | 319/753-5808 |
| Dubuque | Clinic/Youth | 5/19/98 | Mines of Spain Rec Area, Dubuque | 319/556-0620 |
| Dubuque | Clinic/Youth | 6/6/98 | Swiss Valley Park, Dubuque | 319/556-6745 |
| Fayette | Clinic/Youth | 5/30/98 | Volga River State Rec. Area, Fayette | 319/422-3883 |
| Floyd | Clinic/Youth | 6/27/98 | Elks Lodge Pond #418, Charles City | 515/257-6214 |
| Franklin | Clinic/Youth | 6/6/98 | Beeds Lake State Park, Hampton | 515/456-4375 |
| Greene | Clinic/Youth | 6/7/98 | Spring Lake State Park, Jefferson | 515/386-4629 |
| Hamilton | Clinic/Youth | 5/17/98 | Briggs Woods Lake, Webster City | 515/832-4504 |
| Hardin | Clinic/Youth | 7/4/98 | Riverbend Park, Iowa Falls | 515/648-9686 |
| Henry | Clinic/Youth | 6/6/98 | East Lake Park, Mt Pleasant | 319/986-5067 |
| Humboldt | Clinic/Youth | 6/6/98 | Chantland Pond, Humboldt | 515/332-5447 |
| Iowa | "Grand" Fish Day | 6/7/98 | Lake Iowa Park, Williamsburg | 319/655-8466 |
| Jasper | Clinic/Youth | 6/6/98 | Hwy #14 Northwest Newton | 515/792-5135 |
| Jefferson | Clinic/Youth | 6/7/98 | Water works Park, Fairfield | 515/472-8460 |
| Johnson | Clinic/Youth | 6/7/98 | Lake MacBride State Park | 319/644-3615 |
| Jones | Clinic/Youth | 6/6/98 | Wapsipinicon State Park, Anamosa | 319/462-2761 |
| Jones | Clinic/Fly Fishing | 6/6/98 | Central Park Lake, Center Junction | 319/487-3541 |
| Keokuk | Clinic/Youth | 6/6/98 | Chuck Cassen's Pond, Sigourney | 515/622-3757 |
| Lee | Clinic/Youth | 6/13/98 | Chatfield Park, Keokuk | 319/463-7673 |
| Lyon | Clinic/Youth | 6/6/98 | Lake Pahoja Rec. Area, Larchwood | 712/472-2217 |
| Marion | Clinic/Youth | 6/6/98 | Pleasantville City Park, Pleasantville | 515/848-5649 |
| Marion | Clinic/Youth | 6/6/98 | Marion Co. Park, Knoxville | 515/627-5935 |
| Monroe | Tournament | 6/7/98 | Lake Miami, Lovilia | 515/946-8112 |
| Muscatine | Clinic/Youth | 5/30/98 | Saulsbury Bridge Rec Area, Muscatine | 319/264-5922 |
| O'Brien | Clinic/Youth | 6/13/98 | Mill Creek State Park, Paullina | 712/448-2254 |
| Page | Clinic/Youth | 6/6/98 | Pioneer Park, Shenandoah | 712/542-4587 |
| Pocahontas | Clinic/Youth | 6/7/98 | Meredith Park, Plover | 712/335-4395 |
| Polk | Clinic/Youth | 6/20/98 | Easter Lake Park Shelter #2, Des Moines | 515/999-2557 |
| Polk | Handicap Fish Day | 6/13/98 | Big Creek State Park, Polk City | 515/285-0959 |
| Pottawattamie | Clinic/Youth | 6/6/98 | Arrowhead Co. Park, Neola | 712/328-5638 |
| Sac | Clinic/Youth | 7/11/98 | Eden Prairie Rec Area, Schaller | 712/662-4530 |
| Scott | Clinic/Youth | 6/6/98 | West Lake Park, Davenport | 319/328-3281 ext. 24 |
| Scott | Clinic/Youth | 7/5/98 | Buffalo City Park, Buffalo | 319/381-5017 |
| Scott | Ride the River - Hawg Trough Demo | 6/21/98 | Union Station, Davenport | 319/263-5062 |
| Shelby | Tournament | 6/6/98 | Prairie Rose State Park, Harlan | 712/773-2701 |
| Story | Clinic/Youth | 5/16/98 | Ames Izaak Walton League Park, Ames | 515/232-2516 |
| Story | Tournament/Youth | 6/13/98 | Hickory Grove Lake, Colo | 515/232-2516 |
| Warren | Clinic/Youth | 6/6/98 | Annett Nature Center, Indianola | 515/961-6169 ext. 14 |
| Webster | Clinic/Youth | 5/30/98 | Armstrong Park, Fort Dodge | 515/576-6323 |
| Woodbury | Clinic/Youth | 6/6/98 | Bacon Creek, East Sioux City | 712/947-4549 |

Webster City Named National Rebuild Partner of the Year

Rebuild America, a U.S. Department of Energy program to help communities become energy efficient, has named Webster City as its partner of the year. The community was chosen above 150 other program participants in the U.S.

