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DEPARTMENT OF NATURAL RESOURCES





IOWA CONSERVATIONIST

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Ken Formanek

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COVER
Old Rivals - White
on page 22)

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Kathryn Stangl, Assistant Editor
Lowell Washburn, Writer/Photographer
Larry Pool, Graphic Artist
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Energy (515) 281-5918
Other Topics (515) 281-5918
Turn-In-Poachers (TIP), (800) 532-2020
TTD (515) 242-5967

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COVER

Old Rivals - Whitetail by Larry Zach (see information on page 22)



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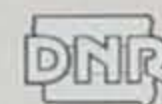
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1997 Hunting Season Outlook

Writing the annual hunting season forecast has become pretty easy. Just dust off last year's article (which for the last decade has mostly all been rosy), juggle a few figures to accommodate some changes in weather or wildlife production, and predict another good year. So that's what I did this year. Iowa hunters should expect an excellent season . . . again.

How good has the last decade been? Consider in the past 10 years:

- Deer hunters have harvested more than the DNR's goal of 90,000 deer annually in five years.
- Pheasant hunters have maintained Iowa's "best in the nation" status by taking from 1 to 1.4 million roosters in nine years. (The only exception was 1993, the year Iowa drowned.)
- Spring turkey hunters have set a new record harvest in six years. (The 1996 take of nearly 15,000 was three times that of a decade ago.)
- Waterfowlers bagged record numbers of Canada geese in five years, with last season's total of nearly 50,000 also three times greater than 1987.
- Duck harvests have generally trended upward throughout the decade as the prairies recovered from years of drought in the 1980s.

Not everyone has had great hunting every year of the decade, of course. Hunters in south-central Iowa continue to find lower populations of pheasants, quail and turkeys than they are used to. A combination of too many acres of Conservation Reserve grasslands in some areas and region-wide wet weather during the past five nesting seasons share most of the blame. Quail populations have declined so badly they are in danger of being relegated to the status of a minor game species, in spite of their former prominence. Better summer weather will help, but long-term habitat loss continues to plague southern Iowa as "clean" farming subtly but relentlessly invades the region.

Peak pheasant numbers have bounced around the state from southwest to northeast to east-central to north-central Iowa as colder-than-normal winters or wetter-than-normal springs have occurred in succession for a year or two. Last year was northern Iowa's turn. A mild winter and beautiful spring in 1996 encouraged a pheasant "love fest" the likes of which hasn't been seen since the rock festival in Wadena in the 1960s. There were young pheasants everywhere. Hunting was outstanding . . . amazing . . .

by Terry W. Little



Roger Hill



unbelievable . . . all season long. Bird hunters can only "phantasize" what it would be like if pheasant numbers peaked like that everywhere at the same time!

Problems occurred regionally for others hunters. In three of the non-record years for deer hunters, licenses were reduced intentionally by the DNR to re-build northern Iowa deer herds that had been reduced by liberal seasons in the early 1990s.

While northern Iowa remains the stronghold of Canada goose hunting, for the first time in a century you can find good goose hunting within reasonable driving distance of your home, no matter where you live. And this situation will only improve as new goose flocks take hold and flourish all over central and southern Iowa.

Duck hunters everywhere are shaking their heads after three years of very strange migrations that greatly reduced their opportunities at flocks of northern ducks. But in spite of that, the number of ducks bagged has generally been on the upswing.

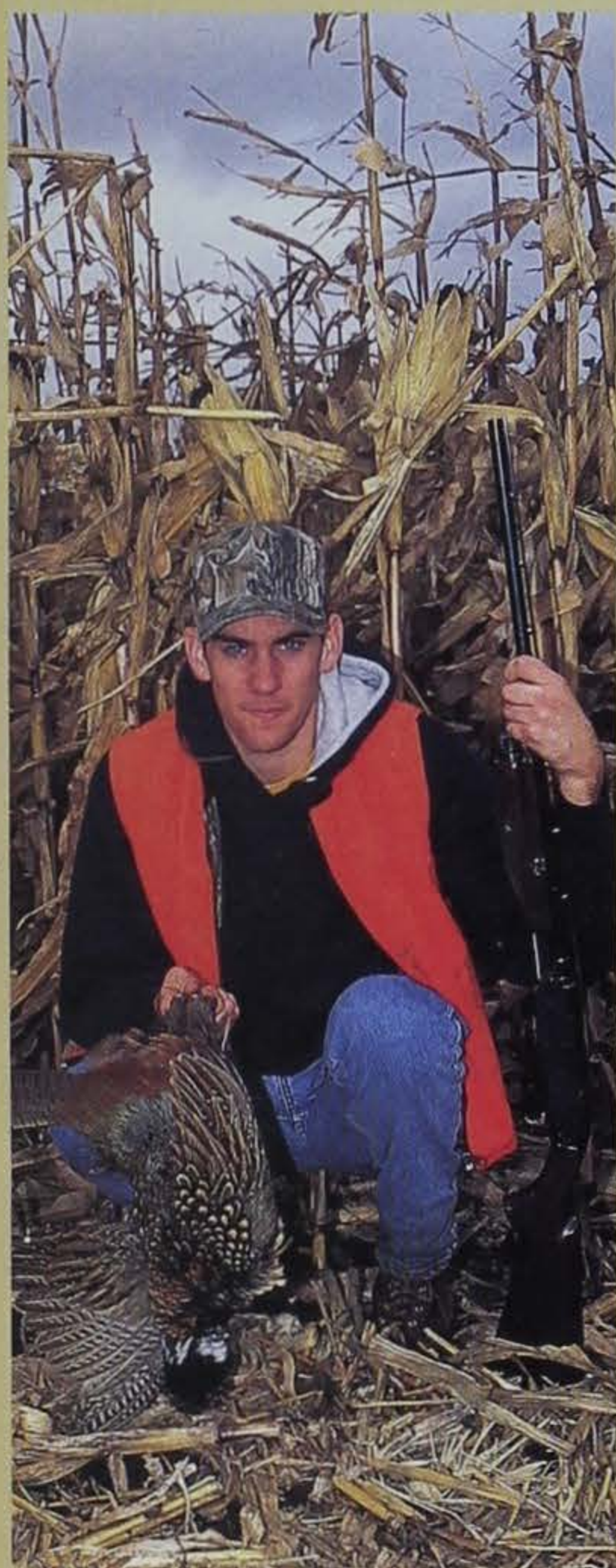
So how does 1997 stack up so far? For most hunters this could be as good a year as any of the past decade. Maybe even better than most. Oh heck, I'll go ahead and say it. This could be the best year overall than any we've seen since Santa wore knickers! Read on for more details!

Upland Game

Todd Bogenschutz's accompanying article on page 12 pretty much says it all for upland game. Iowa should keep the title of "best in the nation" this year, but this reign could be short-lived. If you like to bird hunt and haven't read Lowell Washburn's article in the last issue of the *Conservationist* ("The Parties Over, It's Time to Kiss the Roosters Goodbye"), you need to do so immediately. The rules for the next decade of the CRP have changed dramatically and Iowa stands to permanently lose half of those all-important grassland acres that produced much of the wonderful pheasant hunting we've enjoyed the last 10 years. Northern Iowa, which needs CRP the most, stands to lose virtually all of its CRP, while southern Iowa, where it's not nearly as important, will retain more grass than is needed for good wildlife production. Read Lowell's article for details on how you might be able to help turn the situation around at least a little.

Deer

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Roger Hill



Roger Hill

Deer and Turkeys

If you read the newspapers or watched television at all during the last legislative session, you know the heat is on the deer herd. Too much crop damage to suit some farmers and too many deer-vehicle collisions for some commuters, plus the organized efforts of the Farm Bureau and horticultural groups, led to wild schemes to reduce deer numbers. Thanks to a small but dedicated group of hunters (primarily the Iowa Bowhunter's Association), most of the truly hare-brained ideas fell by the wayside. But not enough hunters or deer watchers spoke up to offset the organized efforts of the anti-deer crowd, so a wholesale reduction of the deer herd will take place during the next two to three years.

This year's deer regulations will be the most liberal since 1990, the last time deer were targeted for a reduction. More hunters will be allowed to buy more licenses to take more deer (particularly does) in more parts of the state than in any recent year. New opportunities include statewide any-deer licenses for all hunters in all regular seasons; the ability to buy more licenses for more seasons than ever before; and special antlerless



Roger Hill



DNR



Ray Johnson

deer hunts in 20 counties during the second shotgun and late muzzleloader seasons, in special late seasons after the traditional end of deer hunting on Jan. 10, and in nine special park or urban deer hunts (with at least two others under discussion). Plus the DNR has under consideration rules to allow the issuing of even more antlerless deer licenses where landowners cannot control herd size with hunters during the regular deer seasons.

Last year's deer kill was a record 107,000 deer. With the new regulations in effect this year, the harvest could reach 120,000 to 130,000. This will undoubtedly begin reducing the deer herd. Currently Iowa hunters experience some of the finest deer hunting in the nation, particularly for trophy deer. (See Jim Zohrer's article on the DNR's trophy deer program, page 17.) How long this will last depends on how many years liberal regulations are in force. And that is the crux of the issue. How many (or few) deer does it take to satisfy the various parties who are affected by them? See Richard Bishop's accompanying article on page 24 for a discussion of the dilemma facing deer managers attempting to satisfy a variety of opposing views on the appropriate number of deer for Iowa.

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Roger Hill



Lowell Washburn

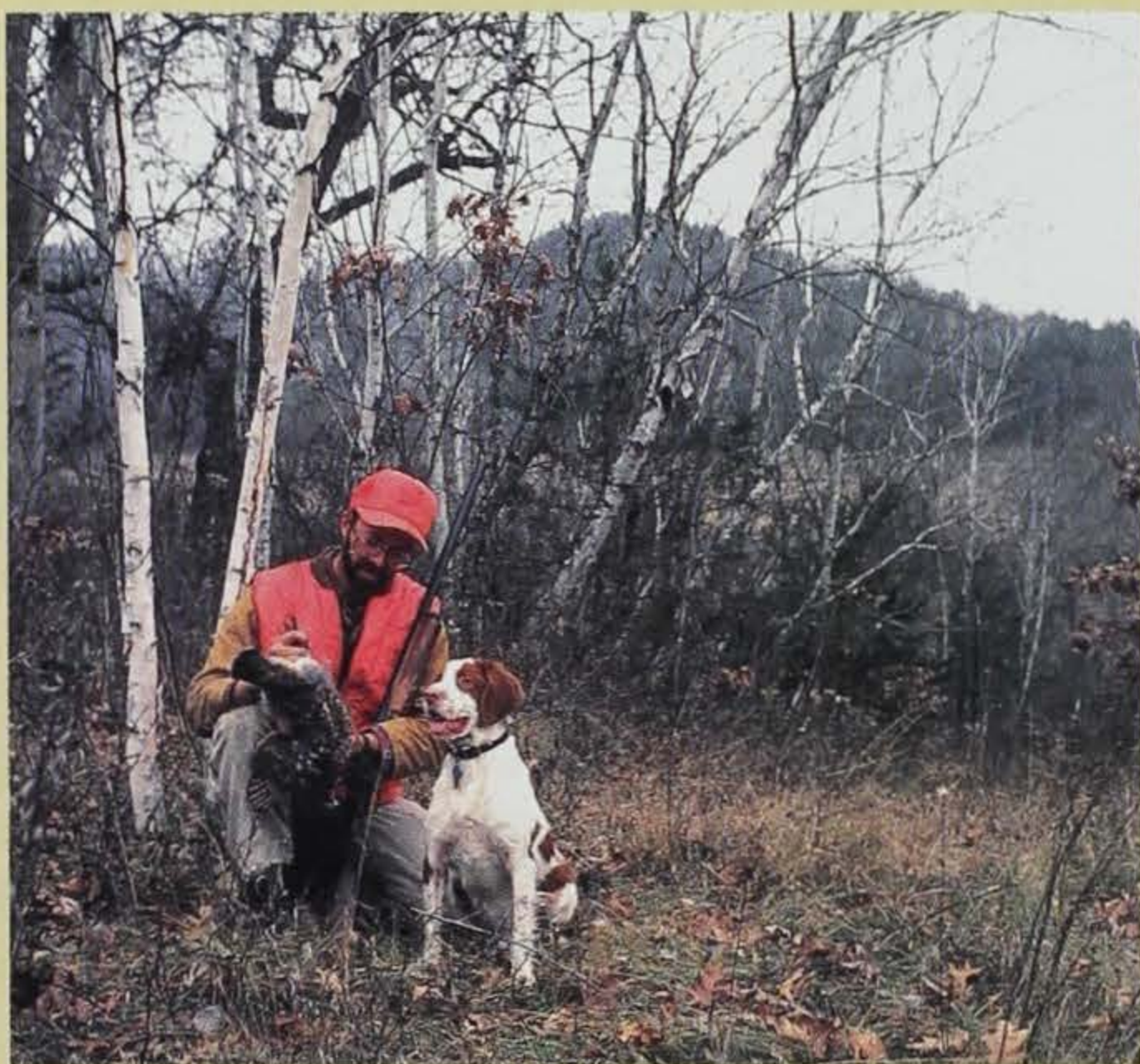
The situation for turkeys is much less complex. Although they cause some crop damage, research in Iowa and Wisconsin has shown it to be insignificant. And a recent poll of farmers indicated they are not particularly concerned about turkeys. Turkeys may well be the next target for those that do not want any wildlife interfering with their self-perceived right to be free of any problems from the natural world in growing whatever they want, whenever and wherever they want. But the evidence is pretty clear that a major problem doesn't exist.

The best news for turkey hunters is that this year's excellent weather virtually assures a good crop of poults nearly statewide. Nearly half of the turkey hens in a DNR study at Stephen's Forest in southern Iowa produced young, far above average. And survival of poults was good. Incidental reports from elsewhere indicate hens with large broods are common. This could be the best turkey hatch in nearly a decade and should assure good hunting this fall and for the next three or four years.

Ducks and Geese

Guy Zenner's accompanying discussion of waterfowling prospects on page 14 is so rosy that it may start waterfowlers quivering with anticipation. Late summer counts indicate production was as good or better than expected. Local production of giant Canada geese set a new record (again), and duck populations will be the highest seen since the mid-1950s. Seasons are more liberal than at any time since the 1970s, with a 60-day duck season, six ducks in the bag and multiple hen mallards and pintails allowed. There is a waterfowl season opening virtually every weekend from Sept. 13 through Oct. 11, providing lots of opportunity for a variety of waterfowling experiences.

But duck hunters burned by poorer-than-expected seasons the past couple of years are probably viewing these forecasts with some skepticism. And they should. No matter how many ducks exist, not much hunting is provided if they all migrate through the state in a few days in late October, as they have done recently. And it pays not to get too euphoric over predictions of 10, 15 or 20 percent increases in duck numbers (or of anything else, for that matter). These increases could result in hunters seeing 11 or



Ron Johnson



Roger Hill



Jerry Leonard

12 mallards in a flock, instead of the 10 seen last year. Or having six flocks work the decoys on a typical day, instead of five like last year. Averaged over the continent, much more duck hunting will be provided, but individuals shouldn't expect an amazing increase where they hunt.

Other Game

A variety of other species provide hunting or trapping recreation for smaller numbers of Iowans. The outlook for trappers, grouse and woodcock hunters, and squirrel and rabbit hunters remain good, even though fewer trips will be made in pursuit of them.

It is hard to believe that as recently as 1986, furharvesting was a \$10 million industry in Iowa. Although fur prices are expected to increase somewhat this year, the value of furs taken will probably be in the \$1 million range, a far cry from a decade ago. The European Economic Community's ban of leghold-trapped fur is still the culprit. Talks with the EEC are of the on-again, off-again variety with only sporadic progress occurring, generally followed by new setbacks. Although some markets are being developed in the Orient to replace Europe as an outlet for North American fur, progress is slow. Until new markets are developed, furharvesting will remain the province of a small number of dedicated, recreational trappers.

The prospects for grouse and woodcock hunters are going in opposite directions. Ruffed grouse numbers in the north country are on the rise, with Minnesota and Wisconsin reporting 25 percent increases in drumming grouse in some regions. With the good weather in Iowa this summer, our grouse numbers should be increasing also. Seasons and bag limits remain the same as in past years.

Woodcock seasons and bag limits have been reduced by the U.S. Fish and Wildlife Service in response to a slow but general decline in woodcock numbers in the Midwest. Breeding habitat loss is the key, with fewer old fields and brushy habitat available for breeding woodcock throughout most of their range. The hunting season has been reduced to 45 days and bag limits to three daily and six in possession to reflect concern over woodcock numbers.



Ron Johnson



Lowell Washburn

Squirrel and rabbit hunting have both fallen from their place of major hunting sports in the past 20 years. Populations of both are still abundant, but fewer hunters choose to pursue them. Bag limits remain the same, but the season for both opened on Sept. 1 this year and in subsequent years to provide some stability in opening dates. In the past they opened on the Saturday before Labor Day, which varied from year to year, displeasing some hunters in almost every year.

So, 1997 is shaping up as a great year. Whether you hunt something a lot, or everything a little, there should be lots of opportunity for you to choose from. Whether we know it or not, we Iowans are spoiled by the abundance of good hunting opportunities we can enjoy. Let's see, it's November . . . Should I go duck hunting? There was a stiff northerly breeze predicted for tomorrow . . . Or bow hunting? It's the peak of the rut . . . How about pheasants? All of the corn around here is out now . . . And there was a flock of geese down on the neighbor's pond this evening . . . But the other neighbor's kid wanted me to take him squirrel hunting now that the leaves are off. Dang it! What should I do?



Roger Hill



Lowell Washburn

Upland Game

by Todd Bogenschutz

Pheasant

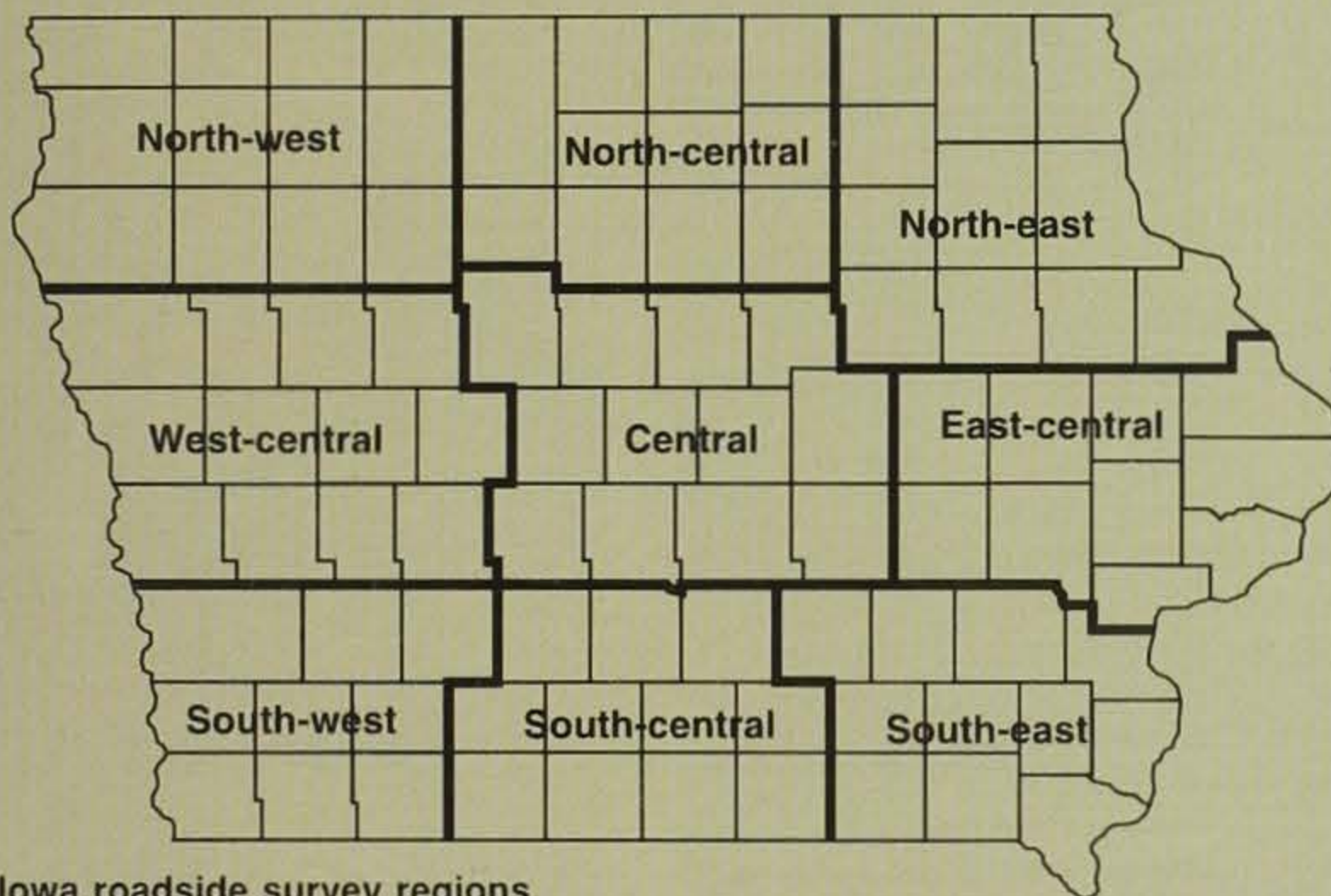


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- Poor

The 1997 August Upland Wildlife Roadside Survey, conducted by the Iowa DNR, indicates *ring-necked pheasant* populations across Iowa are unchanged from last year, although statewide numbers are slightly (2%) above 1996 counts. Iowa's 1997-98 pheasant crop looks promising because of the excellent weather conditions we had during the nesting season. However, the loss of large CRP acreages across northern Iowa looms as a dark cloud in the future for Iowa hunters after this fall. Last year, statewide, we counted an average of 46 pheasants on a 30-mile route. The counts were exactly one bird higher (47 birds/30-mile route) this year.

Southern Iowa pheasant hunters will find much improved hunting conditions over the 1996-97 hunting season, with counts 50 to 60 percent higher than last year in the southeast and south-central regions (see figure on page 13). However, populations in the southwest and south-central regions still remain well below historic levels (25 to 35%). Pheasant populations across central Iowa were very similar to 1996. Populations in the central region were slightly higher than 1996, while populations in west-central and east-central regions of the state were down slightly from last year. The 1997 counts showed an average of 55 pheasants/30 miles in the central region and 45 pheasants/30 miles in the west and east-central regions. Pheasant counts in northern Iowa were some of the highest in the state in 1997. The north-central region averaged 67 pheasants/30 miles in 1997, while the northeast increased 40 percent from 30 birds per route in 1996 to 43 birds in 1997. Northwest Iowa saw a slight decline in populations, likely due to the heavy snows of last winter. However, good bird numbers are being reported in the Spirit Lake area.

The 1997 crop harvest is about two weeks ahead of normal, so biologists are optimistic hunters will have very good success on the 1997 season opener. The northern two-thirds of the state will offer the best hunting in 1997. Based on past comparisons of roadside count data and harvest information, hunters should harvest approximately 1.5 million pheasants during the 1997-98 hunting season if crop harvesting is not delayed by wet weather this fall. Iowa pheasant hunters harvested 1.37 million roosters last year, leading the nation in total harvest in 1996, for the second year running. Resident hunters should expect to see a large number of non-resident hunters this fall



Iowa roadside survey regions.



Ed Kocak

Quail



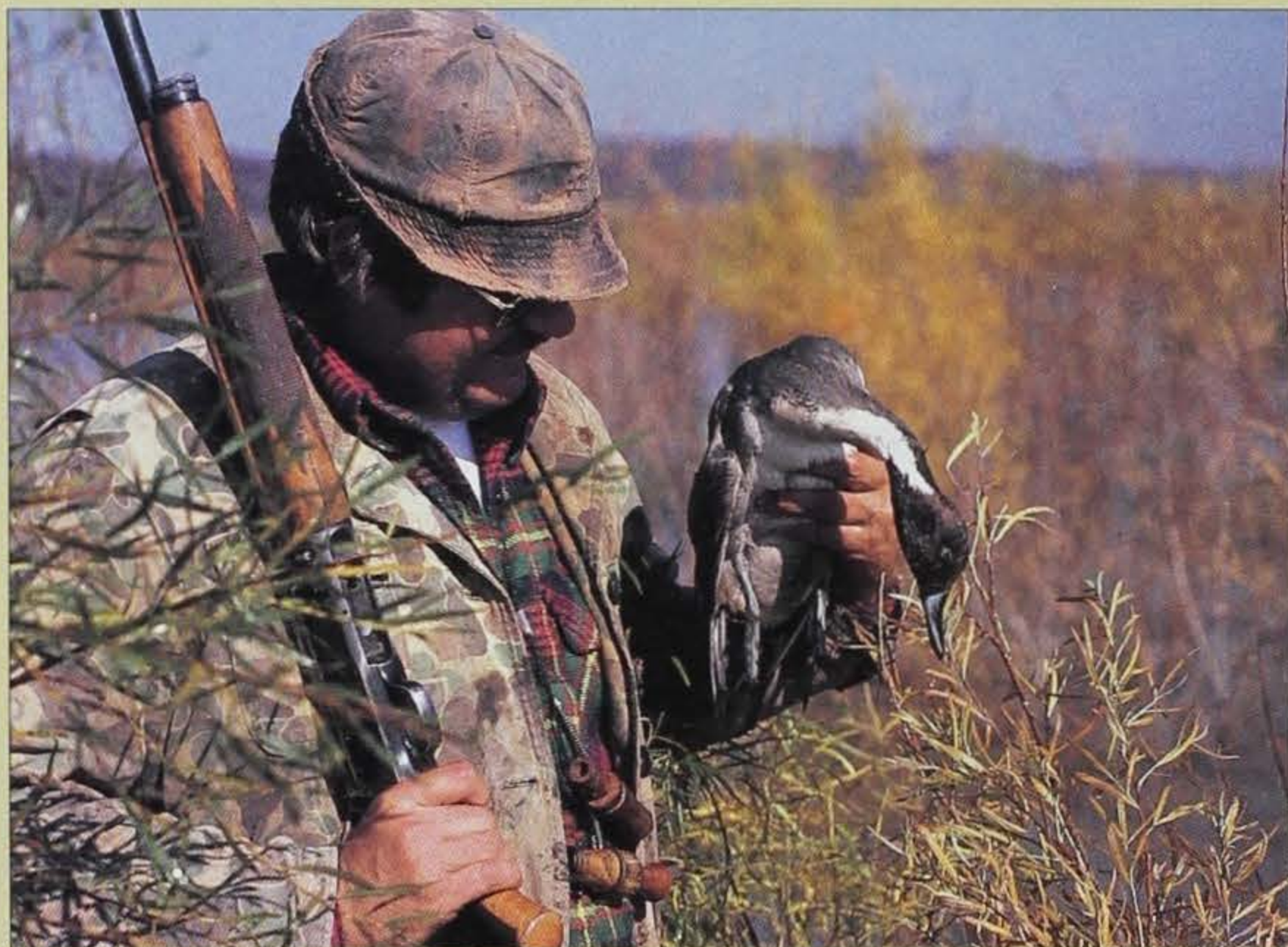
Partridge



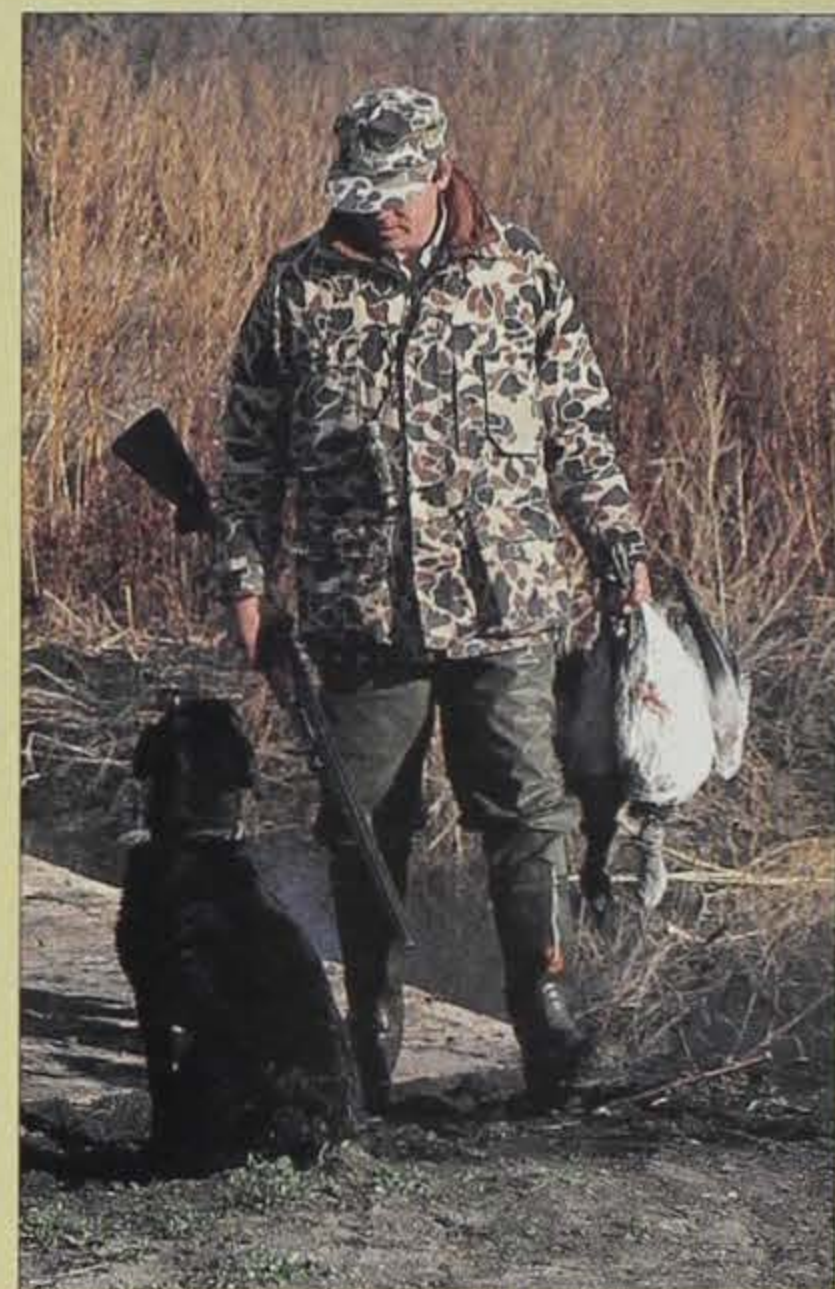
due to Iowa's past success and good hatch this year. The 1997 hunting season runs from Oct. 25, 1997 through Jan. 10, 1998. Shooting hours begin at 8 a.m. and end at 4:30 p.m. The daily bag limit is three roosters, with a possession limit of 12.