The Rebuild Webster City program, in effect for two years, serves as a model to other communities in Iowa and across the nation. The plan focuses on achieving energy savings, job retention, economic developments and helping the environment through energy efficiency. Additionally, it demonstrates how to leverage a small amount of federal funding (less than \$50,000) into nearly \$5 million in energy efficiency improvements.

To date, Rebuild Webster City has retrofitted 20 buildings, including several schools, municipal buildings, private businesses and churches. Program improvements include new heating and cooling equipment, improved lighting, water heater blankets and other similar projects.

Rebuild Program Manager, Kelly Needles, said, "nearly every business and resident in this community supports the Rebuild effort. The entire state should be proud of what Webster City has achieved, and hopefully other communities will follow its example."

Webster City joined the program through the DNR's Rebuild Iowa initiative. Currently, five other Iowa communities (Des Moines, Hancock, Waterloo, Waverly and Cedar Falls) participate in Rebuild. Webster City was honored at a national conference in San Antonio, Texas on March 10.



Iowa Fish and Wildlife Programs Receive \$6 Million

Iowa DNR's fish and wildlife programs will receive more than \$6 million from federal excise taxes paid by anglers, hunters and recreational shooters, according to Al Farris, fish and wildlife division administrator. The funds will be distributed under the Federal Aid in Sport Fish and Wildlife Restoration programs. The funds will help pay for fish and wildlife conservation and recreation projects throughout the state.

About \$2.6 million will be dedicated to wildlife programs. The money comes from an 11 percent excise tax on sporting arms and ammunition, a 10 percent tax on pistols and revolvers and an 11 percent tax on certain archery equipment. One-half of the tax on handguns and archery equipment is made available for state hunter education programs. Distribution is based on a state's land area and the number of hunting license holders. Hunter education funds are distributed according to population.

A total of \$3.6 million will go for fisheries programs. The money comes

from a 10 percent excise tax on fishing equipment, a three percent tax on electric trolling motors and sonar fish finders, taxes on motorboat fuels, and import duties on fishing tackle and pleasure boats. Funds distributed to the states are based on each state's land and water area and the number of fishing license holders.

The federal aid program began in 1937 when a group of hunters lobbied Congress for an excise tax on firearms and ammunition to pay for state conservation projects. Since then, these taxes have helped recover many popular species including the white-tailed deer, wood duck and wild turkey. In 1950, Congress passed the fisheries version to promote conservation of the nation's lakes, rivers and other waterways. It also expanded recreational opportunities for boaters and anglers.



Through the Sport Fish Restoration Program, Iowa will receive \$3.6 million for fishing projects.



Ron Johnson

Conservation Update



Iowa Pheasants Forever chapters are working with farmers and landowners to establish wildlife habitat.

The goal of **Pheasants Forever** is to restore pheasant populations through quality habitat. PF is paying landowners to plant food plots, nesting cover, shelterbelts and other habitat for game and nongame wildlife.

Iowa currently has 98 chapters throughout the state looking to work with local farmers and landowners for the benefit of all upland and wetland wildlife.

For help planting wildlife habitat or more information about **Pheasants Forever**, contact Jim Wooley (S. Iowa) at 515/774-2238 or Matt O'Connor (N. Iowa) at 319/926-2357, or write PF at 1205 Iliion Ave, Chariton, Iowa 50049

Think Habitat!

The "Best" Camp for Kids

The Iowa Bowhunters Association and the DNR's Springbrook Conservation Education Center have teamed up to host the second annual Bowhunting Education, Shooting and Training (BEST) camp. According to Gloria Baker, coordinator of outdoor skills for the Iowa DNR, the goal of the program is to provide both boys and girls ages 12 to 15 an opportunity to learn skills that enhance and encourage participation in bowhunting and outdoor recreation. The camp is scheduled for July 9-12. The cost is \$75.

For registration material contact Gloria Baker, Springbrook Conservation Education Center at (515) 747-8383.