Statewide, the number of *bobwhite quail* counted in 1997 are 127 percent above the number counted in 1996. Much of this increase can be attributed to significantly higher populations in the south-central region of the state, Iowa's historic quail range. Southwest and east-central regions also reported increased quail populations when compared to 1996 counts. The southeast region reported little change in quail numbers. The southwest and south-central regions boast Iowa's best quail numbers, but populations remain 50 percent below their historic averages. Iowa's long-term decline in quail populations mirrors quail populations nationwide, which have declined steadily the last three decades. This nationwide decline is attributed to changing agricultural practices. Larger fields, clean farming practices and the removal of thousands of miles of field hedgerows have proven devastating to quail populations. Quail are primarily an edge species that do best in a small field setting with less intensive agricultural practices. Biologists estimate quail harvest during the 1997-98 hunting season should approach 150,000 birds. The 1997-98 quail season opens on Oct. 25, 1997 and closes on Jan. 31, 1998. The daily bag limit is 8 birds of either sex with a possession limit of 16. Shooting hours are the same as pheasants.

Statewide *gray partridge* numbers increased 117 percent when compared to counts taken in 1996. The partridge is an exotic bird introduced into North America from the arid steppe region of Asia, and only reproduces well during dry or drought years in Iowa. Iowa weather statistics show Iowa had a dry spring in 1997 and biologists attribute this year's increase in partridge numbers to the dry weather. The 1997 roadside survey showed an average of 5.5 partridge per 30-mile route, twice the numbers seen on the survey in 1996. Populations in the northern and central regions all showed increases in 1997. Some of the better partridge counts in 1997 came from Hamilton, Kossuth, Clay, Emmet, Cerro Gordo, Hardin and Hancock counties. The partridge season opens on Oct. 11, 1997 and closes on Jan. 31, 1998. Bag and shooting hours are the same as for quail.



Roger Sparks



Ron Johnson

Ducks and Geese

by Guy Zenner

During the summer of 1996, waterfowl breeding population and production surveys conducted throughout the prairie pothole region of the U.S. and Canada indicated waterfowl hunters could expect to see the largest fall flight they had seen in almost two decades. Prairie pond numbers were 18 percent higher than 1995, 61 percent above the 1974-94 average and the second highest count since 1974. The duck breeding population was estimated at nearly 37.5 million, a five percent increase from 1995 and 16 percent above the long-term average. Numbers of breeding mallards, 7.9 million, were similar to 1995, the highest count since 1972. Estimates of blue-winged teal and northern shovelers had reached record levels. Although not statistically different from 1995, gadwall, green-winged teal and canvasbacks also reached new record highs in 1996. Only pintails, wigeon and scaup remained below their North American Waterfowl Management Plan (NAWMP) goals.

Duck seasons and bag limits were liberalized in 1996 and hunter expectations were high. Despite a compressed migration in Iowa, as well as other Midwest states, hunters did quite well. In a pattern similar to 1995, the bulk of the 1996 duck migration occurred within a one-week period during the last few days of October and the first few days of November. This is the third time a migration of this type has occurred in the past six years. Nevertheless, Iowa duck hunters had a successful season, harvesting nearly the same numbers of ducks as in 1995. The addition of the Youth Duck Hunting Day to the season was particularly popular, as indicated by the number of comments received favoring the continuation of this hunt.

Despite an increased duck harvest in the U.S., the numbers of ducks that returned to nest on the prairies this past spring reached a record high. Total numbers of breeding ducks (42.6 million) were 13 percent higher than 1996 and 31 percent higher than the 1955-96 average. Population estimates for 5 of the 10 major duck species were higher than 1996, while populations of the remaining five were statistically unchanged from 1996. Gadwall, northern shovelers and redheads reached record high levels while blue-winged teal and green-winged teal recorded the second highest counts since the survey began. Mallard numbers increased 25 percent to nearly 10 million, the third highest count since 1955. Both pintail and wigeon numbers rose more than 30 percent.

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Roger Hill



Lowell Washburn

Canvasback and scaup numbers remained similar to last year with scaup populations still 25 percent below the long-term average.

Pond numbers in the surveyed area, 7.5 million, were unchanged from last year, but were the third highest number recorded and 56 percent higher than the 1974-96 average. The good wetland habitat conditions persisted through the summer in much of prairie Canada and the north-central U.S., and brood surveys indicate production was good. The fall flight of ducks is expected to be 92 million, very similar to the 90 million fall flight of 1996. The fall flight of mallards, the number one duck in the Iowa waterfowlers bag, is expected to be more than 14 million, roughly 14 percent greater than 1996.

Although Iowa duck hunters have much to be optimistic about -- with a large fall flight, long season and liberal bag limits -- they should also be aware these conditions do not necessarily mean they will harvest more birds or even see significantly more ducks over their decoys. There are no guarantees in duck hunting, expect that habitat conditions and duck migrations will be different each year. In a pattern similar to recent years, excellent habitat conditions have persisted in the Dakotas through the summer,

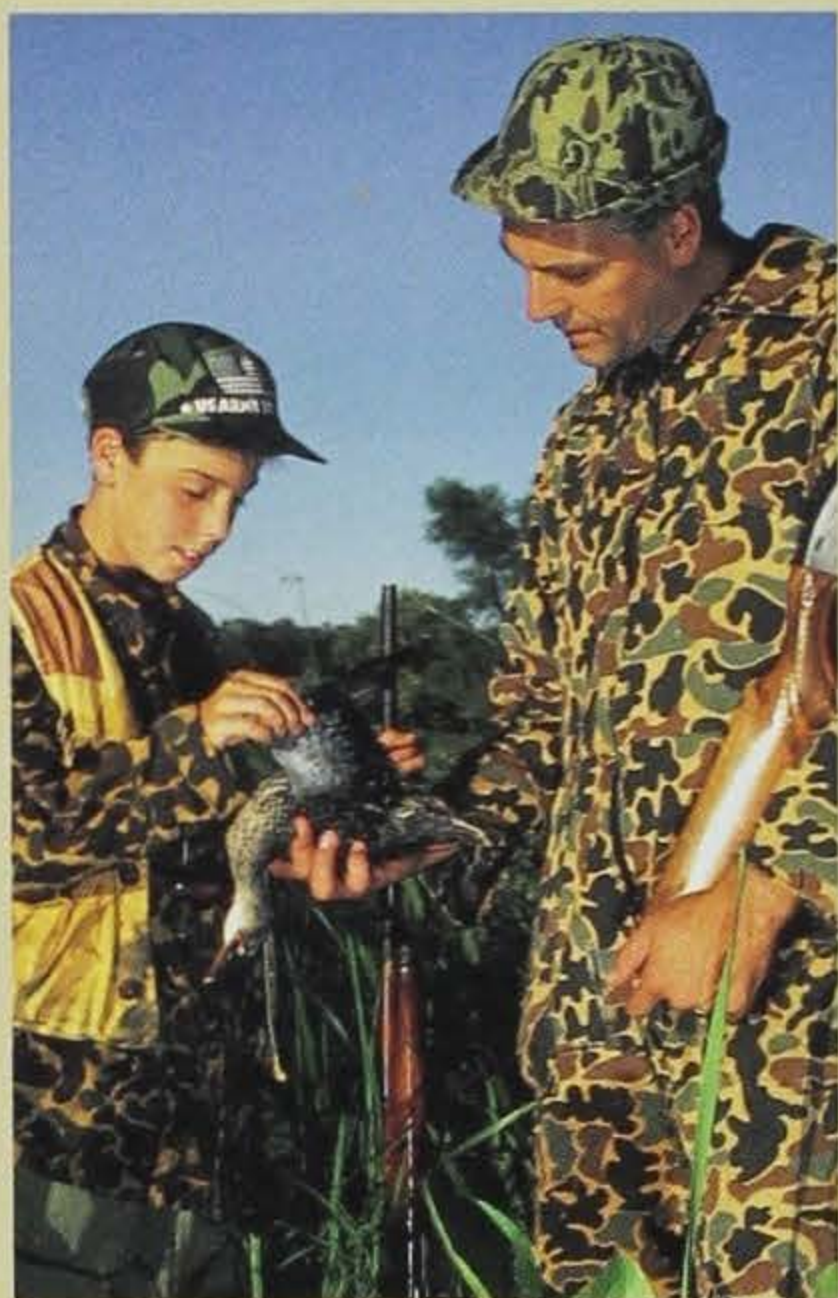
HIP for Migratory Bird Hunters Begins in 1998

Beginning Jan. 1, 1998, all hunters of migratory birds (in Iowa that means ducks, geese, coots, woodcock, snipe and rails) must register with the U. S. Fish and Wildlife Service's Harvest Information Program (HIP) before hunting, and carry proof they have registered while in the field. When they buy their 1998 hunting license, migratory bird hunters will be reminded to register and will be given a toll-free number to call. (That's right, it's free!) They will be asked to give their name and address and a few questions about the number of migratory birds they bagged last year. This information will be passed to the USFWS, which will then sample hunters of each species to estimate the number of migratory game birds they harvest in 1998. Accurate estimates of harvests are a critically important part of the management programs that ultimately determine future hunting seasons. Personal information given to HIP will be completely confidential.

HIP replaces the Waterfowl Harvest Survey some hunters participate in each year when they purchase their Federal waterfowl stamp at post offices. HIP will give better estimates of duck and goose harvests, and allow estimates of woodcock, snipe and rail harvests for the first time.

HIP has been phased in gradually since 1994, when Missouri, South Dakota and California started pilot programs to work out the details of the survey. All states will be conducting HIP surveys in 1998.

Remember, only migratory bird hunters need to participate. If you don't hunt these species, nothing will be required of you. And the survey doesn't begin until 1998. **No action is required this year.**



Lowell Washburn



Ron Johnson



Ron Johnson

which may encourage the majority of the ducks to linger a little longer on the prairies and take a more westerly route on their trek south. If the wetland conditions are good in Iowa, we will undoubtedly attract some of these birds as they pass by. But waterfowling opportunities and wetland conditions are largely dependent upon the weather -- not just the weather in Iowa, but the weather in North Dakota and Manitoba as well. Waterfowlers would be well advised to check local habitat conditions before the season and keep one eye on the weather forecasts.

Waterfowl hunters must also remember good wetland conditions will not last forever on the prairies. As sure as there is a tomorrow, drought will seize the prairies again in the not-to-distant future and duck populations will decline. It is as natural a cycle as the seasons of the year, and waterfowl managers and hunters will have to make adjustments in the future. For now, however, the ducks are taking advantage of the bountiful wetlands and their populations are up.

Good news is on the wind for goose hunters in Iowa as well. Iowa's giant Canada goose population reached another record high this spring and production was up 15 percent compared to 1996. The giant Canada goose population has continued to expand into new areas across the state and most hunters should have fair hunting opportunities close to home. Canada goose population growth flattened out in north-central and northwest Iowa, where densities of geese are highest, but increased considerably in southern Iowa. Canada goose production was better than average on many interior rivers, but production on the Mississippi River north of the Quad Cities was very poor due to flooding in May. The numbers of small- and medium-sized Canada geese migrating from the coast of Hudson Bay and further north should be similar to past years.

The mid-continent snow goose population remains very high and production was fair this summer. The majority of these birds, however, won't arrive in Iowa until the first week in November. If they stage in the Missouri River valley in the numbers they have in recent years, there should be nearly a million snow geese in the valley by the second or third week of November. Snow goose hunters must keep a close eye on the weather as this is the major factor influencing when these geese move out of the Dakotas and how long they linger in Iowa.



Roger Hill



Roger Hill

Land of Trophy Bucks?

by Jim Zohrer

Iowa contains some of the richest soils in the world. We produce bumper crops of corn, soybeans and hogs. We are also noted as a leader in the production of another outstanding crop. Year after year, Iowa produces a large number of trophy whitetail deer. Why are we so lucky? The answer is a rather complex combination of rich soils, farming practices, our deer hunting regulations and the genetics of our deer population. The genetics give our deer the potential for producing trophy racks. When combined with an abundant, high-quality food supply and hunting regulations that permit enough bucks to reach older ages, we have the makings for some outstanding deer.

Iowa always ranks in the top five or six states and provinces in North America in the production of trophy deer racks. Organizations like the Boone and Crockett Club and the Pope and Young Club use standardized systems to measure racks and keep records on trophy deer taken in North America. There are various categories based on the shape of the rack (typical or non-typical) or the method of take (bow or gun). Iowa consistently ranks at the top in terms of the number of entries in each of these categories. Iowa has been particularly successful in placing qualifying entries into the record books during the past ten years. Most reports list Iowa fourth out of all North American states and provinces during this time period. Only Minnesota, Wisconsin and Kansas rank higher.

Since 1953, the DNR has also maintained a trophy buck registry for deer taken in Iowa. We use the same scoring system as the national programs, although our minimum qualifying point values differ. To date, we have accepted 5,000 entries in our record book, with about 400 new bucks added each year (see new entries on the following pages).

So what are your chances of shooting a trophy buck in Iowa? Assuming an annual deer harvest of 100,000 deer, with approximately 50 percent antlered bucks, means that eight-tenths of one percent of all the bucks shot qualify. That is less than one in a hundred. If we look at it in terms of the number of hunters, with 165,000 hunters taking 400 trophy bucks each year, your chances are about one in 400 of shooting a qualifying buck. These may not sound like very good odds, but they are better than most states.

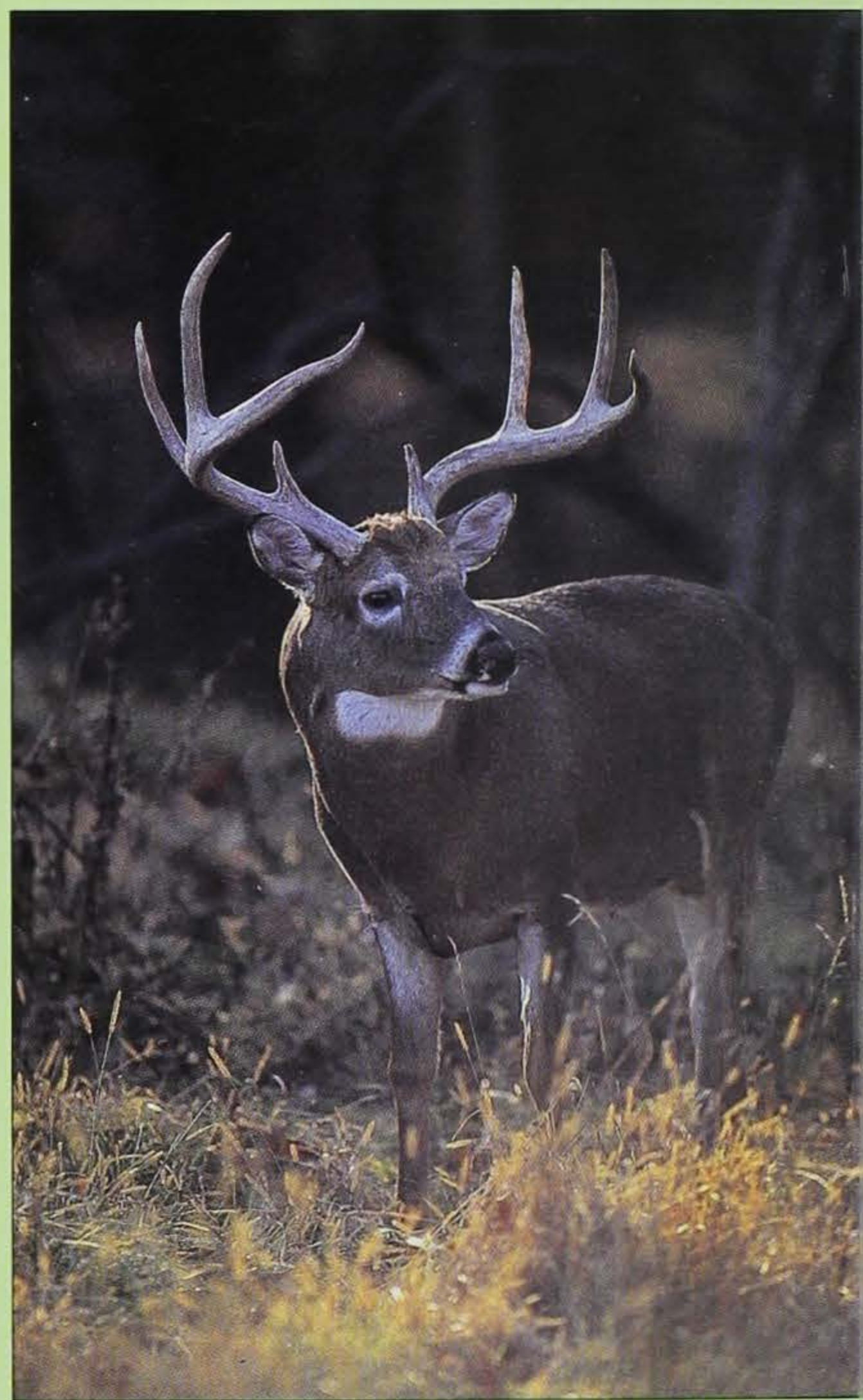
To enter a deer rack into the state record book, you must first have it scored by a certified measurer. To obtain a list of certified measurers in your area contact the DNR. There is no charge to have a rack measured or to enter your score in the state record book.

Photos by Roger A. Hill

1997 Record Deer Racks

This is a list of deer racks scored between
October 1996 and July 1997.

* indicates a new entry into the
All-Time Top 10 Racks.



BOW, TYPICAL

(Minimum Qualifying Score -- 135 pts.)

NAME	CITY	COUNTY TAKEN	TOTAL SCORE	YEAR
*Duane Miller	Onawa	Monona	198 3/8	1996
*Randy Petersburg	Waukon	Allamakee	189 1/8	1996
*Dave Zima	Blair	Monona	186 4/8	1996
Richard Reed	Creston	Union	179 0/8	1996
Mike Feeney	Council Bluffs	Pottawattamie	178 0/8	1995
Jeffrey R Coonts	Buffalo	Scott	175 1/8	1996
Larry Bryan	Stuart	Guthrie	169 4/8	1995
John R Reitz	Davenport	Washington	168 3/8	1996
Jeff Berns	Ridgeway	Winnebago	166 4/8	1997
George Loomis	Eldon	Wapello	166 4/8	1995
Todd Doering	Poynette	Polk	165 6/8	1996
Alan Andrews	Newton	Van Buren	165 4/8	1996
Rodney P Stahlnecker	Honey Creek	Pottawattamie	164 5/8	1996
Rodney P Stahlnecker	Honey Creek	Pottawattamie	164 5/8	1996
Dick Julson	Dubuque	Clayton	163 6/8	1969
Bob Hilton Jr	Shenandoah	Page	163 3/8	1996
Kenneth E Brezel	Dexter	Guthrie	161 5/8	1997
Rollie D Blake	New Market	Taylor	161 2/8	1989

Larry Z
Joshi Ne
Vane Or
Kevin M
Jeff Scha
Mike
Duane B
Brian J
Ron Lin
Jaime S
Ron Sch
Gerald M
Rick Wa
Cory Hu
Brian Gu
Jack Bat
Bob Jon
Mike Me
Don Bru
Mike Ca
John Car
Bob Ath
Rick Stro
Edwin E
Kenneth
Mark St
Chris Ba
Dennis D
Dan Mik
Kevin M
Robin Ha
Rick Dob
Patrick C
Steve Ste
Kurt Gar
Karey Ga
Jerry Lee
Jim Wag
Glen Wil
Tim Wal
Bill Glen
Clyde Mi
Gary L M
Paul Blot
Andy Ray
Jack L Pe
Larry Mu
Dan Mikk
Dan D So
Rick Stro
Gary Hall
Scott Ball
Doug We
Jeff Wirth
Curt J Ch
Justin Gro
Terry L C
Dennis Pa
Robert Sy
Tyler Mes
Michael C
Rick Mac
Ryan Goo
Bob Ferns
John Han
Ed Scholt
Steve Alla
Joseph H

Larry Zach	Ankeny	Fremont	160 4/8	1987	Jim Millard	Birmingham	Van Buren	145 0/8	1989
Josh Neeley	Bonaparte	Van Buren	160 4/8	1995	Bill Saddler	Harpers Ferry	Allamakee	144 7/8	1991
Vane Orey	Indianola	Warren	160 2/8	1996	Merle Steiner	Decorah	Winneshiek	144 4/8	1996
Kevin Meyer	Winfield	Louisa	158 6/8	1996	Dan E Glasgow Sr	Argyle		144 4/8	1996
Jeff Schaaf	Griswold	Pottawattamie	158 5/8	1996	Jim Boxleiter	Dubuque	Dubuque	144 1/8	1996
Mike Miner	Blairstown	Benton	157 7/8	1996	Tom S Hyde	Clear Lake	Cerro Gordo	144 1/8	1996
Duane Baumler	Decorah	Allamakee	157 6/8	1996	Howard Thompson	Aplington	Butler	143 7/8	1996
Brian J Mehaffy	West Point	Lee	157 5/8	1996	Timothy J Harle	Dubuque	Dubuque	143 7/8	1996
Ron Lint	Keosauqua	Van Buren	157 1/8	1996	David L Klobnak	Hamilton	Marion	143 6/8	1996
Jaime Schieffer	Council Bluffs	Pottawattamie	156 7/8	1996	Larry Sebers	Cedar Rapids	Jones	143 4/8	1996
Ron Schepers	Maquoketa	Jackson	156 5/8	1996	Kelvin Carpenter	Woodard	Boone	143 1/8	1987
Gerald Miller	West Union	Fayette	156 3/8	1996	Matthew R Lewis	Stanhope	Hamilton	143 1/8	1996
Rick Wallace	Conway	Taylor	156 3/8	1996	Gary Charipar	Cedar Rapids	Allamakee	143 1/8	1996
Cory Hulsing	Red Oak	Carroll	155 7/8	1921	Bob Fernside	Council Bluffs	Pottawattamie	143 0/8	1996
Brian Gunderson	Omaha	Harrison	155 6/8	1996	Nick Hildreth	Colfax	Polk	142 6/8	1995
Jack Bates Jr	Mount Pleasant	Henry	155 6/8	1996	Duane C Baumler	Decorah	Winneshiek	142 4/8	1996
Bob Jones	Montour	Tama	155 6/8		Mike Schaefer	West Des Moines	Warren	142 3/8	1996
Mike Metz	Indianola	Warren	155 2/8	1995	William Watson	Fairfield	Van Buren	142 2/8	1995
Don Brunning	Long Grove	Scott	155 2/8	1996	Jeff Pavcek	Hiawatha	Linn	142 1/8	1996
Mike Carter	Bellevue	Jackson	155 1/8	1996	Don Mealey	Norwalk	Clarke	142 0/8	1996
John Carlin	De Witt	Scott	155 0/8	1996	Merle Schulz	Pleasantville	Marion	142 0/8	1996
Bob Athen	Northboro	Page	154 7/8	1996	Wayne Salow	Earlville	Clayton	141 7/8	1996
Rick Stroud	Columbus Junction	Louisa	154 2/8	1992	Doug Westercamp	Keosauqua	Van Buren	141 6/8	1995
Edwin E Vander Werff	Reasnor	Marion	154 2/8	1996	Tony Giorgenti	Sioux City	Plymouth	141 6/8	1996
Kenneth P Martin	Evansdale	Keokuk	153 5/8	1996	J D White	Montrose	Lee	141 5/8	1996
Mark Story	Bonaparte	Van Buren	153 3/8	1996	Dave Myers	Creston	Union	141 5/8	1996
Chris Barton	Farragut	Page	153 2/8	1996	Dennis Welsh	Oelwein	Buchanan	141 4/8	1996
Dennis Douthart	Fairfield	Jefferson	153 0/8	1996	Lynn Forke	Carroll	Guthrie	141 4/8	1996
Dan Mikkelsen	Wiota	Adams	153 0/8	1996	Greg Frommelt	Dubuque		141 3/8	
Kevin M Shipley	Des Moines	Marion	152 6/8	1996	Chad Williams	Red Oak	Montgomery	141 3/8	1995
Robin Henderson	Monona	Allamakee	152 6/8	1996	Michael Welch	Muscatine	Muscatine	141 0/8	1996
Rick Dobson	Nevada	Story	152 4/8	1996	Gerald T Dowell	Pella	Marion	140 4/8	1996
Patrick C Lucas	Blue Grass	Scott	152 0/8	1996	Joe Mc Sorley	Winfield	Henry	140 2/8	1996
Steve Stern	La Porte City	Fayette	151 6/8	1996	Kevin C Hedrick	Dubuque	Dubuque	140 2/8	1996
Kurt Gardner	West Branch	Johnson	151 5/8	1996	Tracy Lee Meyers	Cedar Rapids	Jones	139 7/8	1997
Karey Garringer	Iowa City	Iowa	151 0/8	1995	Don Edwards	Council Bluffs	Fremont	139 6/8	1990
Jerry Lee Mead	Charles City	Mitchell	150 7/8	1996	Dennis Cavin	Clarinda	Taylor	139 5/8	1997
Jim Wages	West Point	Lee	150 5/8	1993	Larry Bryan	Stuart	Guthrie	139 3/8	1985
Glen Wilson Jr	Indianola	Warren	150 4/8	1996	Ronald Gefaller	Cedar Rapids	Linn	139 3/8	1997
Tim Wallin	Middletown	Des Moines	150 0/8	1996	Todd M Newcomb	Washington	Washington	139 2/8	1996
Bill Glenny	Washburn	Black Hawk	150 0/8	1996	Jason Forney	Sioux City	Woodbury	138 7/8	1996
Clyde Millie	Sioux City	Woodbury	149 6/8	1997	Greg Turner	Atlantic	Cass	138 6/8	1996
Gary L Mezera	Harpers Ferry	Winneshiek	149 5/8	1996	Andy Kohn	Sioux City	Woodbury	138 6/8	1995
Paul Blotz	Larchwood	Lyon	149 5/8	1996	Tony Batcheller	Washington	Washington	138 5/8	1996
Andy Raymond	Lehigh	Webster	149 4/8	1996	John Bender	Greentop	Davis	138 3/8	1996
Jack L Peterson	Fort Madison	Lee	149 4/8	1986	Kenneth Vaill	Shenandoah	Taylor	138 2/8	1997
Larry Mumma	Corydon	Wayne	149 4/8	1995	Bruce H Johnson	Cherokee	Cherokee	138 2/8	1996
Dan Mikkelsen	Wiota	Adams	149 3/8						
Dan D Soellner	Storm Lake	Buena Vista	149 2/8	1996					
Rick Stroud	Columbus Junction	Louisa	148 5/8	1995					
Gary Halbersma	Urbandale	Guthrie	148 5/8	1997					
Scott Ballard	Chariton	Lucas	148 4/8	1996					
Doug Westhoff	Dyersville	Dubuque	148 4/8	1996					
Jeff Wirth	Waukon	Allamakee	148 4/8	1996					
Curt J Chase	Cedar Falls	Butler	148 3/8	1996					
Justin Grove	Luana	Allamakee	148 2/8	1996					
Terry L Comstock	Essex	Page	148 0/8	1996					
Dennis Palmer	Pittsville	Appanoose	147 6/8	1996					
Robert Syslo	Calamus	Clinton	147 4/8	1995					
Tyler Messer	Burlington	Des Moines	147 2/8	1996					
Michael Graham	Burlington		147 2/8	1996					
Rick Mace	Westfield	Plymouth	146 5/8	1996					
Ryan Gooden	Keosauqua	Van Buren	146 2/8	1995					
Bob Fernside	Council Bluffs	Pottawattamie	146 1/8	1994					
John Hanchett	Sigourney	Keokuk	145 7/8	1996					
Ed Scholtus	Albia	Monroe	145 7/8	1996					
Steve Allard	Fort Dodge	Webster	145 2/8	1997					
Joseph Hogan	Des Moines	Warren	145 1/8	1996					



Bob Burris	Manchester	Delaware	138 2/8	1996
Monte Ferrel	Davenport	Jackson	138 1/8	1996
Dave Elmore	Waterloo	Black Hawk	138 1/8	1996
Nathan Hasty	Adel	Dallas	138 1/8	1996
Ernie Burroughs	Waukon	Allamakee	138 0/8	1996
Max Studer	West Des Moines	Warren	137 6/8	1996
Bill J Ettleman	Thurman	Fremont	137 5/8	1996
Cory Carlson	Columbus Junction	Louisa	137 5/8	1996
Chad Hesseltine	Winfield	Washington	137 4/8	1996
William V Wilson	Manchester	Delaware	137 3/8	1996
Bryan Cassidy	Centerville	Appanoose	137 1/8	1996
Dick Barker	Dubuque	Jackson	137 1/8	1996
Todd Fischels	La Porte City	Black Hawk	136 7/8	1995
Glenn Wilson	Indianola	Warren	136 5/8	1991
Arnie Christenson	Underwood	Pottawattamie	136 4/8	1993
Irwin D Post II	Albia	Monroe	136 4/8	1994
Mike Perkins	Corydon	Wayne	136 4/8	1996
Mark D Moen	Ackworth	Warren	136 1/8	1995
Bill Wagner	Ottumwa	Wapello	136 1/8	1988
Bill Wagner	Ottumwa	Wapello	136 1/8	1988
Mike Van Waart	Sioux City	Monona	136 0/8	1996
Paul Straw	Quasqueton	Buchanan	136 0/8	1994
Doug Middle	Rock Valley	Johnson	136 0/8	1996
Jon Pirtle	Ackworth	Warren	135 6/8	1996
Todd Pennock	Elliott	Montgomery	135 6/8	1996
Cameron Williams	Clarinda	Page	135 4/8	1996
Mike Davis	Mason City	Worth	135 3/8	1996
Roger Wilson	Independence	Buchanan	135 2/8	1996
Bob Rowden	Urbana	Benton	135 0/8	1996

BOW, NONTYPICAL

(Minimum Qualifying Score -- 155 pts.)

NAME	CITY	COUNTY TAKEN	TOTAL SCORE	YEAR
*Ric Porske	Davenport	Scott	221 6/8	1996
Mike Garber	Eldon	Wapello County	200 6/8	1996
Chad Laabs	Guthrie Center	Guthrie	195 0/8	1996
Bruce Vahle	Mediapolis	Des Moines	188 7/8	1997
Brent Hines	Indianola	Warren	186 6/8	1996
Matt Wildman	Cedar Rapids	Benton	182 4/8	1996
Arnold E Vest	Ottumwa	Wapello	182 4/8	1993
Tom E Cooper	Cedar Rapids	Davis County	182 0/8	1996
Mark Thomson	Sperry	Des Moines	179 4/8	1996
Brad Mangler	Martelle	Jackson	173 2/8	1996
Jim Wages	West Point	Lee	172 1/8	1996
James L Corkery	Cedar Rapids	Linn	170 6/8	1996
Chuck Stotts	Boone		168 0/8	1997
Bob Morley	Dubuque	Jackson	167 0/8	1995
Marty Edwards	Omaha	Fremont	166 4/8	1996
Greg Beaver	Forest City	Winnebago	166 0/8	1996
Joe Hanner	Guthrie Center	Guthrie	162 6/8	1996
Mike Veigulis	Altoona	Clarke	162 6/8	1996
Marty Edwards	Omaha	Fremont	161 5/8	1991
David J Kerkove	New Hampton	Chickasaw	155 5/8	1996
Raymond Dresser	Keokuk	Lee	155 3/8	1996
Dwight Reiland	Belmond	Wright	155 2/8	1995

CROSSBOW, TYPICAL

(Minimum Qualifying Score -- 135 pts.)

NAME	CITY	COUNTY TAKEN	TOTAL SCORE	YEAR
Robert Gross	Sageville	Jackson	161 5/8	1995

MUZZLELOADER, NONTYPICAL

(Minimum Qualifying Score -- 170 pts.)

NAME	CITY	COUNTY TAKEN	TOTAL SCORE	YEAR
*Mike Garber	Eldon	Wapello	200 6/8	1996
Tom E Cooper	Cedar Rapids	Davis	182 0/8	1996

MUZZLELOADER, TYPICAL

(Minimum Qualifying Score -- 150 pts.)

NAME	CITY	COUNTY TAKEN	TOTAL SCORE	YEAR
James Hedley	Dubuque	Jones	163 3/8	1997
Chad Sorgdrager	Sioux City	Woodbury	159 4/8	1996
Mark Moen	Ackworth	Warren	156 4/8	1996
Jay Plank	Wellman	Washington	155 6/8	1996
David Esias	Essex	Page	155 2/8	1996
Michael Unga Jr	Jesup	Winneshiek	153 4/8	1996
Stan Wagner	Elkader		153 3/8	1996
Bill Moore	Humeston	Lucas	152 0/8	1996
Bud Allen	Winterset	Madison	150 4/8	1996
Bob Golick	Exline	Appanoose	150 3/8	1997

SHOTGUN, NONTYPICAL

(Minimum Qualifying Score -- 170 pts.)

NAME	CITY	COUNTY TAKEN	TOTAL SCORE	YEAR
Skip Wilson	Redfield	Dallas	222 3/8	1996
Ron Nicolaisen	Perry	Dallas	218 4/8	1995
Mike Tschiggfrie	Cedar Rapids	Allamakee	209 7/8	1995
Louie Floden	Pella	Marion	200 3/8	1996
Andy Lounsbury	West Des Moines	Dallas	200 1/8	1996
Dave Porter	Honey Creek	Cass	199 4/8	1997
James L Beetem	Dubuque	Jackson	196 6/8	1996
Jesse Logan	Mediapolis	Lee	195 2/8	1996
Ronald D Steenhoek	Prairie City	Jasper	195 0/8	1996
Wayne A Sawyer	Waukon	Clayton	191 0/8	1996
Daryl Gruber	Huxley	Allamakee	188 0/8	1990
Doug Hommer	Milo	Warren	185 7/8	1995
Ryan Mensching	Knoxville	Page	185 3/8	1996
Douglas Glandtiser	Eddyville	Monroe	185 0/8	1996
Terry Danielson	Redfield	Guthrie	185 0/8	1995
Daryl Sywassink	Muscatine	Muscatine	184 4/8	
Doug Robison	Richmond	Van Buren	183 4/8	1995
Daryl Holdgrafer	Spragueville		183 0/8	1996
Winston Rock	Low Moor	Clinton	182 4/8	1997
Dale Kreiss	Tama	Jefferson	179 7/8	1996
Ken Schoening	Sioux Rapids	O'Brien	179 4/8	1972
Phil Gohlinehorst	Red Oak	Montgomery	177 0/8	1996
Neil Wangness	Decorah	Winneshiek	177 0/8	1990
Dana Zeller	Lost Nation	Clinton	175 6/8	1995
Randy Fett	Cedar Rapids	Henry	174 6/8	1970
August Blauwet	Larchwood	Lyon	174 0/8	1996
Dave McIntire	Milford	Dickinson	173 5/8	1993
Jim Andregg	Edgewood	Clayton	173 4/8	1996
Matt Hueser	Marcus	Cherokee	173 3/8	1996
Eric Roberts	Victor	Monroe	173 2/8	1996
Lary Christensen	Lenox	Taylor	173 0/8	1995
Shawn Harris	Council Bluffs	Fremont	172 5/8	1996
Gerald Bailey	Salem	Van Buren	172 2/8	1997
Ralph Goedken	Lamont	Allamakee	170 6/8	1996
Trevor Kimble Jr	Morning Sun	Louisa	170 4/8	1996
Oscar Vaal	Eldon	Wapello	170 3/8	

SHOTGUN, TYPICAL

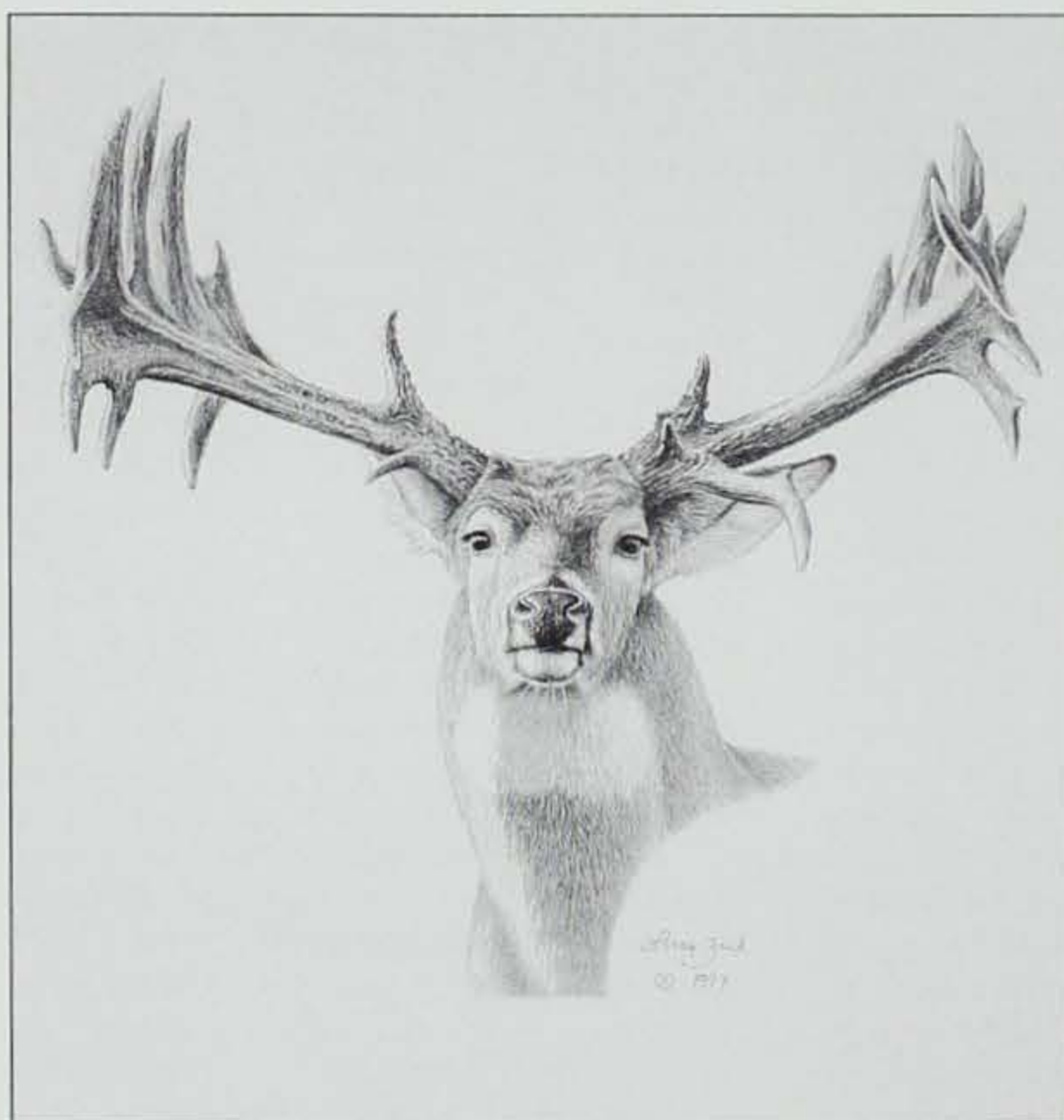
(Minimum Qualifying Score -- 150 pts.)

YEAR	NAME	CITY	COUNTY	TOTAL	YEAR
			TAKEN	SCORE	
1996	*Don Boucher	Albian	Marshall	245 3/8	1961
1996	*Dr Glen Madsen	West Des Moines	Warren	193 5/8	1994
	*Dennis Pollock	Humeston	Wayne	191 4/8	1996
	*Jeff Scott	Mapleton	Monona	190 4/8	1996
	Eric Thorstenson	Waukon	Allamakee	187 7/8	1996
	Joe Birkenstock	Burlington	Des Moines	181 5/8	1996
	Rick Wulfekuhle	Independence	Fayette	178 3/8	1997
1997	Joe Geiger	Lone Tree	Benton	177 5/8	1996
1997	Scott Mc Intire	Promise City	Wayne	176 6/8	1996
1996	Bill Moore	Humeston	Lucas	176 5/8	1996
1996	Earl Kaikkonen	Russell	Lucas	175 5/8	1984
1996	Dave Moritz	Lansing	Allamakee	174 6/8	1996
1996	Pat Schilling	Peosta	Jackson	173 2/8	1996
1996	Ron Bryan	Montezuma	Washington	172 2/8	1995
1996	Wesley Gibbs	Promise City	Wayne	171 6/8	1992
1996	Margaret Mc Carthy	Maquoketa	Jackson	170 6/8	1996
1996	Kevin Howe	Waukon	Allamakee	170 5/8	1989
1996	Thomas Baumgartner	Mason City	Clayton	170 1/8	1996
1997	Richard Morris	Albia	Monroe	170 0/8	1996
	Ronald Faidley	Brooklyn	Appanoose	168 4/8	1995
	Alan Andrew	Newton	Van Buren	168 4/8	1995
	Doug Craff	Brighton	Jefferson	168 1/8	1996
	Daryl Gruber	Huxley	Allamakee	167 6/8	1994
	Derek Ellis	Tarkio	Fremont	167 3/8	1995
	William Cole	Des Moines	Van Buren	166 7/8	1974

Phillip Voder	Milton	Van Buren	166 7/8	1995
Rob Hess	Dubuque	Davis	166 6/8	1995
Duke Barnhart	Chariton	Wayne	166 1/8	1994
Howard Sinclair	Davis City	Warren	166 1/8	1987
Henry Mullett III	Milton	Van Buren	165 7/8	1995
Jason Herndon	Monroe	Marion	165 4/8	1996
Steve Reed	Lenox	Adams	164 7/8	1995
Jason La Grange	Springville	Jones	164 7/8	1996
Bernard Beary	Johnston	Lucas	164 5/8	1996
Jeff Wilson	Mediapolis	Louisa	164 4/8	1987
Craig Phipps	Waukon	Allamakee	164 2/8	1995
Nick Mandarich	Council Bluffs	Pottawattamie	164 2/8	1995
Steve Philby	Red Oak	Montgomery	164 0/8	1996
James Kolls	Sioux City	Woodbury	163 5/8	1995
Sue Hubbard	Manchester	Clayton	163 4/8	1996
Greg Stark	Shenandoah	Page	162 6/8	1994
Kim Starcevic	Albia	Monroe	162 4/8	1990
Chris Kohler	Waterloo	Fayette	162 4/8	1996
Brian Van Gundy	Des Moines	Dallas	161 0/8	1990
Scott Ingle	Hedrick	Keokuk	160 7/8	1996
Kevin Martin	Mount Vernon	Linn	160 6/8	1996
Al Fuller	Toddville	Iowa	160 5/8	1996
Ron Olson	Mason City	Floyd	160 4/8	1996
Jerry Stocker	Eddyville	Wapello	160 3/8	1985
Edgar Boone	Wayland	Jefferson	160 2/8	1996
Kevin Martin	Mount Vernon	Linn	160 1/8	1995
Derek Peterman	Clarinda	Page	160 0/8	1996
Craig R Van Gundy	Woodward	Decatur	159 4/8	1996
Louis Bobinet	Indianola	Warren	159 4/8	1984
Cark Walter	Hamilton	Marion	159 2/8	1993
Carl Walter	Hamilton	Marion	159 2/8	1993
Kenny Alberts	Coralville	Johnson	158 4/8	1996
James Berry	Grandview	Muscatine	158 4/8	1995
Jack Benskin	Guttenberg	Allamakee	158 4/8	1996
James Schuler	West Union	Fayette	158 3/8	1997
Ron Sires	Waterloo	Allamakee	158 0/8	1996
Ronald Brown	Corning	Adams	157 6/8	1996
Scott Mc Intire	Promise City	Wayne	157 5/8	1995
Kenny Capron	Parkersburg	Butler	157 5/8	1996
Roger Farver	Monroe	Marion	157 4/8	1996
James Carver	Alburnett	Clayton	157 3/8	1996
Rob Edwards	Columbus Junction	Louisa	157 1/8	1996
Jim Frank	Urbana	Benton	157 1/8	1995
Russ Etten	Prairieburg	Linn	157 1/8	1997
Dave Martin	Waukon	Allamakee	156 7/8	1996
David Hinz	Waterloo	Guthrie	156 6/8	1996
Rusty Baum	Sioux City	Plymouth	156 4/8	1996
Andy Mellecker	Riverside	Monroe	156 4/8	1995
Jeff Krantz	Otho	Webster	156 1/8	1996
Larry Still	Bronson	Plymouth	155 7/8	1996
John Sickels	Creston	Union	155 5/8	1994
Lyle Kooiker	Marengo	Warren	155 5/8	1969
David Kickbush	Guttenberg	Clayton	155 4/8	1996
William Heintz	Lamoni	Decatur	155 4/8	1995
Bill Wagner	Ottumwa	Wapello	155 4/8	1996
Frank Stoos	Sioux City	Monona	155 0/8	1996
Roger Ellefson	Waterville	Allamakee	155 0/8	1996
Dale Bugenhagen	Monona	Clayton	154 7/8	1996
Tim Manning	Lansing	Allamakee	154 7/8	1996
John Ashbacher	Lansing	Allamakee	154 6/8	1996
Nick Pauly	Oakville	Louisa	154 5/8	1996
Larry Best	Elkader	Clayton	154 3/8	1996
Herb Freerks	Clarksville	Butler	154 2/8	1997
Ryan Moore	Clarinda	Montgomery	153 7/8	1996
John Kollmorgen	Humboldt	Harrison	153 6/8	1996
Louis Bobinet	Indianola	Lucas	153 5/8	1996
Brooks Brown	Clearfield	Ringgold	153 4/8	1996
Bill Cowan	Exline	Appanoose	153 2/8	1996



Carolyn R Greatbatch	Knoxville	Marion	153 2/8	1996	Chris Nelson	Central City	Allamakee	151 4/8	1996
Dennis Steinkamp	Woodward	Dallas	153 2/8	1996	Eric J Tweet	Sioux City	Plymouth	151 4/8	1996
Richard Bolander Sr	Burlington	Jefferson	153 1/8	1981	Jesse F Griffis	Avoca	Harrison	151 4/8	1957
Rocky Sanderson	Cedar Falls	Hardin	153 1/8	1996	Nathan Murders	West Burlington	Wapello	151 3/8	1996
Craig Hanchett	Oskaloosa	Mahaska	153 1/8	1996	Jerry Suby	Walford	Jackson	151 2/8	1991
Brian Wenger	Ryan	Delaware	152 6/8	1996	Dale Kimball	Spirit Lake	Dickinson	151 2/8	1996
Rick Wulfekuhle	Independence	Buchanan	152 5/8	1988	Joe Clawson	Sigourney	Keokuk	151 0/8	1996
Mike Jackson	Bellevue	Jackson	152 5/8	1995	Eugene R Kipp	Yale	Guthrie	151 0/8	1996
Mitch Roland	Knoxville	Marion	152 4/8	1996	Andy Coffman	Milo	Warren	151 0/8	1992
Doug Aistrophe	Randolph	Fremont	152 4/8	1996	Josh Neeley	Bonaparte	Van Buren	151 0/8	1995
Bruce Ahrens	Iowa City	Washington	152 3/8	1996	Joe Vlazny	Monona	Clayton	150 7/8	1995
Kenny Brown	Afton	Union	152 3/8	1996	Kenny Fleming	Richmond	Washington	150 5/8	1996
Terry Fernside	Council Bluffs	Harrison	152 3/8	1992	John Brandhof	Mitchellville	Marion	150 5/8	1994
Steven Wical	Grundy Center	Adams	152 2/8	1996	Dennis Beer	Anita	Cass	150 4/8	1996
Bill Saddler	Harpers Ferry	Allamakee	152 2/8	1991	Ray Halverson	Marshalltown	Marshall	150 4/8	1996
Doug Fuller	Boone	Adams	152 2/8	1996	Ben Lounsbury	West Des Moines	Dallas	150 3/8	1994
Jim Soholik	Lone Tree	Johnson	152 1/8	1995	Daniel O'Neill	Minden	Shelby	150 3/8	1994
Stan Shipley	Villisca	Montgomery	152 1/8	1996	Chris Bauer	Stratford	Webster	150 3/8	1996
Alan Lamm	Ogden	Boone	152 1/8	1996	Scott Wiemerskirch	Bellevue	Dubuque	150 2/8	1996
Dan Foster	Osceola	Decatur	152 0/8	1991	Tim Dunphy	Lakewood	Union	150 2/8	1996
Richard Harger	Center Point	Lee	151 7/8	1996	Robert Hennessy	Waukon	Allamakee	150 1/8	1994
Gerald L Rockwell	Maquoketa	Jones	151 6/8	1996	Gary Snodgrass	Newton	Monroe	150 1/8	1996
Bruce Larsen	Lansing	Allamakee	151 6/8	1996	Adam Woerdeman	Salem	Henry	150 1/8	1995
Gary Wosoba	Monmoth	Jackson	151 6/8	1995	Rick Wulfekuhle	Independence	Buchanan	150 0/8	1989
Dan Hasscock	Montrose	Lee	151 5/8	1985	Richard Stolfus	Lawler	Chickasaw	150 0/8	1996
Chad Dummermuth	Elgin	Fayette	151 5/8	1996	George D Marshall	Monroe	Marion	150 0/8	1996
Randy Hammond	Hornick	Woodbury	151 5/8	1996	David Grier	Montezuma	Pottawattamie	150 0/8	1996
Mike Rees	Guthrie Center	Guthrie	151 5/8	1995	Dale R Sykora	Smithland	Woodbury	150 0/8	1996



Old Rivals - Whitetail

by Larry Zach

During the mid-1990s, an exceptional nontypical whitetail lived in a bowhunting-only area in Illinois, managed for quality whitetail deer. At his peak, in 1995, when he was 6-1/2 years old, he carried a massive 26-point rack with five drop points and an estimated 33-1/2-inch outside spread. When I first learned about this phenomenally nontypical whitetail, I decided to hunt for him. Though I never got a shot. I was lucky enough to see him in my headlights as I left the hunting area one evening.

Many people in the area knew of his existence and whereabouts. He was frequently seen and photographed on numerous occasions. Nine of his sheds have been collected. In spite of all this, he was able to elude bowhunters for many years. A video tape taken during the fall of 1994 captured a violent fight between the nontypical and a big, typical, ten-point which also lived in the same area. These two bucks became the main focus for my painting *Old Rivals - Whitetail*, featured on the cover of this issue. The November scene captures the two bucks crossing paths at an abandoned farmstead shortly after sunrise.

In addition to the rival bucks, I have included five other 'rivalries,' the most obvious being an old John Deere and Farmall.

For information on this or other Zach wildlife art prints, contact your local fine art gallery or White Oak Publishing, 901 SE Trilein Drive, Ankeny, Iowa 50021, phone (515) 964-1570.

ALL-TIME TOP 10 RECORD RACKS

SHOTGUN, TYPICAL

Name	City	County Taken	Year	Total Score
*Don Boucher	Albian	Marshall	1961	245-3/8
Harold Dickman, Sr.	Woodbine	Harrison	1964	200-2/8
Wayne A. Bills	Des Moines	Hamilton	1974	199-5/8
Kenneth Tilford	Lamoni	Decatur	1985	198-1/8
Michael R. Edle	Danville	Des Moines	1989	196-4/8
George L. Ross	Ottumwa	Wapello	1969	195-1/8
Forest N. Richardson	New Virginia	Warren	1989	194-3/8
*Dr Glen Madsen	W. Des Moines	Warren	1994	193-5/8
*Dennis Pollock	Humeston	Wayne	1996	191-4/8
*Jeff Scott	Mapleton	Monona	1996	190-4/8

SHOTGUN, NONTYPICAL

Name	City	County Taken	Year	Total Score
Larry Raveling	Emmetsburg	Clay	1973	282-0/8
Lyle Spitznogle	Wapello	Louisa	1982	258-2/8
David Mandersheid	Welton	Jackson	1977	256-7/8
Carroll Johnson	Moorhead	Monona	1968	256-2/8
Larry J. Caldwell	Des Moines	Warren	1990	248-6/8
Carl Wenke	Cedar Rapids	Lee	1972	245-0/8
Robert Wonderlich	Oskaloosa	Monroe	1970	244-6/8
Wendell R. Prottzman	Mt. Pleasant	Henry	1988	231-1/8
Frederick A. Becker	Guttenberg	Clayton	1993	230-0/8
Edgar Shields	Grand River	Decatur	1986	229-6/8

MUZZLELOADER, TYPICAL

Name	City	County Taken	Year	Total Score
Jerry W. Conover	Sioux City	Monona	1990	182-7/8
Bruce L. Hupke	Carlisle	Warren	1994	170-3/8
Patrick G. Burkle	Earlville	Clayton	1990	170-2/8
Charles Hixson	Chariton	Lucas	1989	170-0/8
Kevin Barge	Hamburg	Fremont	1992	167-7/8
Steve Carter	Washington	Henry	1987	167-0/8
Rick Barnes	Carlisle	Decatur	1994	166-2/8
David Hammel	Dorchester	Allamakee	1990	166-1/8
Jeff Kauzlarich	Rathbun	Appanoose	1989	165-5/8
Chris Ruggeri	Ankeny	Polk	1994	165-1/8

MUZZLELOADER, NONTYPICAL

Name	City	County Taken	Year	Total Score
Mike Moody	Hamburg	Fremont	1990	210-2/8
Vincent P. Jauron	Harlan	Monona	1990	209-1/8
Daniel Kaufman	Wapello	Louisa	1984	205-3/8
Jeff Tussey	Creston	Union	1995	205-0/8
Denny Baum	Ottumwa	Wapello	1990	202-1/8
*Mike Garber	Eldon	Wapello	1996	200 6/8
Dean Beyer	Osage	Mitchell	1991	200-5/8
Jim Evans	Muscatine	Muscatine	1995	196-0/8
Steve Mundell	Ottumwa	Monroe	1991	196-0/8
Ed Banks	Letts	Muscatine	1994	194-1/8

BOW, TYPICAL

Name	City	County Taken	Year	Total Score
*Duane Miller	Onawa	Monona	1996	198 3/8
Lloyd Goad	Knoxville	Monroe	1962	197-6/8
Robert Miller	Wyoming	Jones	1977	194-2/8
Steven E. Tyer	North Liberty	Johnson	1994	194-0/8
Roy Allison	Knoxville	Monroe	1995	193-5/8
Jeffery L. Whisker	Clinton	Scott	1993	191-0/8
Richard B. Swin	Des Moines	Polk	1981	190-5/8

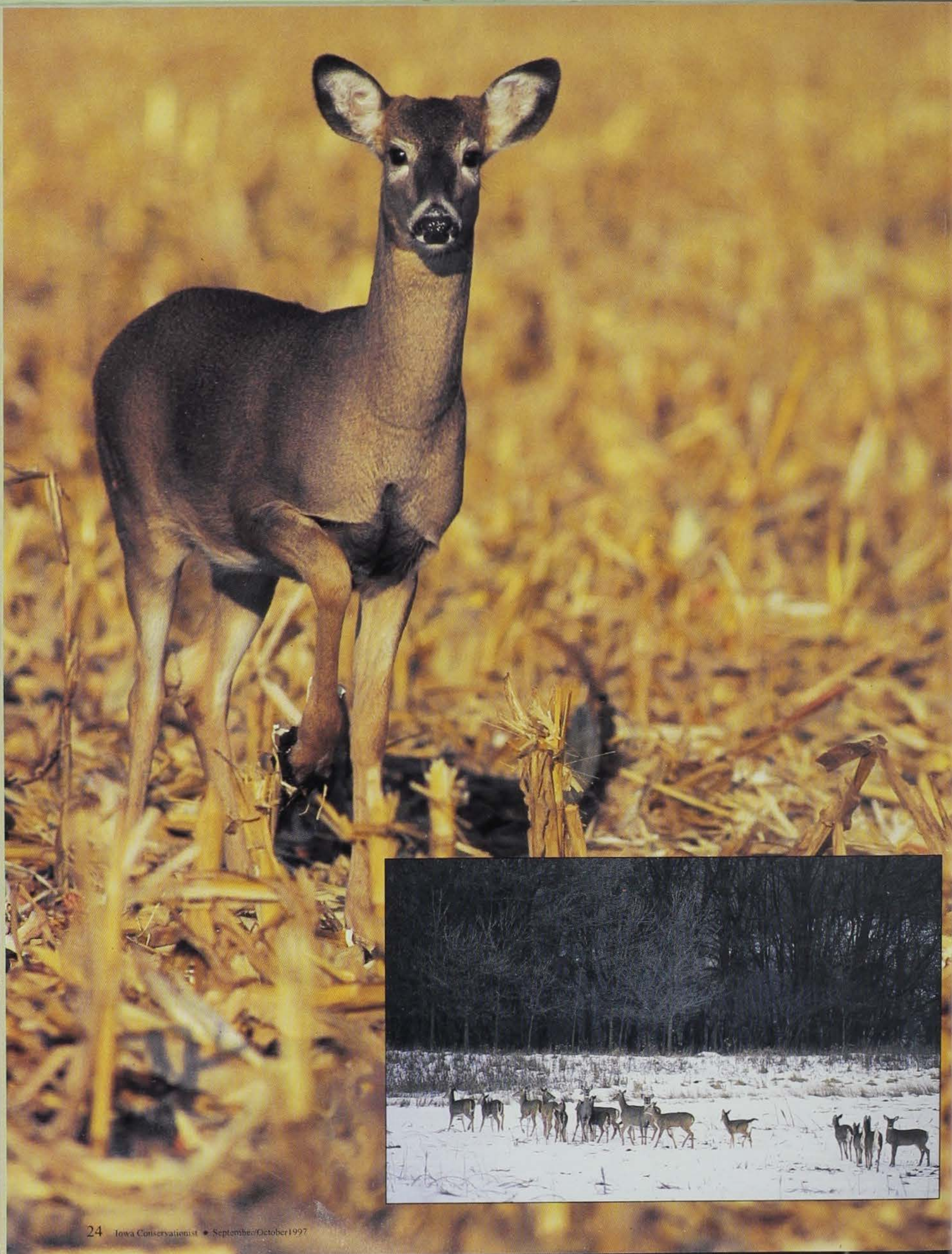
*Randy Petersburg	Waukon	Allamakee	1996	189 1/8
Kevin Peterson	Mediapolis	Des Moines	1989	188-1/8
*Dave Zima	Blair	Monona	1996	186 4/8

BOW, NONTYPICAL

Name	City	County Taken	Year	Total Score
Russ Clarken	Desoto	Dallas	1994	236-7/8
Mike Hobart	Prole	Madison	1993	229-5/8
Terry M. Long	Des Moines	Polk	1995	229-4/8
Jack Schuler Jr.	Indianola	Decatur	1995	227-0/8
Jerry M. Monson	Clear Lake	Cerro Gordo	1977	222-1/8
*Ric Porske	Davenport	Scott	1996	221 6/8
David Propst	Duncombe	Webster	1987	219-3/8
Blaine R. Salzkorn	Sutherland	Clay	1970	218-1/8
George A. Smith	Monona	Allamakee	1991	217-4/8
Chris Hackney	Allerton	Wayne	1983	215-5/8

* indicates a new entry into the All-Time Top 10 Racks.





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In 1996, many people contacted their legislators about too much crop damage (below), too many deer/vehicle accidents and too many deer in urban areas.

Are they the King's deer or do the peasants have a right to share them? This was the center of a great controversy for our European ancestors centuries prior to the settling of this country. In some people's mind, this question has never been settled. But the legal system put in place by our founding fathers established long ago that wildlife in this country belongs to everyone, not just to the government (King) or the landowner (Noblemen). The government (federal or state) was given responsibility to manage wildlife for all the people.

Our present system of managing wildlife evolved in stages, starting with a period of no hunting laws which saw the extinction on a national scale of the passenger pigeon and the near loss of the bison. On the state scene, wholesale destruction of habitat eliminated the bison, elk, wolf, grizzly bear, giant Canada goose, wild turkey, prairie chicken and others. Early conservationists worked hard to establish a system to protect wildlife and its habitat for the enjoyment of all people. Aldo Leopold and Ding Darling, among others, fought long and hard to establish a system to manage wildlife on a scientific basis outside the influence of politics. Iowa has always been a leader in this endeavor. We established a system of citizens (the Natural Resource Commission) appointed by the governor to oversee the management of these valuable resources. Our early conservation leaders clearly saw the problems that developed when a vocal, politically active minority ruled over the more quiet majority.