Outdoor Journey for Girls

Outdoor skills camps for girls will be held at the DNR's Springbrook Conservation Education Center near Guthrie Center. Camps for girls ages 12 to 15 will be held June 10-12, and July 29-31. According to Gloria Baker, coordinator of outdoor skills for the Iowa DNR, the three day program is packed full of outdoor skills training in camping, canoeing, orienteering, fishing and

1998 Iowa Energy Leadership Awards

The Iowa Department of Natural Resources is beginning its application process for the 1998 Iowa Energy Leadership Awards.

The Energy Leadership Awards were developed to recognize the success and ingenuity of Iowans in developing energy efficiency and renewable energy. Past winners include private companies, schools, utilities and various other organizations. Several winners have gone on to win national awards for their energy programs.

You are invited to submit an application to showcase how programs created by your organization exemplify the use of alternative energy resources and energy efficiency. Or, if you know of another orga-

certification in the Iowa hunter education program.

Pheasants Forever chapters throughout the state may cover the \$70 registration fee for girls who come from a chapter area. Interested persons should contact their local Pheasants Forever chapter for registration information.

Boys Hunt/Conservation Camp

Hunting and conservation camp for boys ages 12 to 15 will be held at Springbrook Conservation Education Center near Guthrie Center. The dates are June 24-26 and July 22-24. Gloria Baker, DNR coordinator of outdoor skills said, "the boys will have an opportunity to learn outdoor skills like muzzleloading, shotgun shooting, hunting dog training, furharvesting, turkey hunting, game calling, duck hunting, along with good wildlife conservation practices."

Pheasants Forever chapters throughout the state may cover the \$70 registration fee for boys who come from a chapter area. Interested persons should contact their local Pheasants Forever chapter for registration information.

nization that would be an ideal candidate for an Energy Leadership Award, please have them contact the DNR for an application. The deadline for entries is June 22. Winners will be announced in October.

To obtain an application, contact:

Julie Tack

Energy Information Specialist

Iowa Department of Natural Resources
Wallace Building

Des Moines, IA 50319

Phone: (515) 281-8665

Fax: (515) 281-8895

Join us in recognizing successful energy efforts in Iowa!





The Nature Conservancy®

IOWA CHAPTER

The Nature Conservancy's mission is clear and focused — To preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive.

The concept of protecting biodiversity is understood and appreciated by Conservancy members — more than 900,000 — including 7,200 Iowans, as well as many corporations and foundations that are committed to the organization's work. The Nature Conservancy is distinguished by its science-driven orientation and also by an organizational approach of working on local and regional levels, while maintaining a global perspective. This is made possible because it is part of a larger organization. The Nature Conservancy is the operator of the largest private system of nature sanctuaries in the world.

The Conservancy's approach is non-confrontational and action-oriented. It works entirely within the free enterprise system to protect ecologically significant land by buying and managing it. Plans are developed for each preserve and tailored to meet the specific needs of the site. Ongoing stewardship, including monitoring, research and restoration, maintains the ecological conditions necessary for the long-term survival of endangered species and their habitat. Two college internship programs — one a field conservation biology program and the other a GIS internship program — greatly enhance stewardship and research efforts statewide.

The Iowa Field Office of The Nature Conservancy was founded in 1963 and has protected some of the rarest and most threatened biological communities in the state. Headquartered in Des Moines, the Iowa Chapter also has a staffed preserve headquarters at Broken Kettle Preserve in the loess hills of Plymouth County.

The Conservancy owns or manages about 4,000 acres on 34 preserves in 23 Iowa counties. Most preserves are open to the public for educational uses and recreation such as hiking, nature study, bird-watching and photography. Scientist-led field trips are held throughout the season. Some of the best-known preserves in addition to Broken Kettle Grasslands are Freda Haffner Kettlehole, Swamp White Oak Savanna, Williams Prairie and Cedar Hills Sand Prairie.

A nonprofit, tax-exempt international organization, The Nature Conservancy depends on private contributions to further its important work. For more information, please write the Iowa Field Office at 108 Third Street, Suite 300, Des Moines, IA 50309-4758, or call (515) 244-5044.

Upcoming NRC, EPC and Preserves Board Meetings

The dates and locations have been set for the following meetings of the Natural Resource Commission, Environmental Protection Commission and the Preserves Board of the Iowa Department of Natural Resources.

Agendas for these meetings are set approximately 10 days prior to the scheduled meeting date. For additional information, contact the Iowa Department of Natural Resources, Wallace State Office Building, Des Moines, Iowa 50319-0034.