Our system, which employs highly trained scientists to manage fish and wildlife, delivered the wood duck from near extinction to become the most numerous nesting duck in Iowa; deer and beaver from a rarity to too many in some places; reestablished giant Canada geese and wild turkeys to impressive population levels; returned

river otters, trumpeter swans, peregrine falcons and prairie chickens back to wild existence. All in all, it's a very impressive record.

Recently, however, some of the public has turned from the Department of Natural Resources to the legislature to settle differences of opinion on how these resources are managed. The white-tailed deer is a prime example.

Deer were a scarce commodity prior to the late 1940s, and from the 1950s to early 1970s they were carefully protected by most landowners. The first deer hunting season of modern times was held in the fall of 1953. Over the next 30 years, most public input demanded more deer for wider recreational and viewing opportunities. In the 1970s, landowners loudly demanded the department manage deer to provide all landowners at least one free any-sex license each year. At the same time, other sporting groups were asking for more hunting opportunities. These requests were listened to, discussed at length by the old Conservation Commission, and a program was put in place to deliver a thriving deer herd. The program was highly successful thanks to well-trained biologists, cooperative landowners and supportive hunters.

But with success came some pain. People not interested in deer became very vocal about having too many. In the late 1980s, the DNR responded by reducing deer numbers in much of the northern half of the state. Very quickly, however, hunters and farmers expressed their displeasure and wanted to see more deer. In much of northern Iowa, a herd rebuilding took place by limiting the number of antlerless deer being killed. The result, as before, was success. Deer numbers are back, but so are the complaints from those not enamored with deer.

In 1996, many people contacted their legislators about too much crop damage, too many deer/vehicle acci-

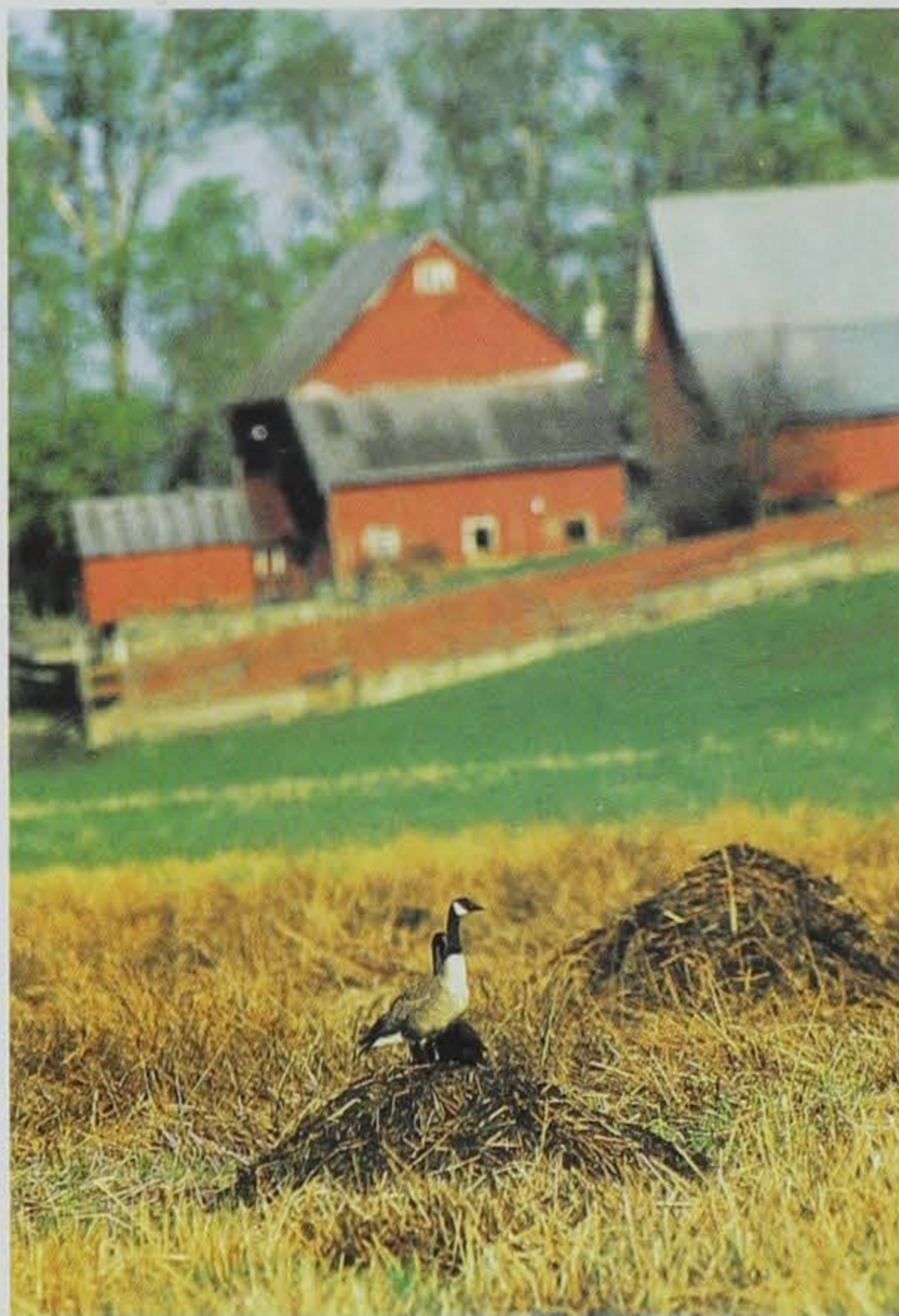


AT A TURNING POINT Management of Our Wildlife

Article by Richard A. Bishop
Photos by Roger A. Hill



Our reintroduction and management of turkeys and Canada geese has been nothing short of phenomenal, and these resources are being enjoyed by many people across the state.



dents and too many deer in urban areas. A survey of landowners by the Farm Bureau and the DNR showed about one-third of the farmers liked the present deer herd or thought it should increase, one-third were fairly satisfied but thought the deer herd should be reduced

slightly, and one-third of the farmers thought the deer should be greatly reduced. This diversity of opinion doesn't lead to a clear course of action for dealing with deer.

The current DNR management program calls for a shift from increasing to reducing deer numbers once populations exceed the level needed to provide the hunting and viewing opportunities the public requests. The *extent* of this reduction is the key to this issue. The second part of the deer management plan addressed the differences in landowners' feelings on how many deer we should have. DNR policy was set to accommodate those landowners satisfied with deer numbers and at the

same time address specific problems where tree growers or crop farmers felt there were too many. Most of these situations can be dealt with during the hunting season, by placing more hunters in the areas of concern and making them shoot does. Where this is not practical, additional depredation permits for antlerless animals could be issued.

Adjusting deer numbers in specific local areas is our management objective. "Block management," as it is called in Montana, is an effective way to manage deer numbers for people with different views of how many deer we should have. In essence, it allows higher deer numbers where landowners are receptive; yet allows the DNR, landowners and hunters to reduce numbers in local areas where the tolerance to deer is lower. Almost everyone wins under this management, rather than jumping from too many to too

few deer or vice versa. This makes sense when you are trying to manage a public resource for a public that has many different opinions on the subject.

The bigger issue is how should we manage Iowa's wildlife? Should a vocal minority make legislative

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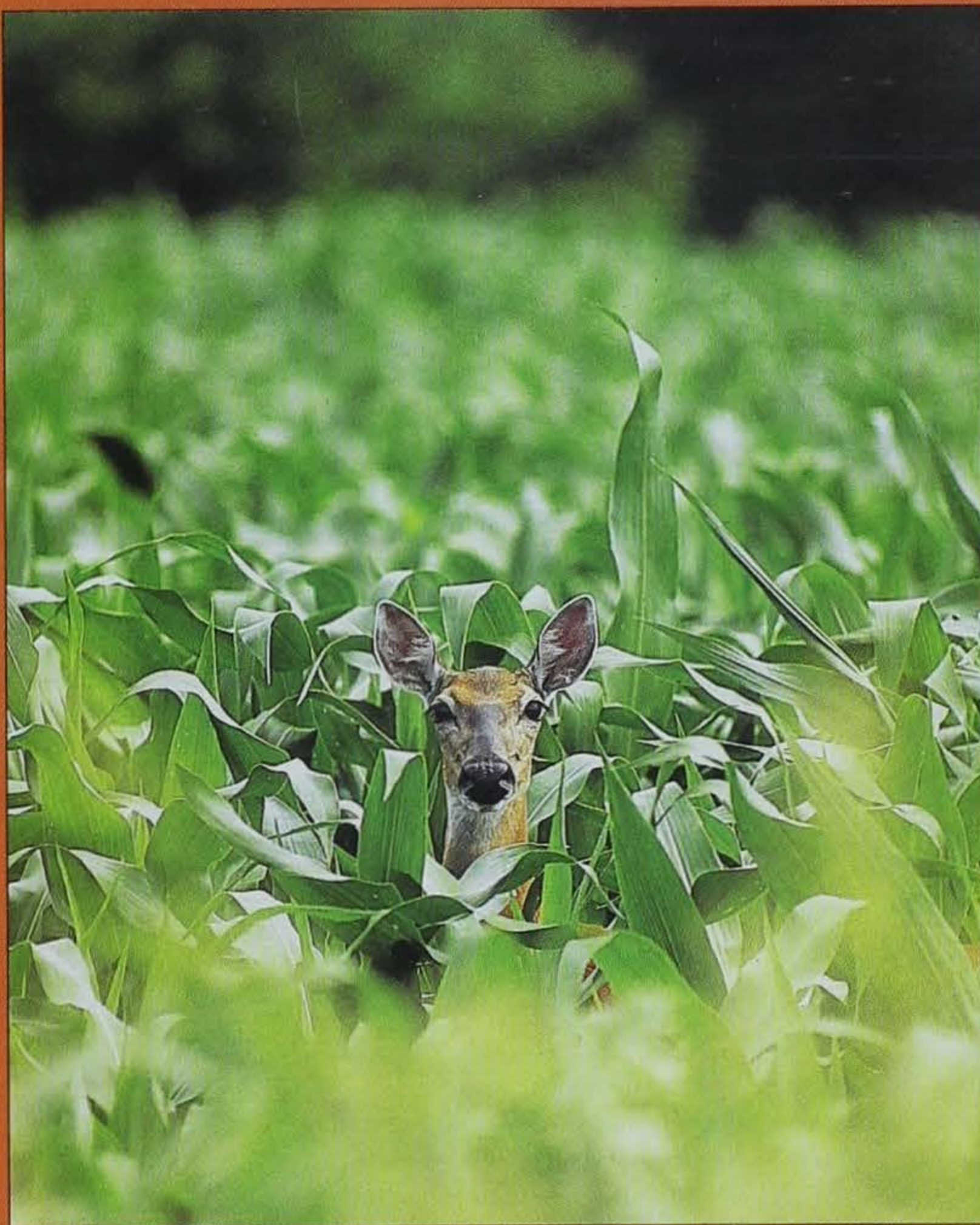
decisions for the majority? Our current political system responds to vocal minorities regardless of right or wrong. How will wildlife be managed in the future? — by professional biologists or by political arm twisting?

The 1997 General Assembly introduced numerous bills to direct the management of Iowa's deer herd. These bills ranged from taking management responsibility away from the DNR and giving it to the Federal Animal Damage Control program (an extension of the U. S. Department of Agriculture) to laws demanding a much reduced deer population. Most of these bills failed, thankfully. Two bills passed allowing landowners a second free license in areas where special late-season deer reduction hunts are allowed. This is a good common-sense law. The second bill that passed established two depredation biologist positions within the DNR to work primarily on wildlife depredation. This is more fully explained to the right.

Deer are currently the focal point, but turkeys and Canada geese will be next. Our reintroduction and management of these two species has been nothing short of phenomenal, and these resources are being enjoyed by many people across the state. The future recreational opportunities provided by turkeys and geese will soon be items of discussion in front of the legislature because a vocal minority of citizens does not want more than a "Noah's ark" numbers of these species. The political system is not the way to manage wildlife resources. Ding Darling would turn over in his grave if he could hear that politics were being interjected into resource management once again.

If this trend continues, those who are enjoying these resources must become politically active and loud, or gracefully accept the consequences. If we don't, Iowa may not be as pleasant a place in the future for those of us who enjoy the out-of-doors.

Richard Bishop is chief of the department's wildlife bureau in Des Moines.



Depredation Biologists To Be Hired

During the 1997 legislative session, a law passed instructing the Iowa DNR to hire two additional wildlife biologists to work on wildlife damage to agricultural crops or trees. The hiring process is currently underway, and biologists will be in place this fall. These biologists will be assigned to east-central Iowa (Cedar Rapids/Iowa City) and south-central Iowa (Chariton). They will cover the entire state working with wildlife depredation problems.

Duties of this position will include working with landowners who are experiencing wildlife damage and with the USDA's Animal Damage Control personnel. Other activities will be to attend meetings of local Farm Bureaus, tree growers and nursery operators, to provide information and current knowledge of damage control techniques. Biologists will demonstrate the use of control practices such as electric fences or guard dogs to show their effectiveness. Working with landowners in specific areas (block management) to solve problems, mainly with deer, will be a major focus of these positions. Management plans will be developed to guide the landowner in reducing damage caused by wildlife.

-- RB

1998 STAMP DESIGNS

The **1998 Iowa Duck Stamp** was designed by Sherrie Russell Meline of Mount Shasta, California. Meline has been a professional artist since the mid-1970s. She holds many awards and credits for her work, including 1998-99 Iowa Ducks Unlimited Artist of the Year, California Ducks Unlimited Sponsor Artist, 1997-98 Idaho Ducks Unlimited Artist of the Year and 1995 and 1997 Arizona Duck Stamp. Meline's design of a pintail pair is sized at 6-1/2" x 11," and is available as a sponsor print through Ducks Unlimited, or for \$95 as an artist edition by writing Sherrie Russell Meline, 2116 Tanager Ln., Mount Shasta, CA 96067 or calling 916-926-3477.

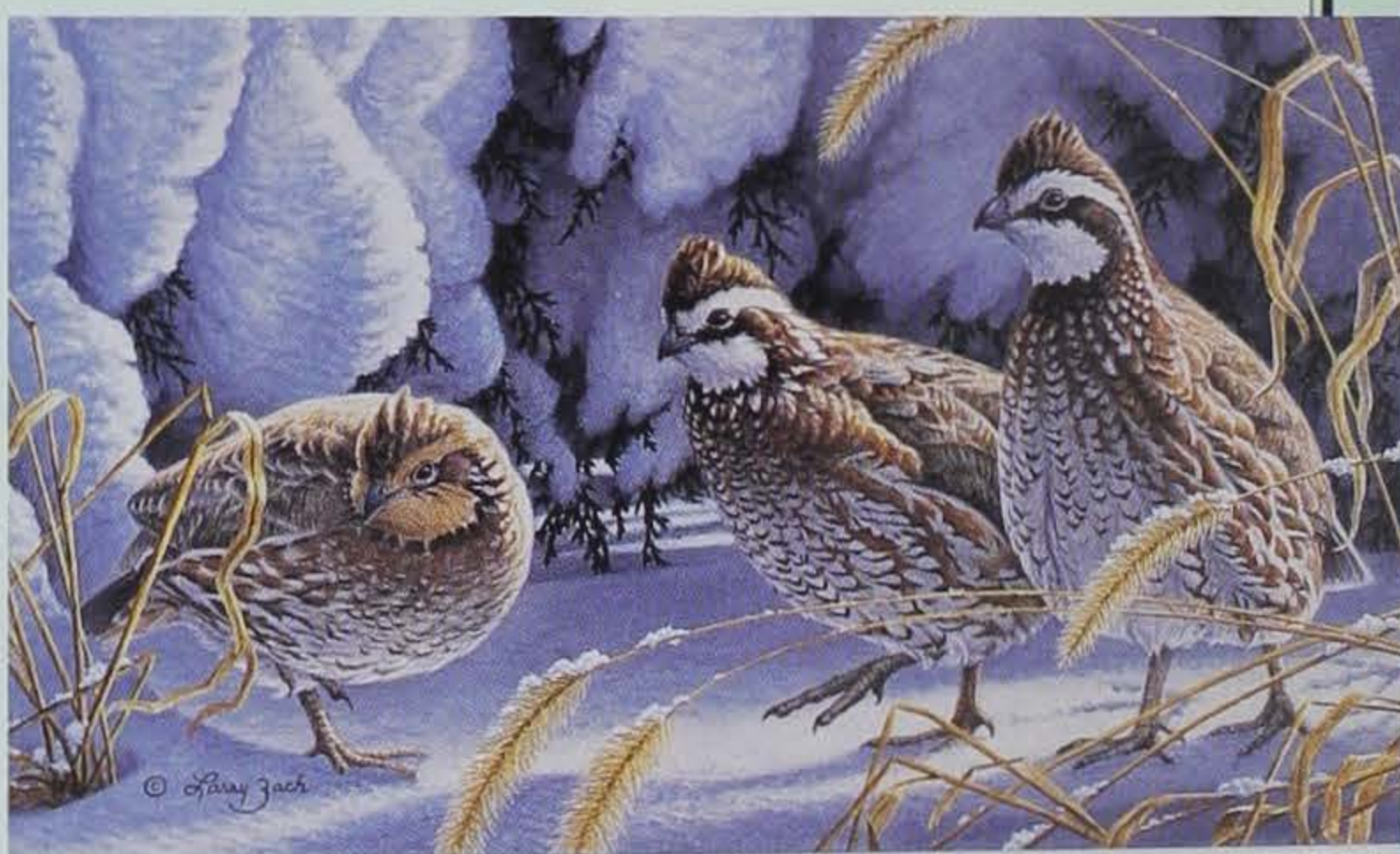
The **1998 Iowa Habitat Stamp**, a quail trio, was designed once again by national award-winning artist Larry Zach of Ankeny. Zach also designed the cover of this issue, *Old Rivals - Whitetail*. Signed and numbered prints of the habitat stamp are available for \$95 and artist proofs are \$125. Both prices include a \$5 mint stamp. Image size is 6-1/2" x 11." Prints of the stamp and cover are available through local art dealers or by writing White Oak Publishing, 901 SE Trilein Dr., Ankeny, IA 50021 or calling 515-964-1570.

The **1998 Iowa Trout Stamp** print was designed by Iowa "industrial wildlife" artist J.D. Speltz. Speltz has been the recipient of two national and six state stamp awards. This year's stamp includes a brown trout with Twin Springs and Pulpit Rock near Decorah. The print image is 6-1/2" x 11." Each regular edition print is \$39.95; artist proofs are \$49.95. There is a limited edition of 150 prints and 15 artist proofs. Stamps can be purchased for \$10. Prints can be purchased by writing Speltz Studio of Wildlife, Box 391, Armstrong, IA 50514 or calling 712-864-3001.

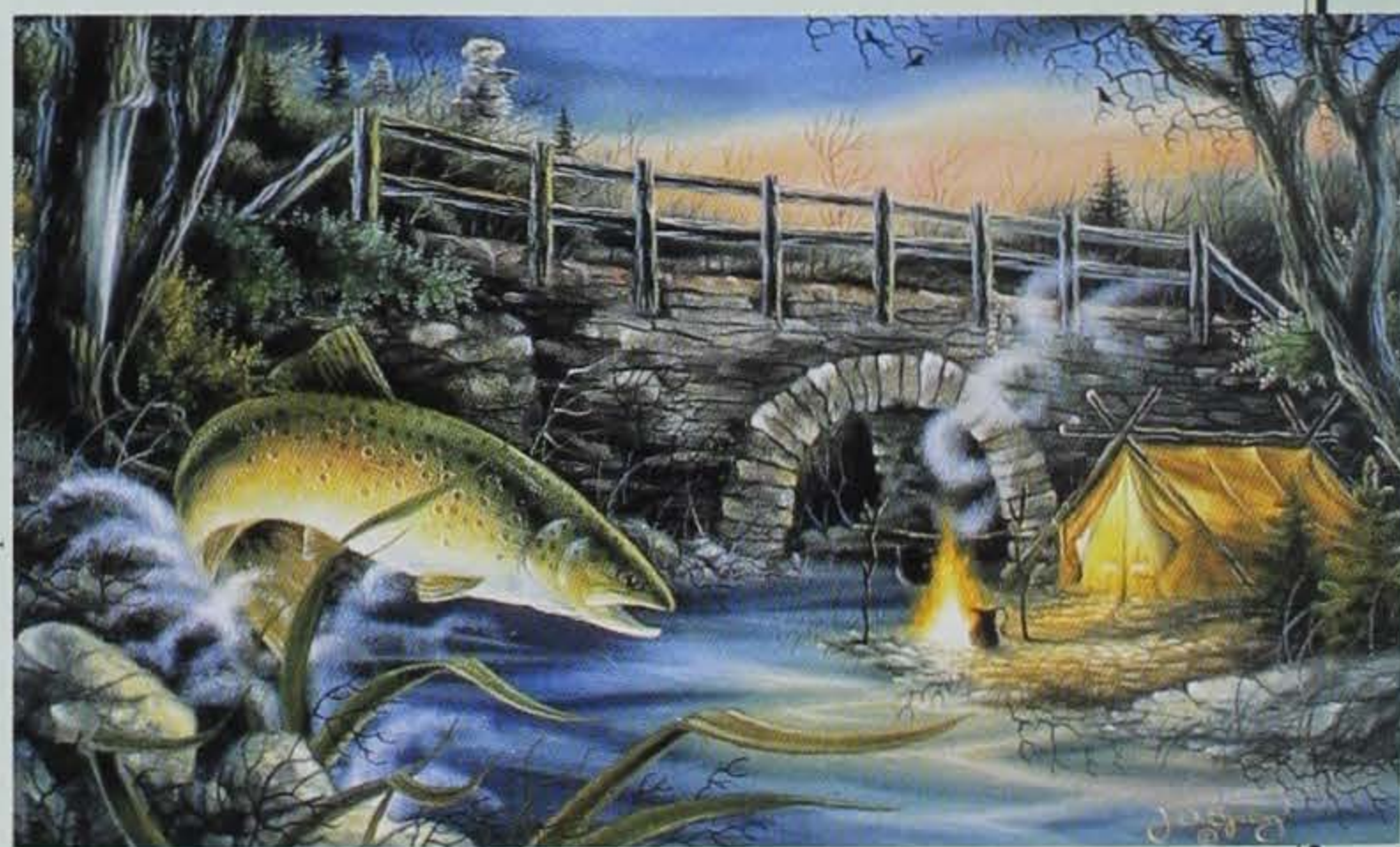
1998 Duck Stamp

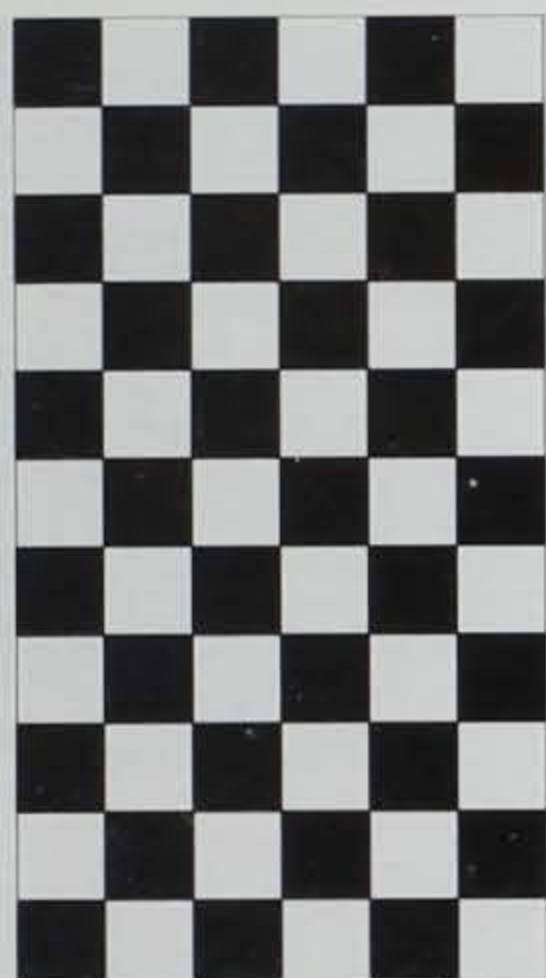


1998 Habitat Stamp



1998 Trout Stamp





First Annual Iowa Electrathon The Little Engines That Could

Center for Energy and Environmental Education



Article by Julie Tack

What does it take to build a car from scratch? Hard work, ingenuity, and teamwork. Combine that with a desire to learn energy conservation — and a group of spunky teachers and students — and you've got the Iowa Electrathon.

What is an Electrathon?

It's a race in which single-person electric cars, designed to be energy efficient and produce less pollution, compete on a closed-loop course. The car to complete the most laps in one hour wins. Most participants are high school students enrolled in an industrial arts or science class. Electrathons are growing in popularity across the country, with involvement from all types of organizations and age groups. The First Annual Iowa Electrathon,

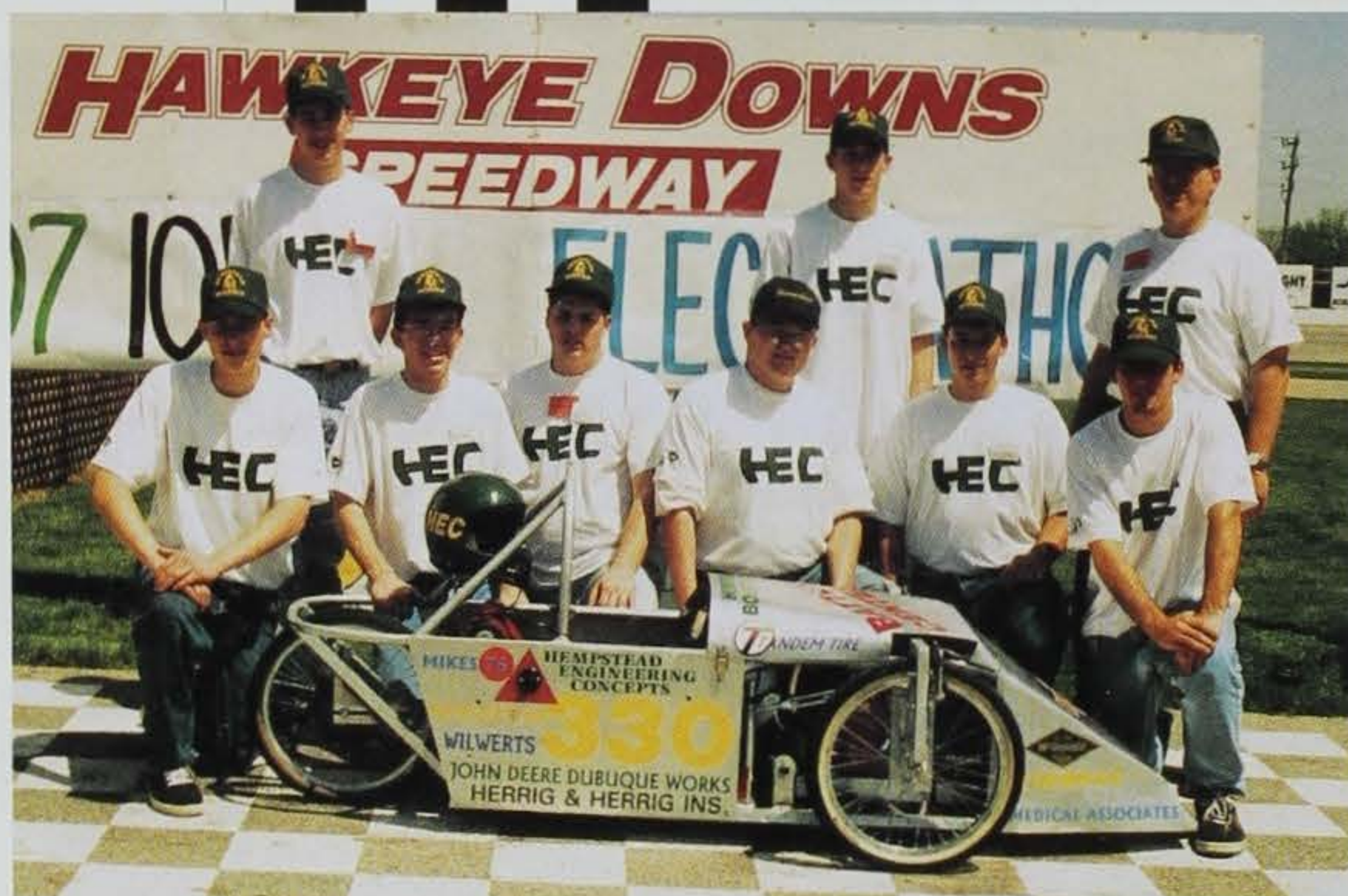
held on May 17 at Hawkeye Downs in Cedar Rapids, featured eight teams from Iowa and Michigan. Dubuque Hempstead's entry, the Predator, won first place, with the Prairie Chuck Wagon from Prairie High School in Cedar Rapids coming in a close second. Two teams that deserve a mention are Waverly-Shell Rock and Cedar Rapids Kennedy, which spent the entire semester building cars, but were unable to compete in the race.

The Electrathon is an exciting event, but it's also the culmination of much more than a one-hour race. What goes into an Electrathon — from both organizers and participants — is months and months of preparation, and a learning experience that will last a lifetime.



1997 Electrathon Results

	<u>Laps</u>	<u>Time</u>	<u>Miles Per Hour</u>
Hempstead	59	1:00:56	27.72
Prairie High School	53	1:00:11	24.9
Coopersville 777 (MI)	53	1:00:14	24.9
Maquoketa Valley	53	1:00:14	24.9
Hubbard Radcliffe	51	1:00:29	23.96
Perry	35	1:00:09	16.44
Pleasant Valley	9	didn't finish	4.22
Coopersville (MI)	9	didn't finish	4.22



Center for Energy and Environmental Education



Center for Energy and Environmental Education

Dubuque Hempstead's entry (top), the Predator, won first place. Hubbard-Radcliffe (above) makes some last-minute adjustments to their vehicle.

Behind the Scenes

In Iowa, the Center for Energy and Environmental Education in Cedar Falls along with the Iowa Renewable Energy Association (I-Renew) spearheaded efforts to bring an Electrathon to the state. Their preparation started more than a year ago by targeting schools with the concept of using electric car development as a teaching tool. Through a series of workshops and newsletters, the two organizations were able to recruit 12 schools that showed an interest in participating, six from Iowa and two from Michigan actually competed.

The purpose of the Electrathon is to teach students the importance of alternative fuel resources through a hands-on learning experience. It also combines education on mechanics, electronics, design and drafting, aerodynamic principles, fund-raising and public relations.

According to Tom Deves, I-Renew board member and a chief organizer of the event, "Electrathon is not only fun, it teaches students about the environmental problems associated with fossil fuels, and that there is a viable alternative."

Students benefit by learning not only how to build a car, but also environmental awareness, how to generate publicity, keep records and accounting, and long-term project planning.



Center for Energy and Environmental Education

Communities Get Involved

Because of the cost associated with building a car, around \$1,500, many schools asked for donations from businesses and organizations in their communities. Companies such as hardware stores, car repair shops and manufacturers were usually very excited to contribute. The schools also developed printed brochures and gave presentations to community groups in order to generate interest.

This Year's Participants

The Iowa schools that built electric cars this year each took unique approaches to teaching the important concepts, raising money and building the cars. For example:

Dubuque Hempstead were guests on local radio and television stations to create public awareness about their project. They also established information on a Web site, which generated e-mail requests for information.

Cedar Rapids Kennedy created four work teams student could join: Public Relations and Accounting, Body and Chassis, Power Systems, and Support. Each had their own work plans and objectives.

Hubbard-Radcliffe canvassed their community for donations and obtained well above their original goal.

Maquoketa Valley obtained design assistance for their car from

local engineers, and substantial contributions from EXIDE battery, who also provided design recommendations.

Waverly Shell Rock watched videos, drove demo cars, and even created a four-page brochure about their project in preparation of building their electric car.

Cedar Rapids Prairie first constructed a prototype out of wood, and then built their racing vehicle out of aluminum with a three-wheel design.

Perry developed a car with a dual-drive chassis -- one for electricity and one for gas -- so the school could compete in two types of races.

Pleasant Valley drew intricate drafting diagrams in order to better plan the design of their electric car.

Want to Participate? Here's How!

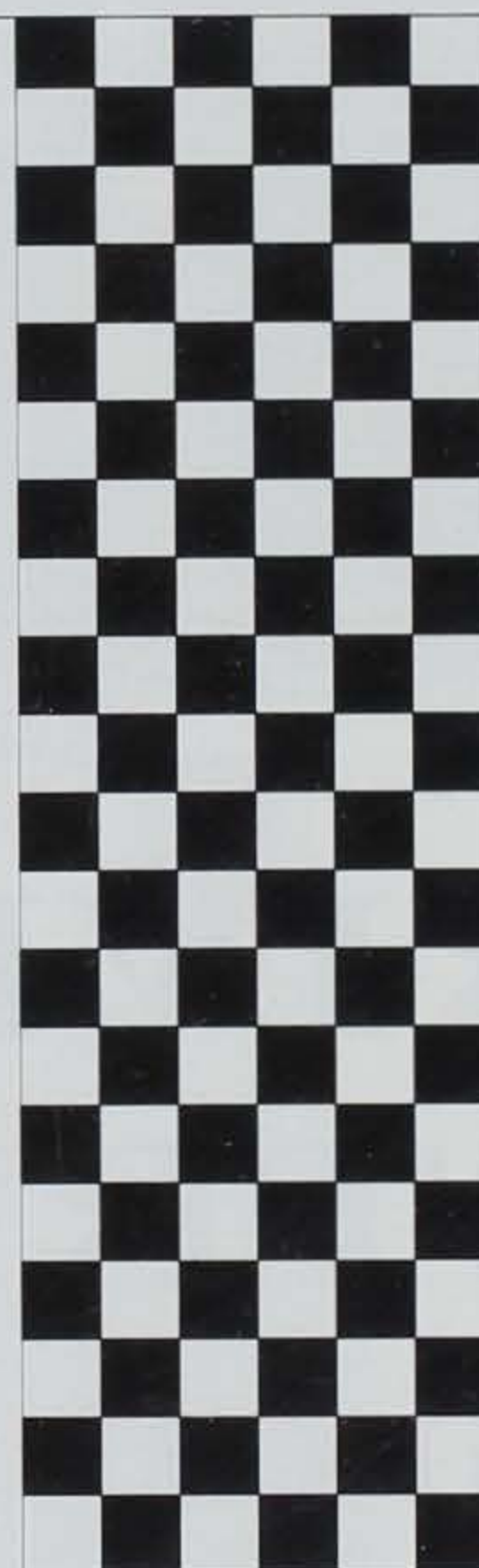
If your school would like more information about how to participate in next year's Iowa Electrathon, contact: The Center for Energy and Environmental Education Attention: Matt Lorenzen Phone: (319) 273-2573 Fax: (319) 273-7140 and e-mail: electrathon@uni.edu

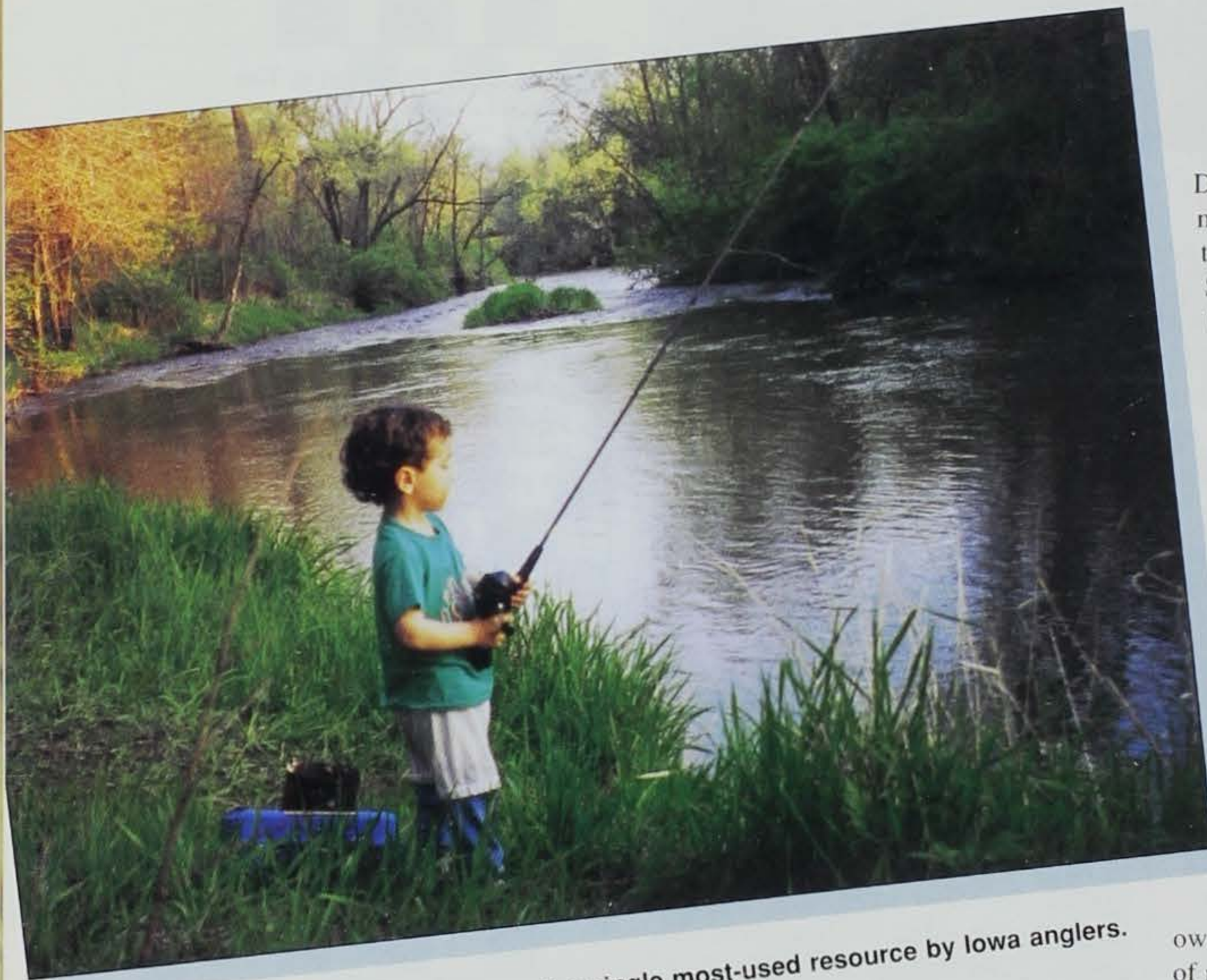
Julie Tack is an energy information specialist for the department in Des Moines.

How Much Pollution is Too Much?

100,000 miles driven in a *gas-powered* car generates 2,623 pounds of carbon dioxide, 2,574 pounds of carbon monoxide and 172 pounds of nitrogen oxide.

100,000 miles driven in an *electric* car generates five pounds of carbon dioxide, nine pounds of carbon monoxide and 61 pounds of nitrogen oxide.





Rivers and streams are the single most-used resource by Iowa anglers.

RIVERS & STREAMS

Great Places To Get Started

Article and photos by Gary Siegwarth

Growing up on Catfish Creek near Dubuque, I was fortunate to spend the majority of my childhood discovering the magic powers of moving water. Swirling currents moving along creek banks lined with overhanging trees, where old snags cut V-shaped wakes in the current, had captivating powers. The creek was like an overwhelming magnet -- drawing most kids in the neighborhood to nearly every type of adventure -- where we lived and dreamed of a "Mark Twain" life on the river.

Looking back on these experiences, many of the important lessons learned about rivers and streams through childhood adventures on Catfish Creek are still valued today both on the job and in raising kids of my own.

Needless to say, like a magnet, these same adventures draw my own kids toward the river's edge. One of many stream and river adventures they have recently discovered is fishing! Rivers and streams are one of the best places to start kids fishing because the techniques can be as simple as a hook and worm. And finding a place to fish can be as close as your own backyard. In fact, rivers and streams provide the most abundant, locally available water to fish in the state, with more than 10,000 miles of flowing water throughout Iowa!

Another advantage of fishing rivers and streams is the abundance and wide variety of fish species inhabiting these waters. Often, you don't know what fish species may be tugging on the other end until you reel it in. Depending on the particular stream or river you're fishing, there is a good possibility you could catch any one of 30 to 40 different species. This provides an excellent opportunity for young anglers learning to identify various Iowa fish. (For a list of some river fish you might find on the end of your line, see page 34.)

To most young kids, the fun of simply catching fish is more important

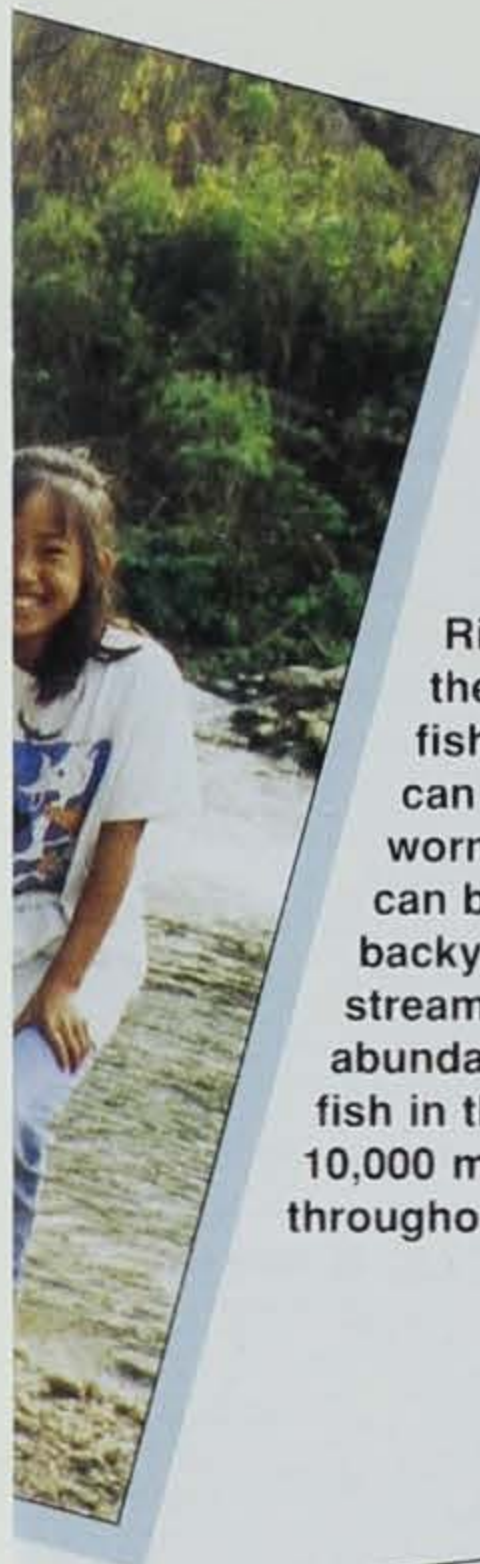
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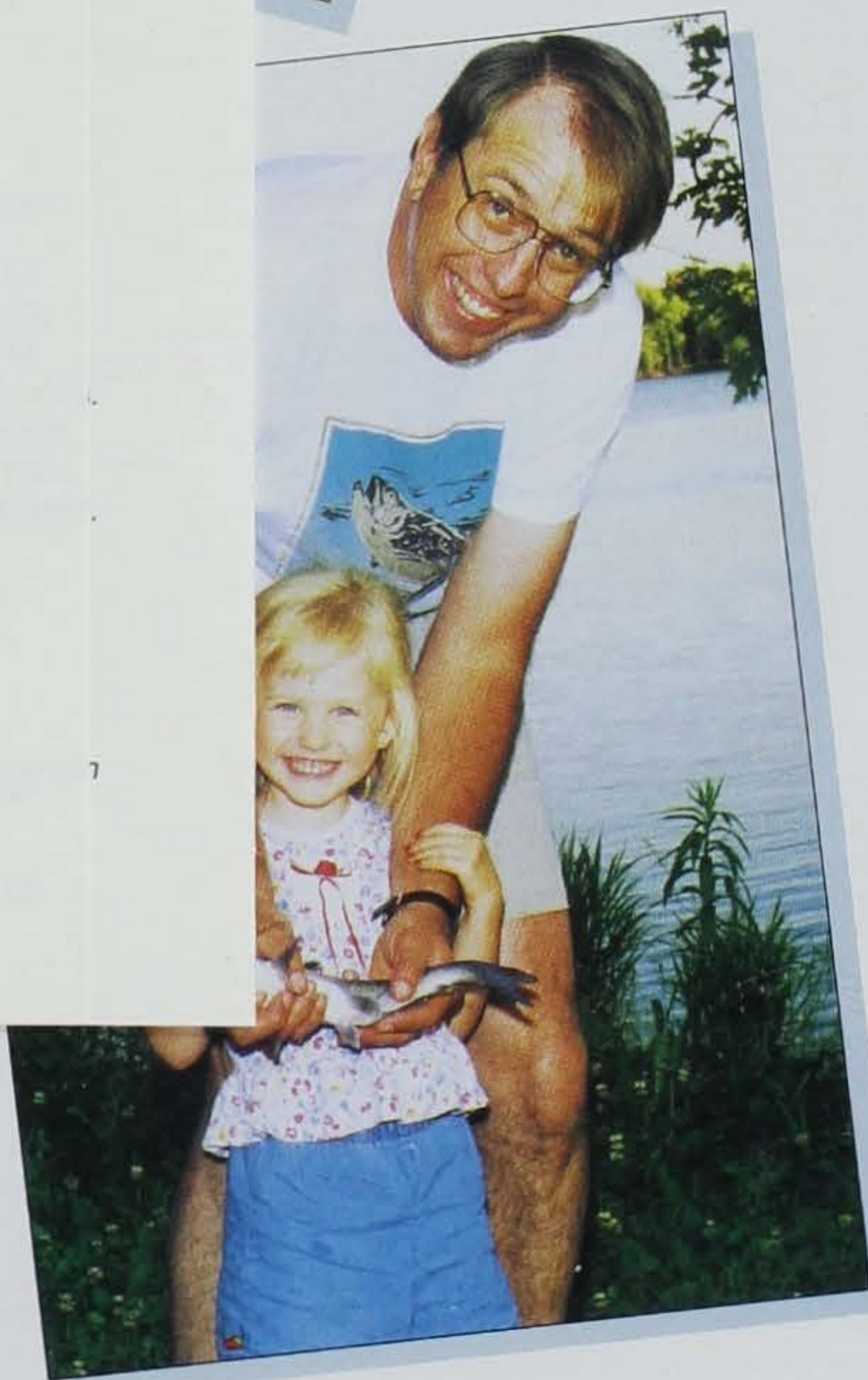
for *everyone* on the list.

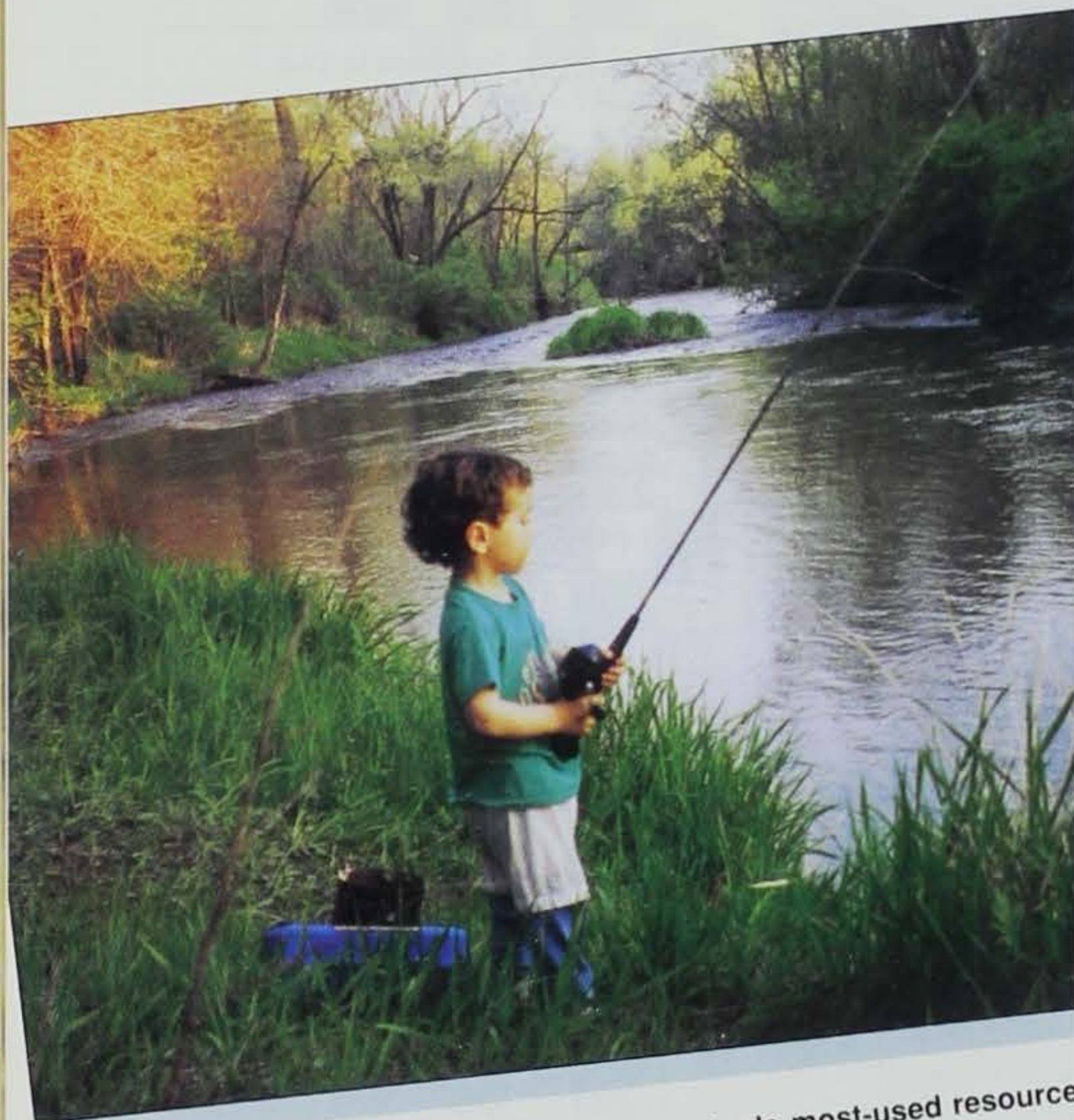
along undercut banks, near riffles, or around some type of structure such as a fallen tree or submerged logs and rocks. Stream fish tend to concentrate in these areas because they provide needed cover from the current and predators, and provide an abundance of natural food.

One stream-dwelling fish perfect



Rivers and streams are one of the best places to start kids fishing because the techniques can be as simple as a hook and worm. And finding a place to fish can be as close as your own backyard. In fact, rivers and streams provide the most abundant, locally available water to fish in the state with more than 10,000 miles of flowing water throughout Iowa!





Rivers and streams are the single most-used resource

RIVERS STREAM Great Places To Get Start

Article and photos by Gary Siegwarth

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fishing, there is a good possibility you could catch any one of 30 to 40 different species. This provides an excellent opportunity for young anglers learning to identify various Iowa fish. (For a list of some river fish you might find on the end of your line, see page 34.)

To most young kids, the fun of simply catching fish is more important

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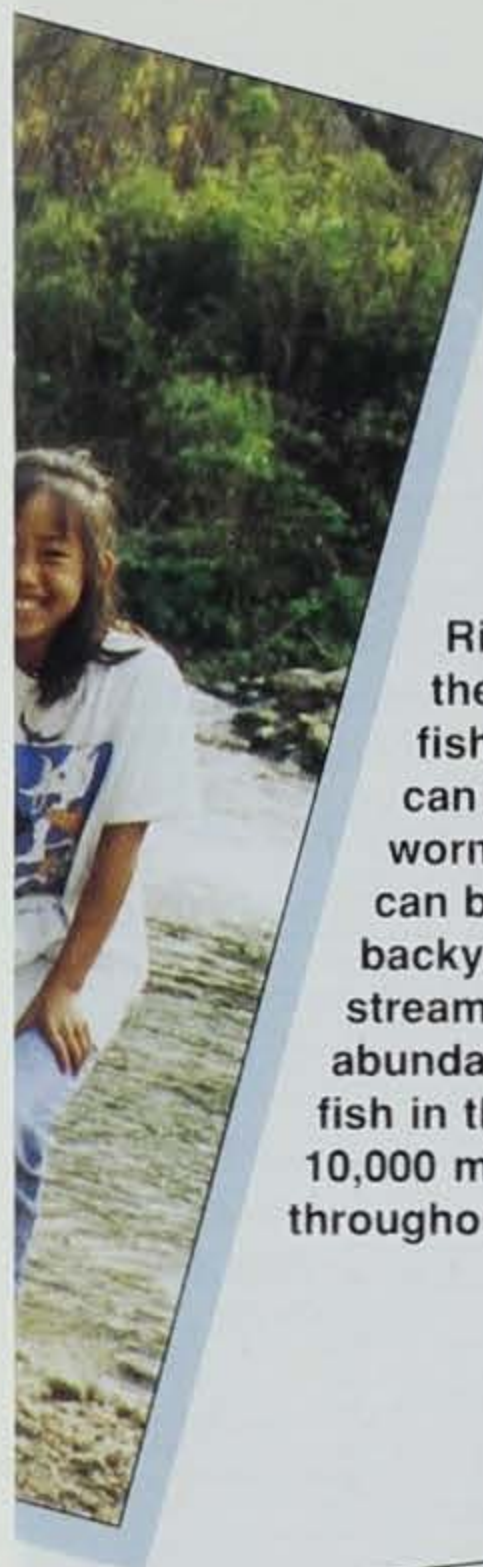
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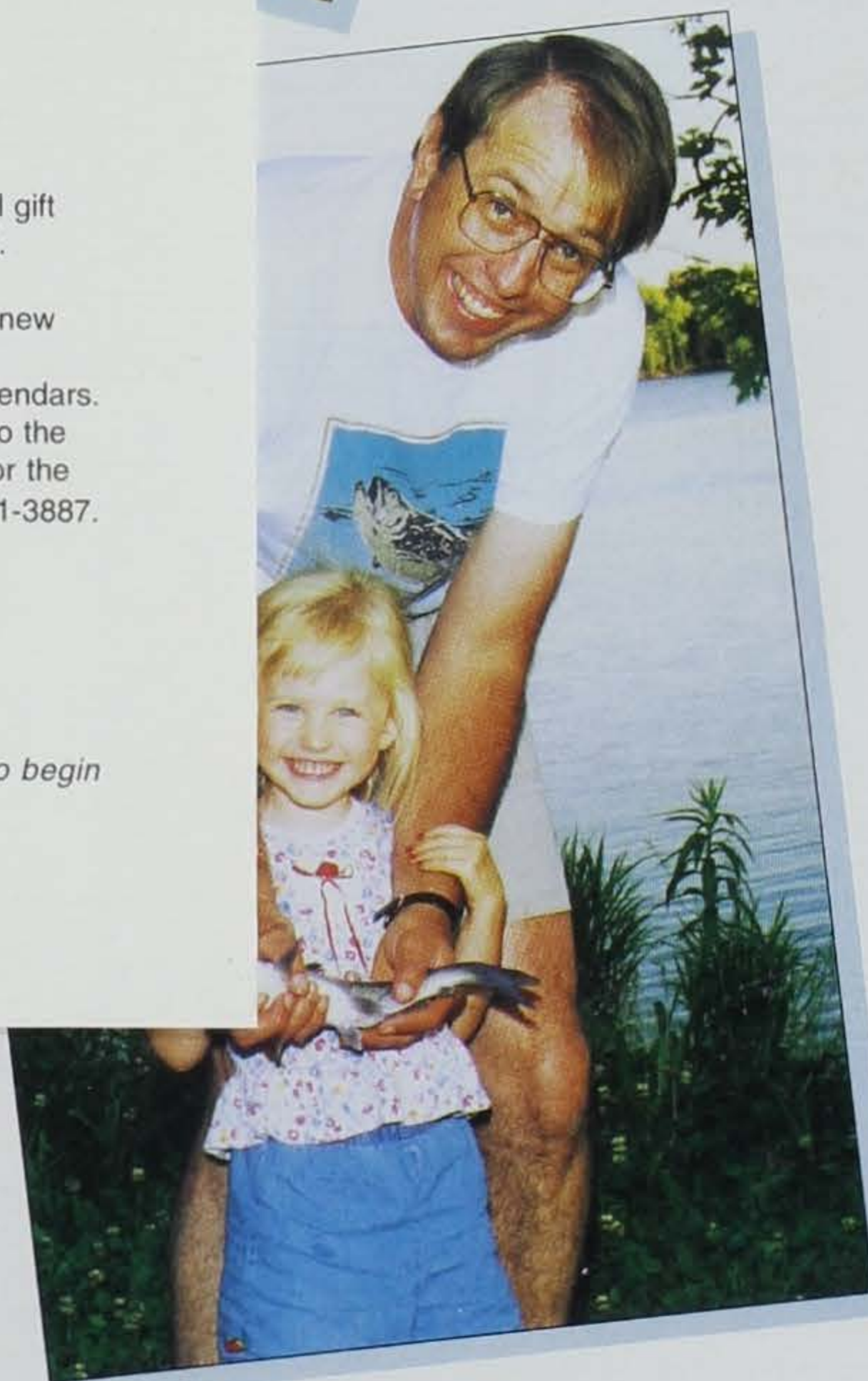
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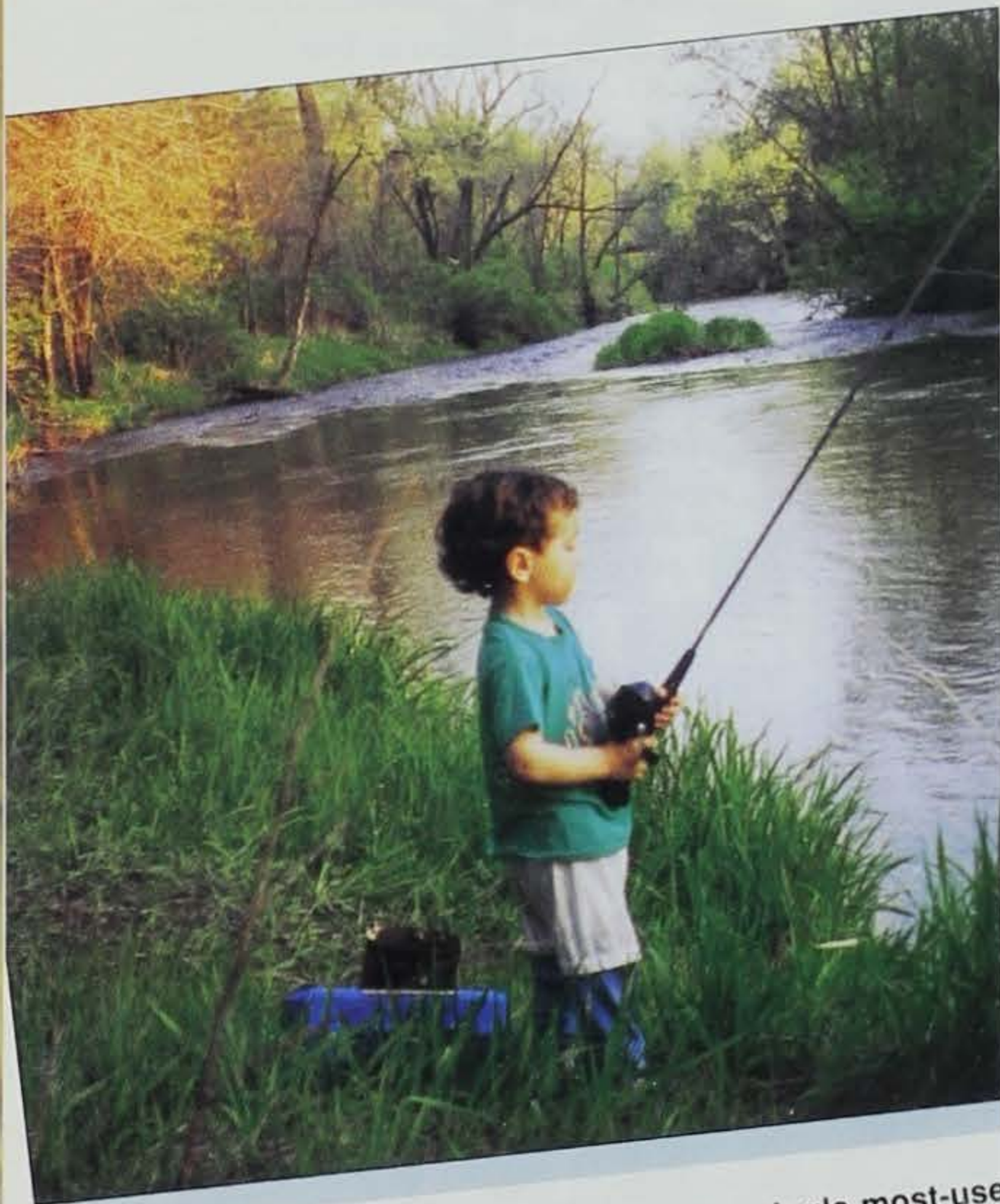
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One stream-dwelling fish perfect



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Rivers and streams are the single most-use

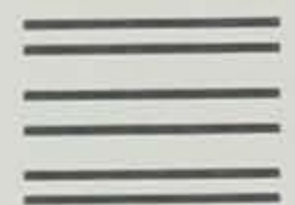
RIVER STREA Great Pla To Get Sta

Article and photos by Gary Siegwarth

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ishing, there is a good possibility you could catch any one of 30 to 40 different species. This provides an excellent opportunity for young anglers learning to identify various Iowa fish. (For a list of some river fish you might find on the end of your line, see page 34.)