Natural Resource Commission:

- July
No Meeting
- August 13
Backbone State Park
- September 10
Spirit Lake
- October 15
Pisgah
- November 12
Des Moines
- December 10
Des Moines

Environmental Protection Commission:

- July 20
Des Moines
- August 17
- September 21
- October 19
- November 16
- December 21

State Preserves Advisory Board:

- June 16
Fayette County

Warden's Diary

“How to Have a Cheap Boat Trip”

It was a Thursday afternoon. By comparison with the weekend, it wasn't too busy a day on Clear Lake — or on any other lake I had worked.

So, when Steve Schutte and I got into the patrol boat, we really expected just a trip around the lake in the sun to make sure things were quiet — as quiet as Clear Lake can be. We thought we might find a few anglers to check — it wasn't to be.

After passing the state park beach and heading toward the city park, we noticed a boat with a couple in it. The boat had an odd-colored registration sticker on it. It was a registration renewal year for boats, with the previous years' expired stickers being red, and the current sticker being orange. On certain colored backgrounds, orange appeared (remember high school art) red. A lot of boats we had to approach more closely to determine the color for a current registration. Thank you, whoever chose the color scheme!

Anyway, we pulled up closer to the boat, and saw the sticker was red and expired by several months. Steve turned on the blue light, and I climbed into the bow to signal the other boat we were going to approach.

I pointed out the expired registration to the man driving the boat. Sure enough, he had forgotten about it. I asked for some identification, explained I was going to cite him for displaying an expired registration and got out the ticket book. While I was writing, Steve ran a check of the boat's life jackets and other safety equipment as we do on every stop. Like a lot of people we run into on the water, the man didn't have any ID on him because he was in a swimsuit — he and his wife were on the lake for some sun and relaxation. So, I asked, “How do you spell your last name, Sir?” At that point, his wife spoke up with, “It's spelled, D-U-M-M-Y.”

Realizing this ticket didn't appear to be doing anything to insure domestic tranquility, I hurriedly finished and explained how to handle the ticket. He was exceptionally pleasant and apologized for the sticker. I told him no apology was needed, he simply had made a mistake. He was the kind of person I hate to give a ticket, but sometimes that's our job.

“What a nice guy, what a nice day, I thought.” Not so fast, Hummy. Off the north shore, we noticed another boat with two men fishing. On the bow was another red sticker. This day was going so well. Routine. We approached the boat, and I said, “How are you today?” to the man in the bow.

He glared at me. “FINE UNTIL YOU #%!*@*& SHOWED UP!”

He threw down the fishing pole and sat with his arms crossed as we approached. Steve and I looked at each other. Routine no more. I asked who owned the boat and the fisherman in the stern answered, “It's mine.” I pointed out the expired registration on

the boat and asked him if he had just bought the boat. He had not. Steve told the owner we were going to cite him for the expired registration.

Well, the owner didn't have much of a problem with this, but the guy in the bow kept poking us with a sharp stick. The usual comments like, “Don't you have anything better to do?” or “Why don't you get that other guy?” All peppered with colorful adjectives about us. Nothing really very original until he said, “What's wrong, I suppose you were beat up a lot as a child?” Now that statement has some connotations I really don't care for, but it sounded so ridiculous and so bottom-of-the-barrel I couldn't help but start laughing. Some people must stay up late thinking of these statements to throw at police officers. Like I said, I don't always like giving someone a ticket, but I don't appreciate being berated while I'm trying to do my job either.

Now, most of these darts had been directed at Steve because he was writing the ticket — I felt it was time to redirect the man's attention, because I noticed while he was talking, he kept looking at the defensive equipment on Steve's belt, particularly Steve's revolver. I was wondering what he had in mind. So the boat was checked for safety equipment, fish and licenses. Steve handed the guy the citation.

“I always had a lot of respect for you Steve,” the fisherman said.

“I doubt that,” Steve returned. We motored away.

Two boats, two groups, two different responses to our job of enforcing navigation laws. The common denominator was the failure to thoroughly check out their boats and equipment before they set out on their trip.

Want a trip that won't cost you extra money? Check your registration and make sure it's properly displayed and the certificate is on board. Make sure there is a wearable and accessible life jacket in good condition for each person on board. If your boat is 16 feet or longer, be sure a throwable floatation device is on board too. Be sure they have a U.S. Coast Guard Approved sticker. Be sure your fire extinguisher is aboard and fully charged. Check the regulations to see when other equipment, such as lights and horns, are required and check that they are operable before you're on the water. Pay attention to speed and distance laws and navigation buoys. Alcohol and boats are not good companions. Take a boating safety course when one is offered, or by home study. Read the regulations.

Paying attention to these will not only save you money, by avoiding a piece of paper from us . . . it may also save your life.

by Chuck Humeston

Parting Glance



**“I told you to go before
we left.”**