To most young kids, the fun of simply catching fish is more important

FROM:

Before sealing envelope, be sure to include remittance.

than the particular species or size of fish. I can vividly remember the hikes up to the house from Catfish Creek carrying a stringer of creek chubs, suckers and bullheads. Even though the fish were somewhat dried out and covered with dirt from being drug across corn fields and pastures on my way home, onlookers would have thought I just won a million-dollar bass tournament from the pride I had showing off my catch.

One of the most important lessons I've learned from taking beginning anglers fishing is to keep the methods as simple as possible. The main components of our four-year-olds' tackle box are a few hooks, some sinkers and various sizes of bobbers. Although, on occasion, we find some of these tackle box components (such as hooks) lodged in the living room carpet, this basic fishing equipment provides most of the essentials for our stream and river fishing trips.

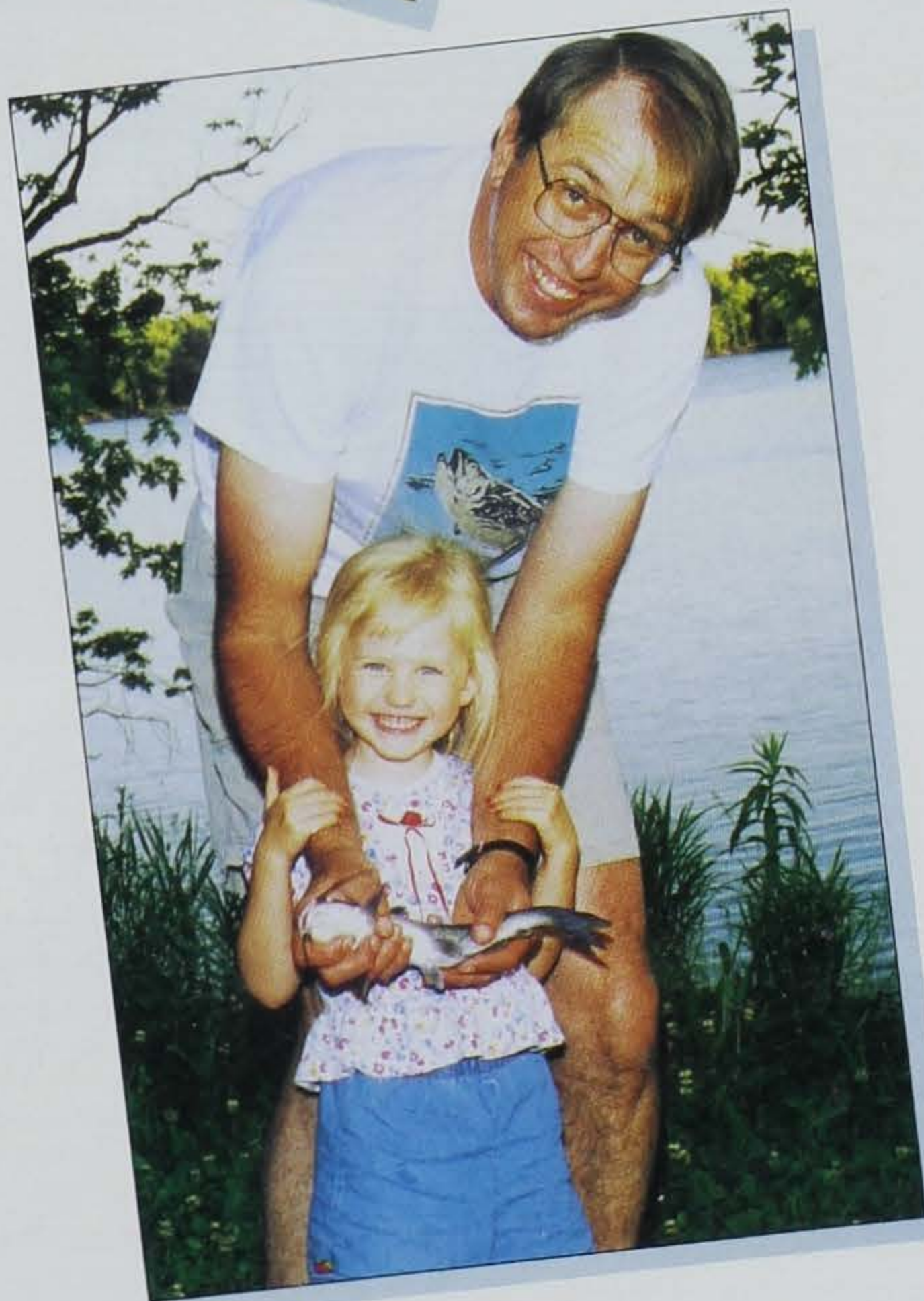
At the river, the simplest approach is to tie on a small sinker and a hook, bait the hook and throw it in. Now it's just a matter of waiting for the fish to take the bait and setting the hook. In more slack-water pools, another good approach for kids is to use a small bobber. This makes it easier for them to know when the fish is nibbling at their bait and when to give the line a tug. As young anglers become more experienced, they can be introduced to more advanced fishing methods and tackle, such as spinners and jigs.

Some of the best fishing areas to target along most streams are located along undercut banks, near riffles, or around some type of structure such as a fallen tree or submerged logs and rocks. Stream fish tend to concentrate in these areas because they provide needed cover from the current and predators, and provide an abundance of natural food.

One stream-dwelling fish perfect



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Creek chub fishing can provide fast action and prized catches for young kids.

for young anglers is the creek chub. Creek chub fishing can be excellent entertainment and practice for beginning anglers. With creek chub fishing, there is usually little waiting between bites and the fish are easy to catch using a worm or other bait on a very small hook. This gives young kids good practice feeling fish tug on the line and then the excitement of reeling them in. Small predator fish such as creek chubs can be found in the upper reaches of nearly any good quality stream throughout Iowa.

The channel catfish is another good target for young anglers. This species is one of the most popular gamefish among Iowa anglers and is easily recognized by kids. Channel catfish are also, by far, the most abundant game species inhabiting interior rivers and streams. They can be found in nearly every river in the state. Many of Iowa's rivers support channel catfish densities as high as 2,000

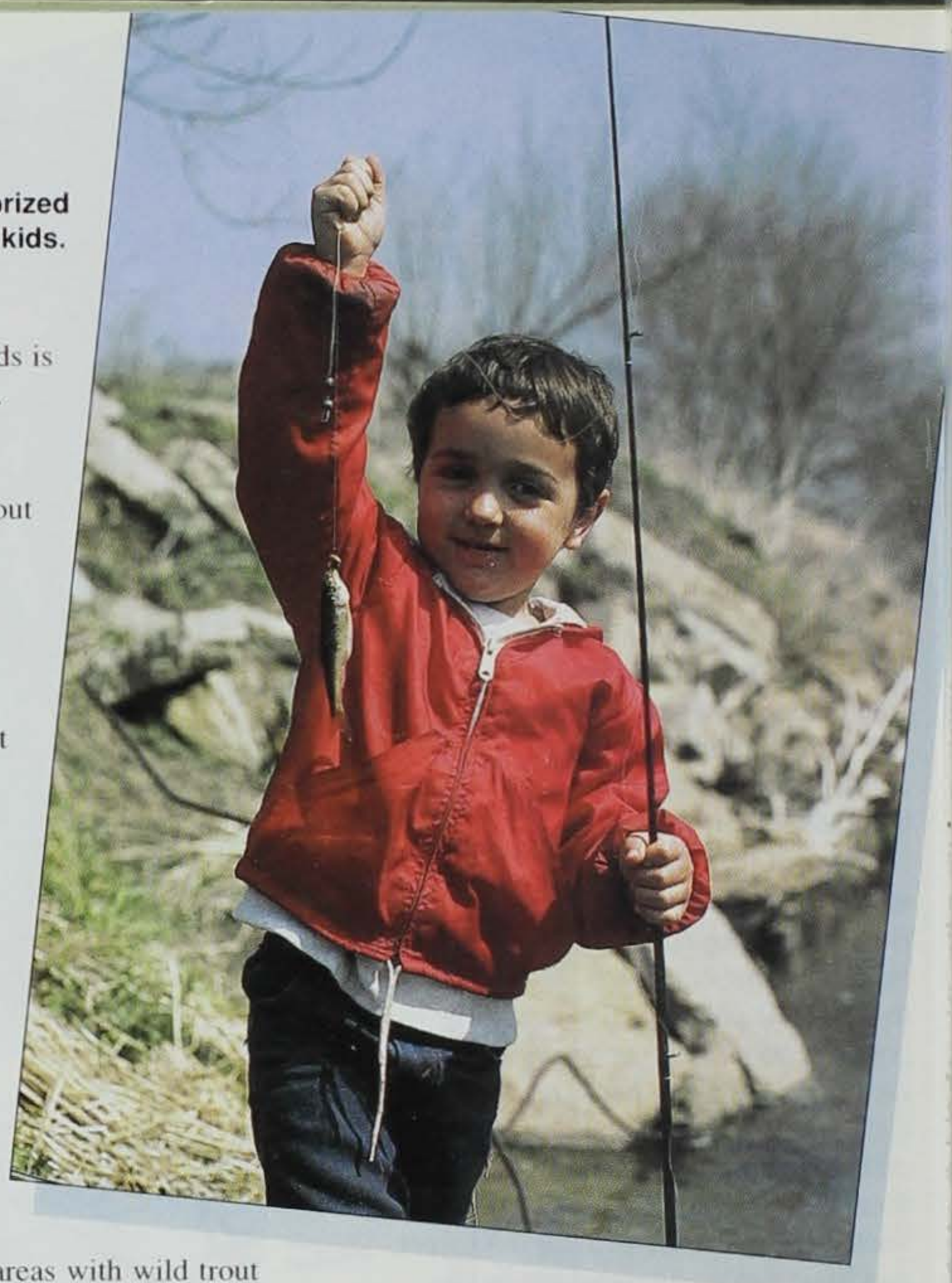
fish per mile! Since channel catfish rely mainly on their keen sense of

smell for feeding, a good approach for catching catfish is to tip the hook with some type of live bait, cut bait, or "stink bait." Another key to catching channel catfish on rivers and streams is to be mobile. If you don't catch a fish within a short period of time, it may simply be a matter of moving downstream above the next log pile or pool. During April through June, you can also catch catfish in surprisingly small-sized streams, because fish are moving through these areas prior to spawning.

Another popular type of angling

for young kids is trout fishing.

There are numerous coldwater trout streams located throughout northeast Iowa. They provide great places for kids to fish. These streams offer a diversity of opportunities for young anglers, ranging from catch-and-release areas with wild trout



Northern Pike	Walleye	Smallmouth Bass	Largemouth Bass	Rock Bass
Green Sunfish	Bluegill	Black Crappie	Channel Catfish	Orange Spotted Sunfish
Black Bullhead	Carp	Yellow Bullhead	Freshwater Drum	White Bass
Yellow Bass	Creek Chub	Gizzard Shad	Bigmouth Buffalo	Quillback Carpsucker
Highfin Carpsucker	Silver Chub	River Carpsucker	Northern Redhorse	Golden Redhorse
Shovelnose Sturgeon	White Sucker	Northern Hogsucker	Central Stoneroller	Hornyhead Chub
Common Shiner	Golden Shiner	Longnose gar	Shortnose gar	Rainbow Trout
Brook Trout	Mooneye	Brown Trout		

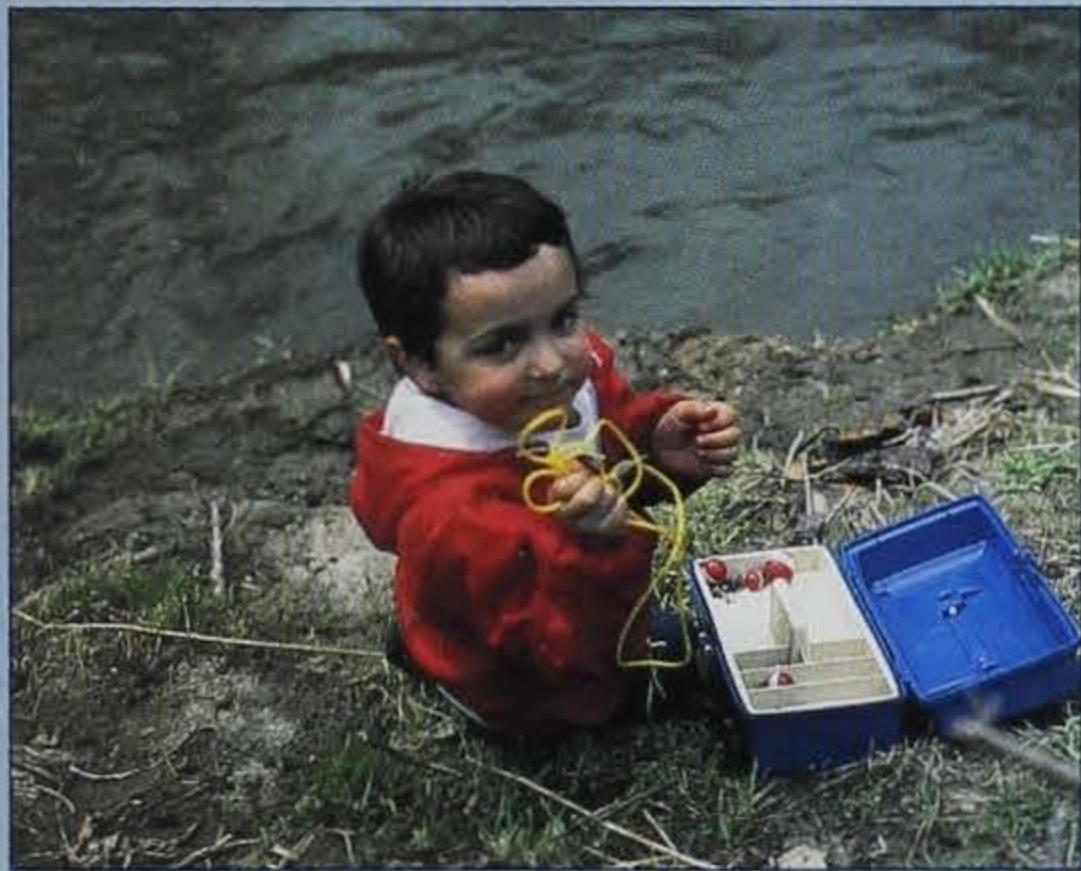
populations to numerous streams stocked weekly with catchable-size rainbows, browns and brook trout. On these same streams, a variety of other fish species such as white suckers and creek chubs can also be caught. A detailed map showing the location of coldwater streams throughout northeast Iowa can be obtained by contacting your local DNR office.

No matter what stream or river in Iowa you venture to, or what fish species you prefer to catch, the most important thing to remember when taking young anglers fishing is to

simply have fun and let kids be kids! Many times my kids love to fish for about 15 minutes before entering into the realm of "river time," when they are suddenly off climbing trees, chasing frogs, collecting shells and rocks, getting wet and muddy, or just being mischievous . . . but, thinking back to my own childhood adventures on Catfish Creek, that was the best part about being a kid!

Gary Siegwarth is a fisheries biologist for the department at Manchester.

Small Streams Make Big Fun For Little Anglers



From top counterclockwise:

The key to a young anglers tackle box is simplicity. A few hooks, sinkers, bobbers and an excited young angler are all that is needed to get started.

A simple worm on a hook will catch a variety of river and stream fish species.

A little assistance hooking the first few worms . . .

. . . and some advice on what to wait for and what to do when there's a nibble . . .

. . . can result in some quick and surprising catches such as this common shiner.



Common Ground For Communicating

As I sit here making plans for a deer hunt with my son this fall, I realize how lucky I am to be able to share the outdoors with him. Adam is 16 years old now and is in a time of his life when things are changing quickly. I don't pretend to understand his world. My teenage world of the 1960s was much different and, I believe, much simpler. I do believe the time he and I have spent hunting, fishing and trapping together has given us a common ground for communicating, one which helps in all areas of our lives.

Early this spring, while checking fishing licenses, I happened upon a mother and her daughter. The mother asked a lot of questions about where to fish and what to fish with. She mentioned she hadn't fished since her father had taken her as a small child, but she always had fond memories of the trips. All this time, the daughter sat about 30

by Joe Pestotnik

feet away with a Walkman turned up so loud we could hear it. I remember a green streak in her hair covering one side of the headset.

The woman said there had been some problems with her daughter. She wanted to spend more time with her. With money tight, she thought they could use her father's old fishing gear for something to do. An hour later, I drove back by the location and though they were still 30 feet apart, they might as well have been 30 miles apart -- mom looking at her newspaper, daughter enjoying her music.

In late July, I noticed a car parked near a farm pond and I stopped to see if someone was fishing. As I walked down the hill towards the pond, I saw two women on lawn chairs who were

fishing -- at least they had poles in the water. Mostly they were laughing and visiting, two old friends on a nice summer afternoon. They were about three feet apart and so involved in their conversation they didn't notice me until I said "hello."

This startled them and as one turned towards me, I noticed a green streak in her hair. Sure enough, it was the same mother and daughter I had seen earlier in the spring. They said they weren't having much luck fishing, but that didn't matter since it was a beautiful day and they were obviously enjoying each other's company. Miracles do happen!

In a world of high-pressure and fast-changing life styles, at times it seems hard to find a way to communicate with your children. Their world is much different now than it was for me at the same age, but the basic problems are the same -- ones that children have faced for thousands of years. So why not use the same ground for building communication that has worked for thousands of years. Fall is here and it's a great time to be outdoors with your child. This fall my son and I will go on many small hunting trips, some have already been planned, others will be spur-of-the-moment. I already know they will be successful hunts whether we harvest any game or not.

Joe Pestotnik is a conservation officer for Pottawattamie County.



Ron Johnson

The community of Waverly is benefitting from the partnership of dedicated groups and individuals, with the renovation of the Waverly Light and Power pond.

Partnerships in Fish and Fishing

by Mark Winn

If you ask any seasoned angler what they look for when trying to catch fish, I guarantee their answer will be (or should be) structure. Building structure, or habitat improvement, is probably the most enjoyable aspect of my job as a fisheries technician. With the goal of improving anglers success, DNR fisheries personnel spend about

two months each summer creating different kinds of fish habitat in lakes and streams, helping to concentrate fish where they can be more easily caught. One of the side benefits to these habitat improvement projects is the opportunity to work with individuals outside our department. There are many dedicated individuals and groups throughout the

state willing to donate time and talent to this effort. Here is how one such habitat improvement unfolded.

In 1969, the Three Rivers Chapter of the Isaak Walton League in Bremer County approached the Waverly Light and Power Company (WLP) with the idea of renovating the company's pond. WLP was in the process of finishing



Mark Winn

In Iowa, we commonly receive telephone calls from landowners wanting information on how to improve fishing in their ponds. In general, there are four things to keep in mind when it comes to maintaining a quality pond fishery.

The most important factor is **water quality**, which is influenced by how much runoff or siltation enters the pond. The best ponds in Iowa have about 20 acres of watershed for each surface-acre of water impounded.

Vegetation is another important consideration. When aquatic vegetation covers more than 20 percent of the pond surface, a control is usually necessary.

Fish stocking comes in next -- what type of fish to stock, in what densities and at what time of year.

The final and sometimes most important factor for improving fishing is **fish habitat**.

their new generation plant on 32 acres of land donated to the City of Waverly from the Carnation Company. The plant's generators were to be cooled with well water, but people were concerned about the warm water discharge and the effects it might have on fish in the Cedar River. On the city property was an abandoned eight-acre settling basin left from Waverly's sugar beet factory, which had gone out of business around 1945. The basin, just north of the Waverly Light and Power Plant, is adjacent to the Cedar River. It could be used for the discharge, however, it was discovered the pond leaked through the bottom.

In 1970, approval was granted by the City of Waverly to grade, shape and seal the bottom of the pond with 22 tons of bentonite per acre. The sealed bottom worked successfully until 1989 when vandals dug a trench through the dike, causing the pond's water level to drop. In 1990, WLP had the trench repaired, but the pond failed to maintain sufficient water levels.

Over the past several years both employees and anglers have seen a decline in the quality of fishing that once occurred at this pond. In 1990, the board president of WLP wanted the company and its employees to do something for the community by making the pond available for public fishing. One of the company's employees, Dave Mulder, contacted various agencies for assistance and eventually telephone the DNR about ideas on how to renovate and stock the pond.

Certain requirements had to be met in order for the state to stock fish into this newly renovated pond. The bottom had to be sealed, it had to have a minimum depth of eight feet and the pond had to be free of fish. In the past, Waverly Light and Power Com-



Waverly Light and Power pond before renovation began in spring of 1996.



Dave Mulder



Mark Winn



Mark Winn

pany had used the pond to hold fishing events for children and always allowed public fishing. In 1991, WLP employee's decided to go with the "adopt-a-pond" project to make their work place more attractive and bring back the original dream of the Ikes.

During the years between 1991 and 1995 what ever could go wrong, went wrong! The WLP plant sustained astronomical costs in facility maintenance and repair. The flood waters of 1993 eroded the bottom of the pond and ruined the seal. In 1994, WLP was dealing with FEMA for help in replacing the seal, but they could only provide \$7,000 -- a far cry from the \$200,000 needed. For almost two years the pond remained dry and hopes were fading. There had to be a more cost-effective alternative for repairing the pond.

At this same time, several plant employees and a general contractor got together and came up with the idea of excavating below the water table and letting the pond fluctuate with the level of the Cedar River. An agreement was worked out to dig the pond as deep as possible at a cost of \$30,000 to WLP. This was the answer they had been looking for.

Numerous workdays were held throughout the pond renovation allowing individuals to get involved in the project. Some of the renova-

Top to bottom:

With the Waverly Light and Power Company in the background, employees are hard at work creating habitat for the WLP pond. Notice the rock piles, pallet structures and trees in the pond bottom.

Creativity counts in building fish structure.

By creating fish habitat, fish become concentrated in an area, improving angler success.

tion included removing trees, sodding, building steps, trucking and leveling dirt, shaping banks, seeding and fertilizing, and covering the seeding with straw. The response from the general public was very positive and they were excited to see the pond restored.

In the spring of 1996, we were asked to take a look at some habitat work they had been doing on the newly renovated pond. We were amazed at the work accomplished and the magnificent effort the employees put into this five-acre pond. We discovered they had access to wooden pallets from local businesses within the community, so we loaded our pickup with a power nailer, nails and lumber and away we went. We were more than happy to provide labor and

materials for this wonderful project. As a general rule, the DNR can donate time and materials to a private project only if it will benefit a public fishery and provide public fishing. The WLP pond certainly met this criteria.

Waverly Light and Power and its employees ask the general public to treat the area as if it were their own. The pond's future looks bright. There will be permanent park benches around the pond, barriers to keep vehicles off the grass, a shelter house at the west end, more trees and shrubs, additional rock for the jetty and bank stabilization, and a sign describing the history of the pond along with rules and regulations. The contractor who removed fill from the pond is scheduled to return at a later date to remove an additional two to three acres of

material, enlarging the overall size of the pond to eight acres.

The WLP project is a perfect example of how businesses, city employees, organizations and individuals can come together and create something positive for the community. These partnerships bring together all the team work necessary to complete a project quickly, costly effectively and with great success. If you or your associates would like more information on how to begin a similar project, call your local Natural Resource Conservation Service (NRCS) office or your regional DNR fisheries biologist for more information.

Mark Winn is a fisheries management technician stationed in Manchester.



Mark Winn

Iowa Department of Natural Resources personnel survey the new pond for largemouth bass and bluegills previously stocked.

Will Hunting Opportunities Be "Cut Down?"

by Amanda Carstens

With the year 2000 quickly approaching, many of us are thinking about our future, what it will have in store for us, and how things will change. We wonder what kind of lives our children and grandchildren will live, and how things will affect us as we grow older.

The Forestry Division of the Department of Natural Resources is also wondering what the year 2000 will bring. With increasing grazing fees in western Iowa, expiring CRP contracts and a renewed emphasis on food production, landowners have more land management options to consider. These decisions may include increased grazing pressure and the clearing of woodlands for other agricultural needs. If this should happen, Iowa could lose a quarter of its woodlands, 25 percent of the wild turkey population, 20 percent of the deer population and the diversity of other wildlife relying on this habitat.

This decrease in woodlands could significantly impact the 250,000 hunters in our state. Without the habitat woodlands provide, wildlife numbers will fall.

We will be losing more than wildlife populations, however. We will be losing a tradition. A tradition which has been passed down from generation to generation, each teaching the next how to shoot, call turkeys and claim the prize they've dreamt of for years.

Hunting has become a national pastime, a time for families and friends to get together and enjoy the outdoors and the adventures every hunt brings. In Iowa alone, hunting generates more than \$5 million annually in license sales, and \$22 million for hotels, food and gas stations, not to mention a priceless amount of smiles and laughs.

Many of these fun times would not be possible without the hard work and dedication of the 55,000 private woodland landowners who choose to

maintain them. These landowners make up a mere two percent of Iowa's population, yet they own 92 percent of the woodlands. Many are approaching retirement age, resulting in a change of land ownership, and a possible change of land use.

The future of Iowa's woodlands depends on each one of us. Gail Kantak, DNR district forester, says, "As Iowan's, we all enjoy the many benefits woodlands provide us. So it is up to us to take care of this renewable resource." Mike Brandrup, DNR forestry services bureau chief adds, "If we want to ensure that all the benefits we derive from the state's

woodlands will be here for the next generation, we must support the private woodland owner, starting today."

If we pitch in to help these landowners and show our appreciation for the resource they provide, we can secure the roots for the next millennium, ourselves and future generations. If not, the future of Iowa's timber and our hunting traditions will continue to be uncertain.

Amanda Carstens is an intern for the Forestry Division currently working in Ames.



Roger Hill



Roger Hill

“Eight Points” Every Hunter Should Know

1. Woodland wildlife is highly dependent on woodlands for their habitat.
2. Only 6% of Iowa's land base is woodlands.
3. 92% of Iowa's woodlands are privately owned.
4. Most of Iowa's privately owned woodlands are owned by less than 2 percent of Iowa's population.
5. 25% of Iowa's woodlands will change ownership in the next 10 years and 50% in the next 20.
6. New owners may have different desires for their land, resulting in a change of land use.
7. Woodland owner/hunter relationships may be changing.
8. Every percentage reduction in woodland habitat results in losses of wildlife populations.

Five Proactive Steps To Make The “Buck Stop Here”

- 🦌 Be a lawful hunter -- make hunting a positive experience for the woodland owner.
- 🦌 Offer assistance to woodland owners -- help them with woodland management activities (tree planting, timber stand improvements, firewood harvests, fence building)
- 🦌 Put the woodland owner in contact with their DNR district forester.
- 🦌 Match retiring woodland owners with young landowners that value the woodland resource.
- 🦌 Show your appreciation to the woodland owners who share their resource with you!

MORE THAN 90% OF IOWA'S WOODLANDS ARE OWNED BY LESS THAN 2% OF THE STATE'S POPULATION!

WHAT COST-SHARE ASSISTANCE IS AVAILABLE?

CRP -- Conservation Reserve Program

This is a federal program designed to take highly erodible crop land out of production. (annual rental payment to landowners + 50% cost-share for tree planting)

EQIP -- Environmental Quality Incentives Program

This is a federal program designed with an emphasis toward soil and water conservation practices.

FIP -- Forestry Incentives Program

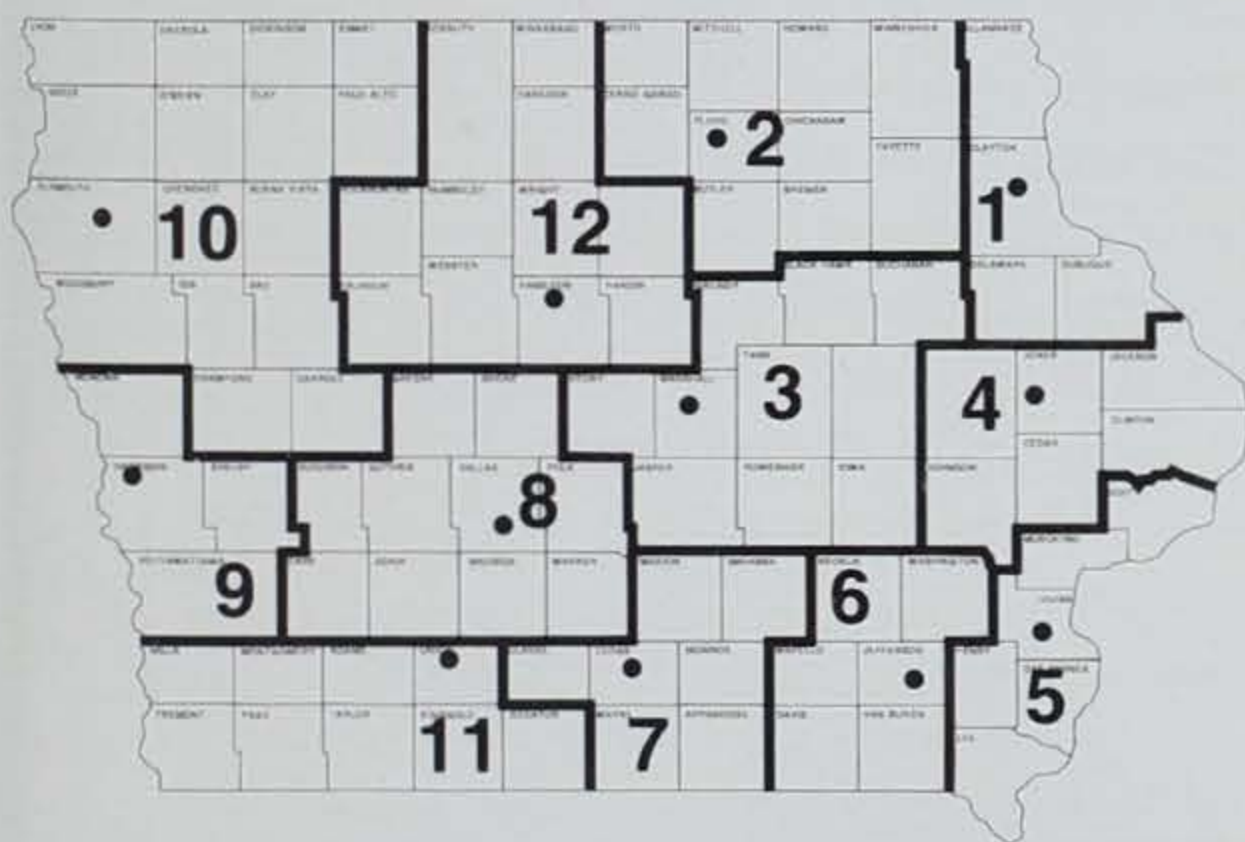
This is a federal program designed for long-term timber production, increased timber acreage and improved quality. (65% cost-share for tree planting and timber management)

REAP -- Resource Enhancement and Protection

This is a state program designed to provide a broad-based approach to protect Iowa's natural resources. (75% cost-share for tree planting, timber management and native grass planting)

SIP -- Stewardship Incentive Program

This federal program provides for an improved forest environment with a broad range of projects from tree planting to protection of endangered species. A stewardship management plan is required. (75% cost-share for tree planting, timber management and buffer strips)



A FORESTER CAN ASSIST YOU . . .

in determining the trees best suited to your site, with planting design, in developing recommendations for proper site preparation and weed control, with proper site preparation of existing timber, and with the correct procedures for thinning, pruning and marketing your timber.

For more information about the DNR's Forests and Forestry Division, check out our web page at <http://www.state.ia.us/forestry>

WHAT OTHER ASSISTANCE IS AVAILABLE

Professional Forestry Assistance

The Forestry Division of the DNR provides free professional forestry assistance to landowners in Iowa. A staff of 12 professional foresters are available to meet with landowners to provide services such as planning for tree planting, timber management assistance, buffer strip development and forest-related wildlife habitat improvement.

Other Professional Assistance

Assistance is available from DNR wildlife and fisheries biologists, ISU extension, NRCS personnel, consulting foresters and county conservation boards.

Forest Reserve Law

Forested areas, at least two acres and not grazed by domestic livestock with a minimum of 200 trees per acre, qualify for tax exemption status under this law. You are still allowed to harvest wood products. Also, land planted to trees under the CRP program may qualify after the CRP contract expires. For more information contact your local county assessor's office.

State Forest Nursery

The state nursery sells high-quality, low-cost forest planting stock. For order forms or additional information, call 1-800-865-2477 or 515-233-1161.

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Webster City, IA 50595
515-832-3585 |

The Impact of Recycling

Article by Tracy Bucher

Photos by Ken Formanek

No longer should the three R's be reading, 'riting and 'rithmetic, but rather reduce, reuse and recycle. Since the creation of Earth Day in April 1970, almost three decades ago, Americans have learned the importance of these words. Through increased awareness, consumers have realized being environmentally conscious requires minimal effort, but the benefits generated surpass any and all expenditures.

Through the establishment of the 1989 Waste Reduction and Recycling Act, solid waste reduction has generated considerable publicity and legislative support for environmental issues during the last decade. With the establishment of this act, goals at the state level were developed to reduce the amount of waste sent to landfills. To meet these goals, the total amount of waste sent to landfills must be reduced 50 percent by the year 2000.

Currently, the reduction in volume of solid waste sent to landfills has reached 33 percent and is showing steady improvement. This improvement is largely due to the growing amount of municipalities with curbside recycling programs, plus the

additional number of municipalities with drop-off programs. Combined, these programs service more than 80 percent of Iowans, making recycling more accessible and therefore, more popular among residents.

The accessibility of recycling has also made recycling a significant partner in Iowa's economy. In 1995, more than 650 jobs existed in Iowa for processing recyclable materials. These jobs and the resulting product sales stimulated more than 1,290 total jobs and \$100.3 million in total industrial sales state-wide -- the primary economic impacts of recycling. For every job created in the processing sector, one additional job is created in the remainder of Iowa's economy, and for every \$1 of income generated in the processing sector, an additional \$.97 of income is generated in the remainder of the Iowa economy.

Although legislative support has generated publicity for environmental issues, it is important to note that nothing can be accomplished without the actions and commitment of Iowa residents. In an attempt to educate consumers about recycling, and more specifically the recycling process, the remainder of this article is dedicated to showing the impact of recycling.



Bradenton Glass Production, Tropicana Products

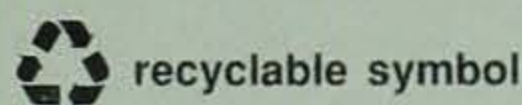
Manufacturers purchase post-consumer glass from processors to produce new products. When the consumer purchases the new glass product, the recycling loop is complete. In 1995, Iowa residents and businesses recycled 26,165 tons of glass.



Every recycling loop begins and ends with a consumer. Products made with post consumer glass, such as glass containers, can be found anywhere.

Glass

Look for the recyclable symbol on the items you purchase. The recyclable symbol means the item may be recyclable in your area. Check with your local recycling center or landfill if you are unsure if the product can be recycled locally.



recyclable symbol



For the loop to continue, consumers must separate recyclable glass products from other waste and set the recyclables out for collection.



Bradenton Glass Production, Tropicana Products

Processing post-consumer glass begins at specialized plants designed to break materials down. Once the post-consumer glass is broken down into a useable form, the material is packaged and sold.



As recyclables are collected, through curbside or drop-off collection programs, responsibility is now in the hands of the local recycling center.

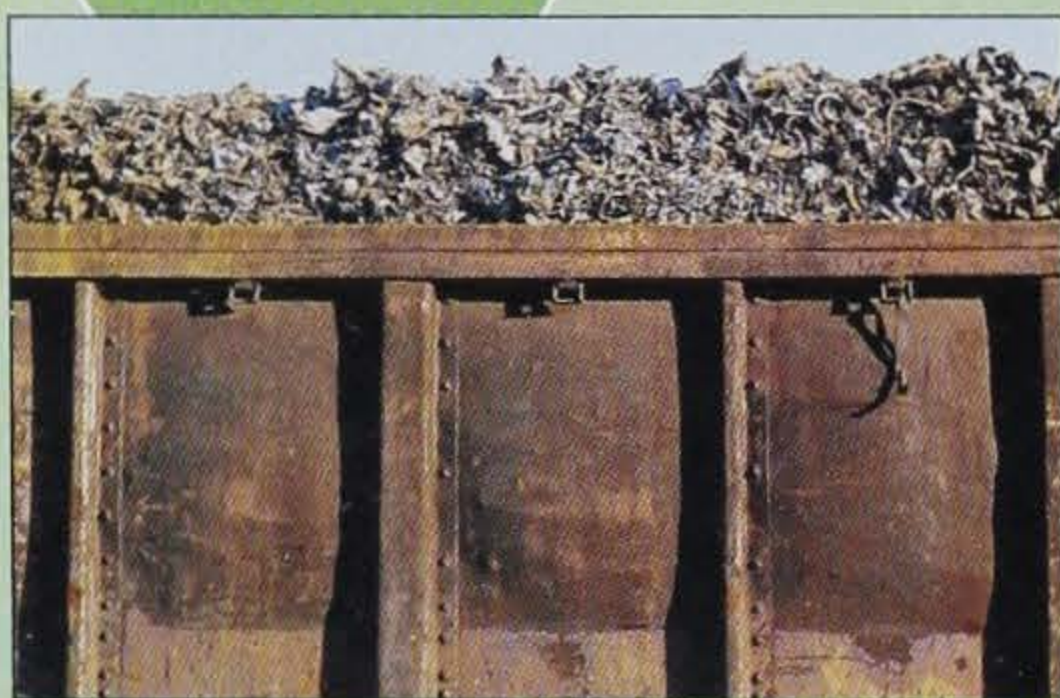


North Star Steel



North Star Steel

Manufacturers purchase post-consumer metal from processors to produce new products. When the consumer purchases the new metal product, the recycling loop is complete.



North Star Steel

Processing post-consumer metal begins at specialized plants that shred or bale the materials. Once the post-consumer metal is shredded or baled into a usable form, the material is sold to a manufacturer.

As recyclables are collected, through curbside or drop-off collection programs, responsibility is now in the hands of the local recycling center.



Every recycling loop begins and ends with a consumer. Products made with post-consumer metal, such as food containers, can be found anywhere.

Metal

Look for the recycled symbol on the items you purchase. The recycled symbol tells you the product or its packaging contains recycled materials.



recycled symbol



For the loop to continue, consumers must separate recyclable metal products from other waste and set the recyclables out for collection. Iowa residents and businesses recycled 202,632 tons of metal in 1995, which comprised 30.5 percent of all recycled commodities.





Manufacturers purchase post-consumer paper from processors to produce new products. When the consumer purchases the new paper product, the recycling loop is complete.



Every recycling loop begins and ends with a consumer. Products made with post-consumer paper, such as newspaper, copier paper, greeting cards can be found anywhere.

Paper

Join other businesses in Iowa and make the pledge to buy recycled. Members of the Buy Recycled, Iowa campaign receive several benefits including information on setting up a buy recycled program, where to find recycled products, and a subscription to the national Buy Recycled Business Alliance's newsletter. For more information call 515/281-4367 or 515/242-4755.



Mason City Recycling

Processing post-consumer paper begins at recycling centers designed to separate and bale different types of paper to increase its value. Once the post-consumer paper is separated into usable types, the material is packaged into bales and sold. More than 346,000 tons of paper were processed in 1995 by Iowa recycling centers -- by far the largest amount of any commodity.

As recyclables are collected, through curbside or drop-off programs, responsibility is now in the hands of the local recycling center.



For the loop to continue, consumers must separate recyclable paper products from other waste and set the recyclables out for collection.





Manufacturers purchase post-consumer plastic from processors. As new products are produced for consumers to use, such as park benches made of 100-percent recycled plastic, the recycling loop is complete.



Every recycling loop begins and ends with a consumer. Products made with post-consumer plastic, such as toys and picnic tables, can be found anywhere.

Plastic

Look for the term "post-consumer" on recycled products. Purchasing the item with the highest percentage of "post-consumer" material will help strengthen market prices for recyclables, improving the economics of our local recycling programs.



Dubuque Plastic Production

At the recycling center, processing post-consumer plastic begins as the plastic is separated and ground up or baled. Once the post-consumer plastic is broken down into a reusable form, the material is packaged and sold.



For the loop to continue, consumers must separate recyclable plastic products from other waste and set the recyclables out for collection. Iowa residents and businesses recycled 20,442 tons of plastic in 1995, comprising 3.1 percent of all recycled commodities.



As recyclables are collected, through curbside or drop-off programs, responsibility is now in the hands of the local recycling center.



As new products are purchased by the consumer, such as topsoil and mulch, the recycling loop is completed.



City of Postville

For yard waste to be recycled, residents and businesses must separate it from other waste and set the recyclables out for collection or deliver the material to a recycler.

Yard Waste

The Iowa DNR has available a directory of companies in Iowa that sell recycled products. If you would like a copy of this directory or would like your company included in the directory, please call the DNR at 515/281-4367.



Organic Technologies

In Iowa, more than 250,000 tons of organic waste is composted annually.



Organic Technologies

After collection, the processing of yard waste begins at composting facilities that are designed to grind and decompose yard waste and other organics into nutrient-rich compost.

The Waste Management Assistance Division would like to thank Hy-Vee Foods, The City of Des Moines Public Works Department, Cedar River Paper, Hammer Plastics, Tropicana, the City of Postville, Organic Technologies Corporation, and North Star Steel for their assistance with the development of this article. Tracy Bucher is an intern for the department's Waste Management Assistance Division in Des Moines.

Parks Profile

Originally constructed by the CCC as a water source for nearby Bedford, this park gem lives on as

Lake of Three Fires State Park

by David Sunne

If you enjoy camping, fishing, hiking, swimming, equestrian activities, picnicking, photography or just plain solitude, you owe it to yourself to visit Lake of Three Fires State Park. This beautiful park, nestled in the wooded hills of southwest Iowa, was dedicated in 1935. The lake was originally constructed by the Civilian Conservation Corps (CCC) as a water source for the town of Bedford, four miles to the south. Besides the lake, the CCC constructed several other facilities including the beach house, a shelter house, six cabins, the ranger residence and shop. All of these are still being used and add to

the enjoyment of today's visitors.

The park's 10 miles of multi-purpose trails are becoming one of its biggest attractions. These trails wind through prairie, woodlands and transitional areas surrounding the lake, and are open to bicyclers, horse back riders, hikers, cross country skiers and snowmobilers. A recently completed low-water crossing near the snowmobile bridge on the north end of the lake allows horse-drawn wagons to cross and provides an improved emergency access.

The area abounds with wildlife and beautiful scenic vistas. One of the parks

most notable natural features is its oak trees. Hundreds of mature oaks spread their canopies over the park. They provide aesthetic beauty and welcome relief from the summer heat.

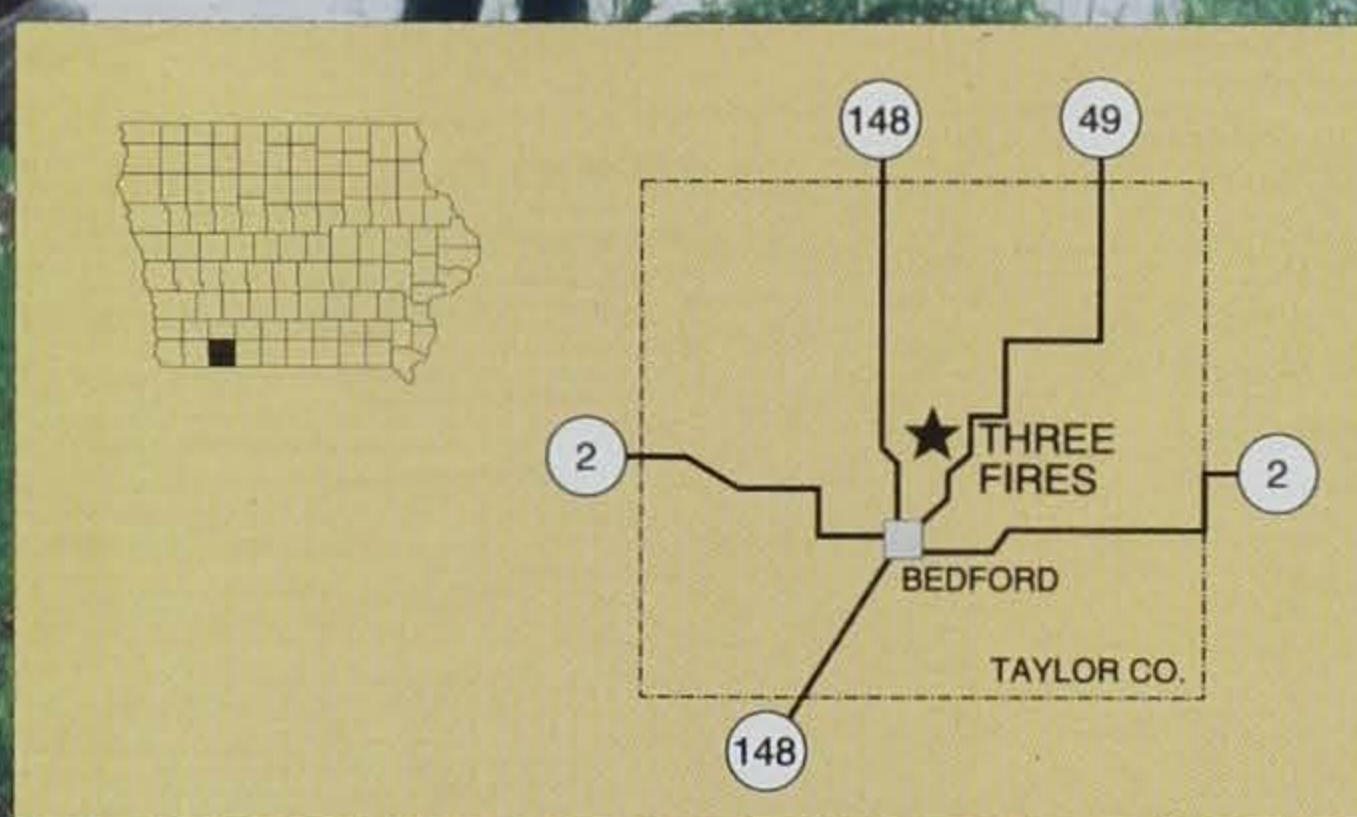
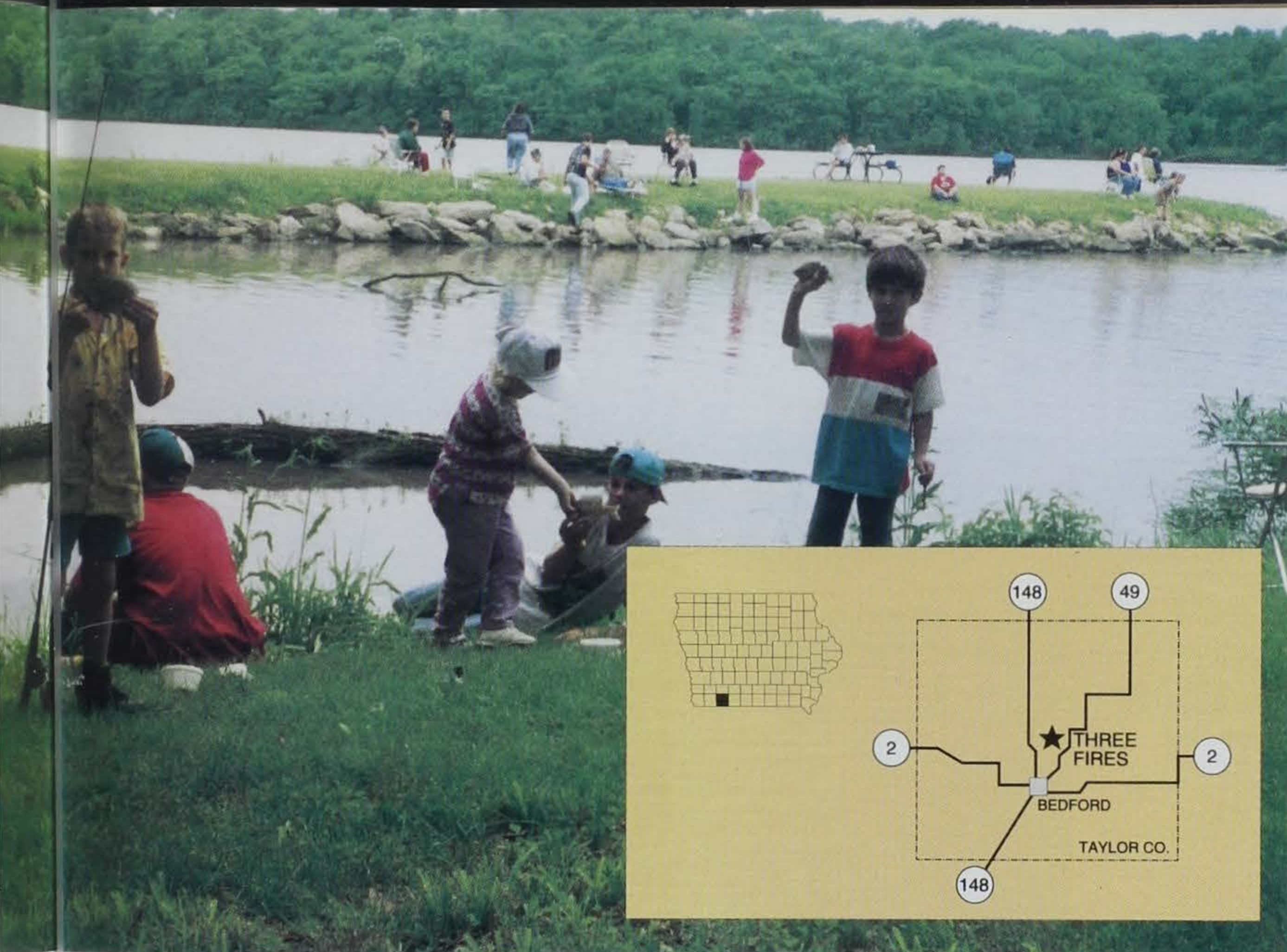
For those who enjoy fishing, the lake contains a good population of largemouth bass, crappie, bluegill, and channel and flathead catfish. Many happy anglers have fished these shores and a kid's fishing clinic is held every year. Swimming is also very popular and the gradual slope of the sandy shoreline at the designated swim area makes for family swimming that is fun for all ages. For more family fun, there is a well-used "flying disk" golf course in the shelter area.

Perhaps the park's biggest draw is camping, however. Three Fires has three separate campgrounds providing both electric and nonelectric camp sites, as well as an equestrian campground and a day-use area.

Cabins are also available as an alternative to camping. The CCC



DNR



constructed six, one-bedroom cabins which seem to grow in popularity each year. Each cabin has a modern rest room (showers are in the campground), and are furnished with a double bed, a table and four chairs, a full-size stove and refrigerator, pots, pans, dishes and silverware. They sleep four people comfortably and hold a maximum of six. The cabins are available from May 1 through Oct. 15. As with all state park cabins, reservations are taken for the current calendar year only, starting the second business day of January each year. Reservations fill quickly so call the park office at (712)523-2700 as soon as you have a date in mind for your stay.

This is an exciting time at Lake of Three Fires. Several park remodeling projects are completed, and many other renovations and enhancements to park facilities are slated for the next few years. In May, the campground electric project was completed while leveling, gravelling and enlarging the pads improved the quality of the campsites.

The upgrade included new picnic tables and 30 new 30-amp and 50-amp electric sites — two at the equestrian campground.

Three Fires is also the first state park to have "buddy campsites" — the park has two of them. Buddy sites are two sites placed adjacent and parallel to each other allowing friends to camp together and use the same living space. The sites may be used by any type of camper but are especially favored for recreational vehicle camping. Buddy sites have been sought after in other states and appear to be just as popular in Iowa.

There's plenty of great fishing at Lake of Three Fires and, the "Kid's Fishing Clinic" (above) is an annual event.

The new "buddy campsites" (below) allow friends to camp together. The buddy sites are favored for recreational vehicle camping.



David Sumner



Ken Formanek

Wait, there's more! The DNR, using Resource Enhancement and Protection (REAP) funds, has just purchased 220 acres north of the park — designated as the Simmons Tract — increasing

lake. This area will be multi-use with a large marsh and silt ponds, trails and native prairie, along with rare oak savannas and other wooded areas. All of the Simmons Tract will be open for public hunting this hunting season.

Lake of Three Fires is not the only state park undergoing extensive "remodeling." With the resurgence of state appropriations for facility renovations and improvements (\$12 million over the next four years), along with REAP funding, Iowa's state parks are receiving more structural attention than they have in 60 years — since the CCC and Works Progress Act. Much of this money will be spent to restore the historical architecture, while the rest will be used to enhance and protect other features.

There is no better time to enjoy Iowa's state parks. And, when you visit Lake of Three Fires, don't forget to ask how it got its name. *That* story is one we like to explain on site.

In addition to the campground electric project, a new campground shower house is scheduled for construction in the near future and, by the spring of 1998 all gravel roads in the park will be paved and the sewer system renovated.

Renovation on the beach house will also begin this year, restoring and converting it into a lodge/open shelter. Modern rest rooms will be added and the steps and sidewalks leading to it repaired. The construction will revive the beach house and bring back its original magnificence. Upon completion, it will be available for family gatherings such as weddings and reunions, and will be in complete compliance with the American with Disabilities Act (ADA).

Two new playgrounds are planned one near the beach and one near the picnic area. These playgrounds are being cost-shared by DNR, the Friends of Lake of Three Fires and the Bedford Saddle Club. The club is also undertaking fundraising to build a modern rest room in the equestrian area sometime within the next several years. This season the DNR constructed 22 new hitching rails, new lighting, a water supply and two new corrals in the equestrian area.

Sound like a lot of improvements?



Ken Formanek

Lake of Three Fires total acres to 1,001. Lake watershed protection is the primary purpose for purchasing this property — 1,650 acres drain through this ground and into the lake. When first completed by the CCC in the early 1930s, the lake covered 125 acres. Due to siltation, primarily from the north, the lake is now only 85 acres. If the Simmons Tract can adequately protect the lake's watershed, long-term plans include dredging and renovation of the

David Sunne was the park ranger at Lake of Three Fires and is currently ranger at Backbone State Park.

Larry Lock is currently the park ranger at Lake of Three Fires.



Larry Lock

Lake of Three Fires offers swimming, fishing, camping, cabins, miles of trails and an equestrian area. The new horse pen (above) is just one of the recent improvements to the equestrian area and renovations are going on throughout the park.

"Duckology" 101

by A. Jay Winter

This fall, Iowa expects to experience the largest flight of ducks since the U.S. Fish and Wildlife Service (USFWS) started keeping records in 1955. This is excellent news for bird watchers and hunters alike. June duck surveys conducted by the USFWS showed 42.6 million ducks on the breeding grounds to the north and estimate a fall flight of more than 100 million ducks.

This increase in duck numbers is due to the excellent water, weather and habitat conditions the ducks encountered during spring migration and nesting. Many of the excellent habitat conditions can be attributed to the efforts of private citizens and conservation groups to improve and reestablish waterfowl habitat. Congratulations to all who have supported these efforts, but don't stop now after encountering some success. There is still much work to be completed.

Learning to identify the variety of ducks coming through Iowa can take some time, but is made much easier by knowing a few tips. Ducks can generally be categorized into two groups -- puddle ducks and diving ducks. They differ both the way they look and the way they behave.

Common puddle ducks are mallards, green-winged teal, blue-winged teal, wood ducks, northern shovelers and gadwall. Puddle ducks are typically found in shallow water areas feeding on water plants, roots,



Lowell Washburn



Gary Winch

Puddle ducks have typically bright colors (far left), legs placed in the middle of their body -- allowing them to walk on dry land with ease (top) and "tip" down in the water to feed leaving their tails sticking straight in the air (left).



Lowell Washburn

seeds, small aquatic life, corn and acorns. They feed by tipping the front of their body down in the water and reaching for their food. This leaves their tails sticking straight in the air.

The puddle ducks' legs are located midway on the body between their tail and their chest. This allows them to both stand up and

walk on dry land very easily. They also sit very high on the water. This is demonstrated by their tail being very visible while they are on the water. When puddle ducks start to fly from the water they actually jump off the water vertically. They can be detected by looking for their typical bright colors as they sit on the water or fly over a wetland area.

Practical Conservationist



Ken Formanek

Diving ducks ride low in the water and are often difficult to see.

Common diving ducks are scaup, canvasbacks, redheads, ring-necked ducks, goldeneyes and buffleheads. These ducks are generally found in deep water areas, such as lakes and large rivers, feeding on roots, leaves, and seeds of aquatic plants, snails and aquatic insects. They feed by actually diving to the bottom in deep water and digging through the bottom material to find their food.

The diving ducks' legs are located near the rear of their bodies. This makes it easier for them to swim and dive, but harder for them to walk or stand on dry ground. They sit low in the water and give the impression their tail is under the surface of the water. They also have difficulty flying directly from the water's surface. Instead of jumping into flight from the surface of the water, they have to paddle with their feet and flap their wings for many yards before actually taking flight. Diving ducks are very hard to see on a large body of water, so you have to watch the surface very carefully for their typical black and white markings to "ride up" on the waves.

Get out and enjoy this fall's large waterfowl migration. Visit one of Iowa's many wetlands and practice your identification skills. Bring a waterfowl identification book and don't forget your camera.

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

The Dipper

The duck hunting world is full of little tricks hunters use to attract ducks. One of the most recent, popular tricks is the use of motorized decoys that wobble, splash or swim. These are very effective if the water is calm, because they impart the lifelike waves ducks produce while going about their daily activities.

This wave motion is simple to imitate with the latest tool commonly called "the dipper." (See the picture below.)

You can construct the dipper with a little knowledge and very little work. You probably will not even need to purchase any new equipment. It is basically a decoy attached to a cord strung through a weight and run to the blind. This allows you, the hunter, to pull on the cord, pulling the decoy down and producing waves. Just follow these simple steps to construct the dipper and possibly improve your duck hunting success:

1. Obtain a decoy. Any type of duck or goose decoy will work. You also need approximately 50 feet of lightweight decoy cord, colored to match the water, a weight with a ring on top to run the cord through and a storage device for the extra line. This storage device can range from a stick to a cord wrap like those used to store electrical cords. Be creative, you may already have the perfect cord storage device at home.

2. Run one end of the decoy cord through the ring on the weight. Tie this loose end to the front of the bottom protrusion on the decoy.

3. The other end of the line should be attached to the cord storage device and wrapped so it is ready when you need it.

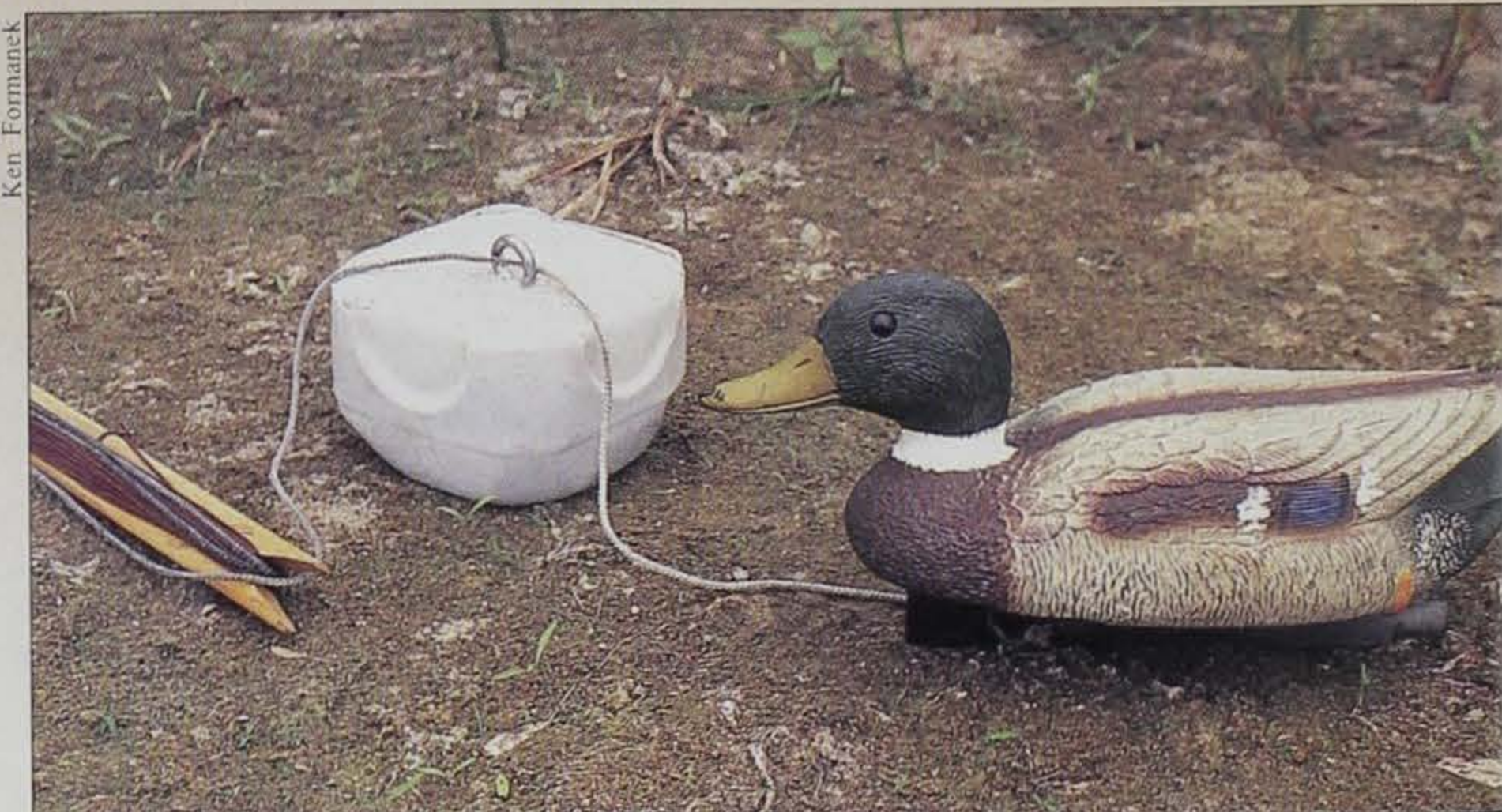
Now you have your new duck hunting toy (you can *call* it a tool) completed and ready to use when the season opens.

To operate this "high tech" piece of equipment place the decoy and weight out in the water with the line coming from the decoy through the ring in the weight and leading to your position. When you want movement in your decoys, just pull the string to produce a lifelike circle of waves around the decoy. The duck will dip and the motion will also make other the decoys move. The wave motion can also help hide your movements to avoid detection.

**Did you shoot
a banded duck or goose?**

**Call 1-800-327-BAND
(2263)**

**to report your band and
help sustain waterfowl
populations and waterfowl
hunting for the future.**



Ken Formanek

Leaf and Seed Collecting by Don Sievers

The following information is adapted from Dr. Carl W. Bollwinkel's presentation on *Techniques for Pressing and Mounting Plants* given at the Natural History Potpourri Workshops held at the Conservation Education Center from 1990 through 1995.

Background:

A collection of leaves and seeds can provide excellent opportunities for teachers to incorporate natural resource topics into many class activities. Any collection requires accurate record keeping, for without correct data the specimens are of little value. Color photographs or slides can greatly compliment your collection by providing a record of the general site characteristics of your collecting locations -- colors of flowers and leaves during changing seasons, fruits, nuts, seeds and tree shapes.

Before adventuring into your urban or rural forests, obtain permission to collect. Most landowners will admire your efforts to teach students about natural resources and will want to share with your class the local history about their trees. City, county, state and federally managed lands such as parks, recreation areas, preserves and wildlife refuges have special regulations governing collecting specimens from these public areas. Always contact the correct authority concerning details about collecting opportunities.

Procedure:

1. When choosing materials to collect, determine a purpose for the collection. Collect only abundant species and specimens that are representative of the entire plant, not the unique-looking ones, or those damaged by disease or insects.

2. **Collecting** — Use a sturdy plastic bag capable of carrying several specimens "sandwiched" between newspapers. The bag should accommodate specimens ranging in size up to 11-1/2 inches wide and 16-1/2 inches long, the size of a herbarium mounting sheet.

To maintain accurate records specimens must be tagged when collected. Attempt to collect more than one leaf and include a portion of the branch. This lets you examine bud and leaf scars, branching patterns and other plant characteristics. Make a diagonal cut of the twig to expose the pith.

3. **Recording Field Data** — Use field data sheets, or record entries into a field notebook or journal. Herbarium labels will identify the types of data that should be collected. Number your records sequentially to match the tagged numbers of the specimens you collect.

4. **Pressing Specimens in the Field** — Remember specimens pressed immediately after collection make more attractive mounts. Lay out the specimen between double sheets of newspaper looking as you wish it to appear when you transfer it to a herbarium sheet. Spread plant parts so they are not on top of each other. Open large flowers so the internal parts may be seen. If flowers cluster you may want to thin them by removing several. With catkins, place polyester batting above and below them to prevent crushing. Turn one leaf over so the back may be observed. Split heavy parts to speed up the drying process. Remove large fruits and seeds and place them in envelopes which can be attached to the herbarium sheet. Number the newspapers to correspond with the collection number of the field data.

Age:

Grades 4-12

Objective:

Students will develop a leaf or seed collection from trees in their local area.

Materials:

large plastic bag to accommodate specimens up to 11-1/2 inches wide and 16-1/2 inches long.

small pruning shears to remove tree branches

newspapers (a good supply)

journal to record field data (species, where collected, etc.)

tree identification guide

tags to identify individual specimens

polyester batting (to prevent crushing of fruits and seeds)

12" X 18" corrugated cardboard ventilators (with the corrugations running the 12-inch distance)

plant press (see text for materials)

herbarium sheets, glue and labels

small envelopes for holding seeds

Resource Materials:

Brockman, Frank C. 1968. *Trees of North America, a Golden Field Guide*. Western Publishing Company, Inc.

Coder, Kim D., and Paul H. Wray, June 1984. *Key for Trees of Iowa*. Cooperative Extension Service, Iowa State University Pm-970.

Iowa Department of Natural Resources, Forestry Division. March 1997. *20 Common Trees of Iowa*. State of Iowa. 24 pages.

Classroom Corner

Extensions:

1. Have students take pictures of the leaves and trees to make a photographic collection.

2. Have students take leaf rubbings of the leaves and trees, or draw sketches of them.



Roger A. Hill

Color photographs or slides can greatly compliment your collection by providing a record of the general site characteristics of your collecting locations and the colors of flowers when they are fresh.

Don Sievers is a training officer at the department's Springbrook Conservation Education Center in Guthrie County.

5. Making a Plant Press—

Materials

for wooden frames—

eight wood strips $3/8"$ x $1"$ x $18"$, and 10 wood cross pieces $3/8"$ x $1"$ x $12"$

two nylon straps, each $1"$ wide and $60"$ long

two buckles for straps

carpenters glue

40 nails $7/8"$ long (Nails are longer than the thickness of the wood strips to allow them to be clinched on the opposite side. This prevents the wood strips from separating while tightening the straps.)

newspapers to absorb moisture

corrugated cardboard ventilators $12"$ x $18"$ (cut from cardboard cartons with the corrugations running the $12"$ distance)

Assembly

Use four 18-inch wood strips as a base. Next, evenly space five 12-inch wood strips on top of the base to form a grid pattern. Fasten the strips with glue and two nails at each intersection point of the grid

6. Pressing Specimens in the Plant Press—Place the newspapers containing the specimens collected in the field between sheets of corrugated cardboard. Ideally, only one or two specimens should be placed between two sheets of cardboard. If you have leaves that tend to curl, lay a damp piece of tissue paper on the flattened leaf to hold it in place. The tissue paper will soon dry.

"Sandwich" layers of newspapers and cardboard between the wooden frames. Fasten the buckles to one end of each strap and encircle the entire press with each strap by going around the narrow part of the wooden frame. Pull the straps tight to apply pressure to the specimens. You want the straps as tight as possible to prevent wrinkling the leaves.

Allow one or two weeks for drying at room temperature. Check the newspapers for excess moisture or mildew after one week and replace them with dry materials if necessary. When arranging specimens take care not to crush the fruits.

7. Mounting Specimens on Herbarium Sheets—Herbarium sheets with a high rag content will last longest. Herbarium sheets, glue, labels and other supplies are available in many scientific supply catalogs. Brush glue onto the back of the specimen. Leaves will last longer if glue is applied to the entire surface of the leaf. Next, arrange the specimen on the sheet with the branch portion to the bottom and leave space in the lower right-hand corner of the sheet for the herbarium label. Pad fruits and seeds with polyester batting to prevent crushing.

Berries should be pricked many times with a fine needle and the fluid drawn off with blotting paper. Pods should have one valve removed to show the number and disposition of seeds. Allow space in the lower right-hand corner to attach a small envelope containing larger seeds and fruits. To prevent the specimen from lifting off of the herbarium sheet, weight it with heavy weights. Large numbers of sheets may be dried at the same time if the sheets are placed on corrugated ventilators and the ventilators separated with small blocks of wood.

8. Storing Specimens—Separate and categorize herbarium sheets according to your intended use. Be careful not to bend or fold the herbarium sheets and store them in a cardboard box or other convenient case away from sunlight.

For lengthy storage, place the sheets in a closed plastic bag. A mothball can be placed into the bag to discourage insect infestation. Keep mothballs away from students.

Wetlands Vital To Wildlife

Wetlands provide critical habitat for hundreds of species, including more than one-third of our endangered species. They help maintain high water quality, contributing to groundwater supplies. In addition, wetlands lessen the effects of floods by absorbing and slowly releasing spring runoff. Nationwide, millions of wetland acres have been lost to urbanization and agricultural conversion, but progress is being made to reverse that trend. More than 74 percent of the lower 48 states' wetlands are on lands controlled by private landowners, and these landowners are critical to the success of wetland restoration.

Historically, the lower 48 states contained an estimated 221 million acres of wetlands, dropping to about 104 million acres in the 1980s. In 22 states, 50 percent or more wetland acres have been lost -- Iowa has lost more than 90 percent of its original wetlands. Of the 7.6 million acres of wetlands that once

existed in Iowa, all but 30,000 acres were drained by 1980.

Things are improving, however. The DNR, U.S. Fish and Wildlife Service (USFWS), and various county conservation boards have acquired more than 25,000 acres of wetlands and associated uplands in the 35-county Prairie Pothole Region, and an additional 6,600 acres of wetlands have been restored on public and private lands. Much of this has been accomplished with the help of partners such as Ducks Unlimited, Pheasants Forever and the Iowa Natural Heritage Foundation. In addition, the Natural Resources Conservation Service (NRCS) has enrolled more than 60,000 acres of river flood plains and potholes into the Wetland Reserve Program and the Emergency Wetland Reserve Program, further helping to bring important wetlands back to the Iowa landscape.

These improvements have made some notable gains. According to the annual breeding duck survey conducted by the USFWS, the

number of breeding ducks rose to 42.6 million this spring, the highest level since the survey began in 1955. The survey estimates the number of ducks in important breeding areas by using samples taken across more than one million square miles of the north-central United States, western and northern Canada, and Alaska.

"We have come a long way," said USFWS acting director John Rogers. "The breeding population has grown by nearly 70 percent since 1990, when drought, agricultural practices and predation reduced it to one of the lowest on record at 25.1 million." Favorable weather conditions and the millions of acres of restored wetlands have boosted populations but Rogers warned against complacency and urged the continuance of wetland conservation efforts in preparation for another dry cycle.

For more information on what you can do to protect and restore the state's wetlands, contact your local wildlife biologist or call Jim Zohrer (515)281-4815, or Jeff Joens (515)281-8664 in the DNR's Des Moines office.



Jeff Jackson of Newton received a new Remington 870 deer shotgun from Al Farris, DNR Fish and Wildlife division administrator. Jeff won the gun in a random drawing made from all those who returned their shotgun deer hunter survey cards promptly in 1995. Also pictured are Jeff's wife Donna and DNR deer biologist Willie Suchy. Paul Farni of Durango won a new compound bow in the drawing and Steve Blood of Cedar Rapids won a new muzzleloader by returning their survey cards early. In 1996 winners were: Shotgun -- Norbert Dettman, Luana; Bow -- Jeffrey Suhr, Waukon; and Muzzleloader -- Darren Nelson, Ottumwa. The bows were donated by the Iowa Bowhunter's Association and the shotguns and muzzleloaders were donated by Whitetails Unlimited.

Websites Worth a Look

Nongovernmental Environmental Organizations of Iowa -- This website contains a list of more than a 100 environmental organizations in the state. There is a short description of the organization's goals as well as contact information for each organization.

(<http://www.drake.edu/stulife/envirn.html>)

Iowa Environmental Internet Sites -- This website provides links to the many, Iowa-specific environmental web pages. It links to a variety of information on pollution, habitats, government, geology, agriculture and wildlife.

(<http://www.drake.edu/stulife/IAInternetResources.html>)

Environmental Volunteer Opportunities in the Greater Des Moines Area -- There are many environmental volunteer opportunities in the Des Moines metro area. Check out this site to see a list of the agencies offering programs, their addresses, phone numbers and a description of their needs.

(<http://www.drake.edu/stulife/EnvironVolunteer.html>)

Conservation Update

Iowa's Wildlife Restoration Efforts -- Success Stories, Set Backs and a New Project

Iowa's Wildlife Restoration Projects have included river otter, peregrine falcon and now the osprey. Here are brief summaries and updates on those projects.

River Otter — The river otter was a common sight along major rivers and streams throughout Iowa prior to the state's settlement, according to DNR wildlife technician Pat Schlarbaum. However, by the early 1900s few otter sightings were reported on Iowa's interior streams — the population was reduced by a combination of factors such as stream pollution, agricultural activities and unregulated trapping. Until recently, only a small, native population remained in and along the Mississippi River in northeastern and east-central Iowa.

In 1985, efforts to restore the otter to other parts of Iowa began when 16 otters were released at the upper end of Red Rock Reservoir in Marion County. These otters, eight males and eight females, were brought from Louisiana in a three-way trade. Iowa wild turkeys, two for each otter, were captured and sent to Kentucky, Louisiana was paid by Kentucky, and Kentucky transported the Louisiana otters to Iowa. The otters were tagged for identification, should they later be

recaptured or found dead, and radio transmitters were implanted to monitor movement, mortality and habitat use. Otter releases are monitored by tracking, mud and snow slides and by observations from agency personnel and the public.

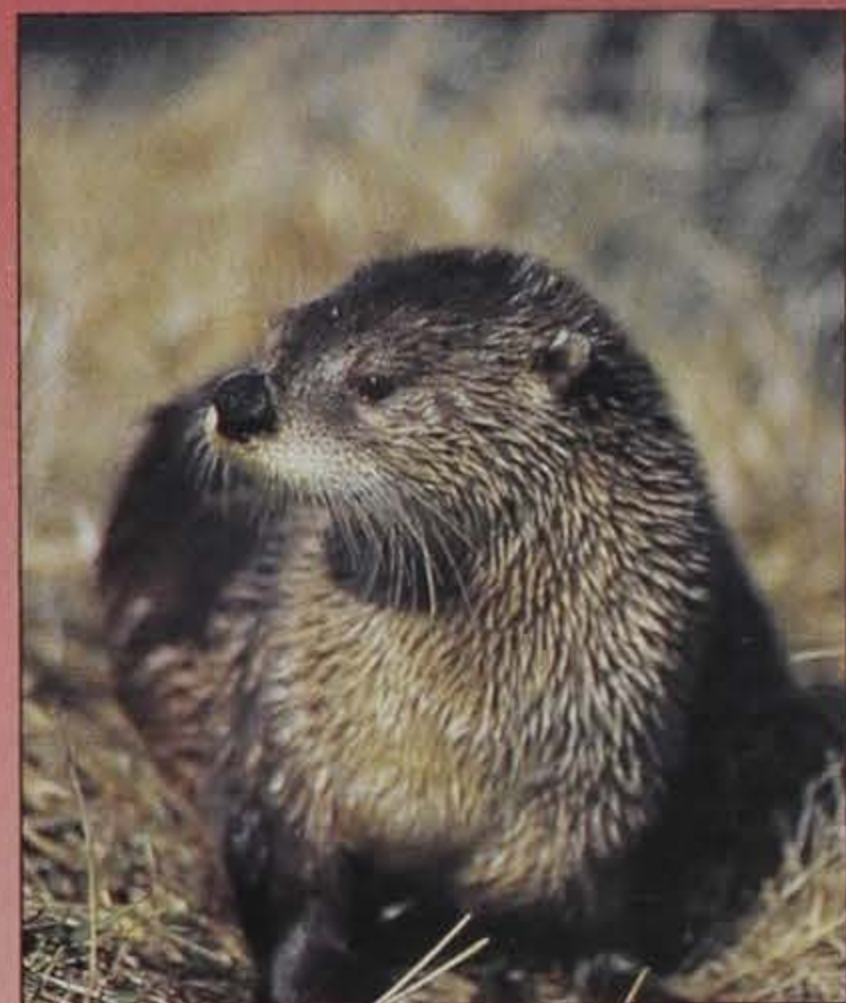
Following the success of the initial release, additional otters, most obtained through identical three-way trades, were released from 1986 through 1989 at nine sites. Eight otters released in Mitchell County in 1989 were obtained through a fund-raising effort by the Mitchell County Conservation Board and local schools.

In 1990, 38 otters were released at the Mitchell County site and a new site on the Winnebago River in Cerro Gordo County. These otters were paid for by local fund-raising efforts and T-shirt sales by the Iowa Trappers Association, Furtakers of Iowa, ISU Fisheries and Wildlife Biology Club and the DNR. In 1997, Indian Creek Nature Center in Linn County provided funding for 17 animals, and Chichaqua Wildlife Area in Polk County provided funding for the release of 12 otters.

To date, a total of 251 Louisiana river otters have been released in Iowa and the results are encouraging. Not only have otters been observed in 69 counties across the state, but more than 126 sightings have documented reproduction at many of the release sites. Areas in southern Iowa have apparently benefited from otter releases in Missouri, as sightings in Fremont, Ringgold and Decatur counties, and along the Grand and Nishnabotna rivers can be attributed to Missouri's reintroduction program.

A detailed analysis of a population evaluation conducted by county conservationists, conservation officers, and DNR biologists has not been completed, but from all indications at this time, the otter is doing well in Iowa.

Peregrine — Beginning with an unsuccessful first effort to establish peregrine nestings in 1992, the attempt to re-establish a peregrine falcon population in Iowa has been challenging and exciting. The outlook quickly improved when the Cedar Rapids and Des Moines sites produced four young in 1993, six in both 1994 and 1995 and five in



Ron Johnson

1996. However, fear remained that a setback could happen at any time.

"The fear became a reality this year in that the Des Moines pair won't be producing any young in 1997," Schlarbaum noted. "Though we continually encouraged the female to lay eggs in prepared nesting sites, she repeatedly moved to concrete where the eggs were exposed to rain. Her behavior is confusing because she gave the appearance of being new to the site although she has occupied the American Republic building since 1992 and has produced 10 young since 1993. Her male mate was originally released at Cedar Rapids in 1990."

"On a brighter note this year," Schlarbaum said, "the pair of peregrines at the Cedar Rapids site produced two young that fledged from the building in June. This pair has produced 11 young since 1992."

Osprey — The DNR's Wildlife Diversity Program, in partnership with the Macbride Raptor Project, U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service (USFWS), undertook a new introduction project to establish nesting osprey in Iowa, according to Schlarbaum. He said 11 states have released osprey, and Iowa's effort will complement a coast-to-coast linkage of the birds.

During the next 10 years, 100 osprey from Wisconsin will be released at a number of sites across the state. Wisconsin will



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receive \$500 per bird to cover agency expenses. Release sites include Clear Lake; Spirit Lake; Rathbun, Coralville, Red Rock and Saylorville reservoirs; and a number of locations along the Mississippi River. To distinguish Iowa-fledged osprey from those released in other areas, each bird will be banded with a colored leg band in addition to the aluminum USFWS band.

In a pilot project, the first group of four young was released at Coralville on Aug. 6, by the Macbride Raptor Project. Jodeane Cancilla from that project coordinated the fundraising and logistics for the release. Several other birds have been or will be received from other states and will also be released by the project.

"Large and narrow-winged, the osprey is commonly called the fish hawk or fish eagle," Schlarbaum said, "but it is neither a true hawk or eagle. From the front, osprey are predominantly white on the head, neck and wing lining. A blackish-brown stripe extends through their yellow eyes and down the side of the neck, with a dark patch on the front and back of the head. Their call is a series of shrill, staccato whistles, gradually rising in pitch."

Males and females are similar in appearance and size, though females tend to be slightly larger. Osprey weigh approximately four pounds, are 17 to 22 inches long, and have a wingspread of about 56 inches. In flight, the osprey's wings are angled back much like those of a gull.



"Most osprey first breed at four years of age," Schlarbaum explained, "and prefer to nest near large rivers, lakes or reservoirs with ample food and nesting sites such as platforms or large, dead trees. Historically, osprey nested in several adjacent states, although there are no documented accounts of osprey nesting in Iowa. However, excellent nesting and foraging habitat was available, so it is very likely osprey nested here prior to European settlement."

Both the male and female incubate, but the female remains in constant attendance for the first 30 days to provide protection from predators and the elements. The female will feed the young even after they leave the nest for their first flight at around 53 days. They gradually expand their range until dispersal in late August.

"Osprey exhibit a strong nesting loyalty to the area where they were fledged and do not move well into nesting in other areas," Schlarbaum said. "Osprey are remarkably tolerant of human activity, but care should be taken to minimize very high human pressure. Nonbreeding osprey come to Iowa each year, but return to other locations to nest. By bringing osprey to this area, Iowans will have the opportunity to observe a unique and powerful fishing raptor."

For more information on wildlife restoration programs in Iowa, contact: Pat Schlarbaum, DNR Wildlife Diversity Program, Wildlife Research Station, 1436 255th St., Boone, IA 50036, (515)432-2823.

Iowa Trout Anglers Enjoy Catching Wild Browns

"According to the most recent survey completed in June, both angler use and success rates on French Creek trout stream in Allamakee County have increased compared to a similar survey in 1996," said Marion Conover, DNR fisheries bureau chief. He said fishing is very good on the stream for anglers in pursuit of both rainbow and brown trout.

"Beginning in 1997, special regulations

on French Creek limited all fishing to artificial lures and restricted brown trout to catch-and-release only," explained Conover. "The special regulations were initiated to protect the streams naturally reproducing population of brown trout. Although the stream is no longer stocked with brown trout, rainbow trout will continue to be stocked and may still be caught and kept by anglers."

"Population surveys had shown several strong year classes of naturally produced browns," Conover said, "and while natural reproduction does occur sporadically in a few other Iowa trout streams, the successful reproduction in French Creek is unequalled anywhere else in the state."

Creel surveys indicated the harvest of these wild browns was reducing the number of browns more than 11 inches long, and DNR fisheries biologists saw not only the need to protect the wild brown trout population, but an opportunity improve it.

"The artificial-only rule was instituted because fish swallow live bait more deeply and quickly, and the use of artificial lures is proven to lower hooking mortality in trout," said Conover. "French Creek anglers have the option of keeping rainbows they catch, while the stream also provides a unique opportunity in Iowa -- the experience of catching quality-sized, wild, brown trout."

"Interestingly, anglers are also catching and releasing large numbers of the stocked rainbow trout, even though rainbows are legal to keep," Conover said. "In June, 77 percent of the rainbow trout caught were released. Stocking rates have been reduced to prevent an excessive build-up of rainbows in the stream. The result is excellent numbers of both stocked rainbow and wild brown trout in this high-quality stream, and anglers are having excellent success catching both species."

"More anglers, spending more time fishing and catching more fish, are what special regulations are all about," Conover added. "The French Creek special regulations are definitely a success story for Iowa anglers."

Conservation Update

The Izaak Walton League of America

The Izaak Walton League is currently celebrating 75 years of conservation awareness and action. The Ikes (Izaak Walton League members) have been pivotal in the passage of major legislation to protect our environment and prevent its abuse. They are also involved in local events to promote awareness and participation in the environment.

Nationally the organization has more than 50,000 members in 350 chapters. In Iowa there are approximately 6,000 members in 54 chapters, more chapters and members than any other state. Some of the past major accomplishments of Iowa chapters include:

- aiding in the formation of the Iowa Conservation Commission (currently known as the Iowa Department of Natural Resources) to put the management of Iowa's fish and wildlife in the hands of trained professionals
- assisting in the creation of the county conservation board system throughout Iowa
- helping ensure the establishment of roadside parks by requiring them to be included in all highway construction plans
- creating *Operation Litterbug* to clean up the state's highways
- planning and carrying out *Plant Iowa* resulting in the planting of 500,000 trees and shrubs by Ikes members
- initiating the "Uncle Ike" environmental education program
- assisting in the passage of the Resource Enhancement And Protection program (REAP) which provides millions of dollars for conservation
- instituting the Izaak Walton League Conservation Scholarship Fund, providing thousands of dollars in scholarships to college students pursuing a degree in conservation
- organizing the *Save Our Streams Program* (S.O.S.), providing education to maintain stream quality
- home of the Iowa Games' shooting events - Ames Chapter
- helping create the Turn In Poachers Program (TIP)

These are all major statewide accomplishments by a group of people who also enjoy success with their local chapter activities including hunter education classes, shooting events, seasonal celebrations, bow hunter education classes and a vast array of other activities.

For more information about the League in Iowa contact the Iowa Division of the Izaak Walton League of America, 3716 Ingersoll, Suite E, Des Moines, IA 50312, (515) 271-5655 or (800) 957-4340, fax (515) 271-5657 or E-mail: iowaikes@aol.com. The officers are: President, Iowa Division — Tom Rodd, Office Manager — Lynn Watson, First Vice President — Bill Hedrick / Second Vice President — Randy Jimenez and Third Vice President — Dennis Stansbury.



Scouts Make Beaver Creek Streambank Stabilization A Success

Andy Buchanan, a 17-year old from Des Moines, working on his Eagle Scout Service project, came up with what he thought was a perfect project — preventing erosion and improving water quality all with a few "sticks." Following the suggestions in an article from the May/June 1995 *Iowa Conservationist* on willow post planting for streambank stabilization, Buchanan outlined a project to accomplish local erosion control. At his urging, Scout Troop 61, under the direction of leader Bill Kamberg, took willow and dogwood posts and placed them in the ground along a highly eroded section of Beaver Creek at Camp Dodge in Johnston. These vegetative posts root and grow rapidly, producing dense vegetation above and below ground, preventing erosion and holding soil in place.

According to Mary Jones, environmental specialist for the Iowa National Guard, the site had been highly eroded and had resisted efforts at establishing native grasses to help control run-off. "The soil at the site was very sandy but had been packed to a hard, almost brick-like consistency by heavy equipment," Jones said. "The unusual weather during the last several summers (either extremely dry or extremely wet conditions) hindered our efforts and the erosion was really progressing."

"We were very interested in Andy's project but after our failed attempts we were not very optimistic. The posts looked so stark and the ground was so hard we didn't have much hope for the project's success," noted Jones. "We were astounded by the greening up of the posts and how all of the posts helped stabilize the bank and allowed the remaining native grasses to take off. We have seen such a difference in just a little while and couldn't be more pleased. This low-cost project made a very direct, beneficial environmental impact on the site. The site is self-maintaining and is a great boon to water quality."

The National Guard provided tools and some direction to the troop, and the scouts identified, gathered and bundled willow and dogwood posts, storing them until they could

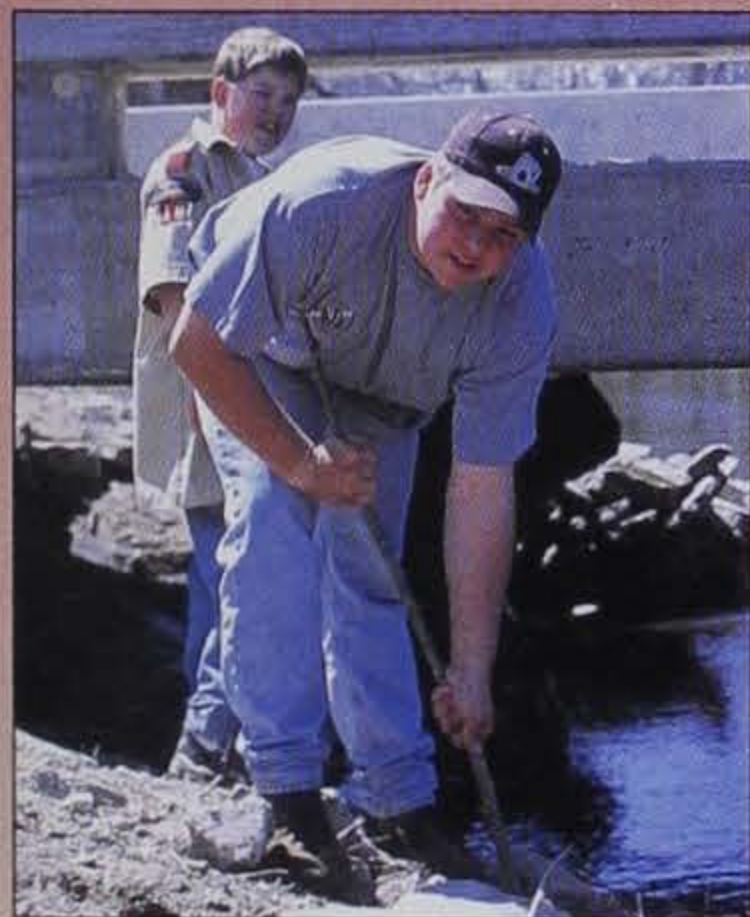
Conservation Update

be "planted." Planting proved more difficult than expected and the scouts put a tremendous amount of effort getting the posts into the ground.

"The soil was very hard and it was easy to see how water would run right off and carry more soil with it," Buchanan said. "We had to dig holes into the soil to put the posts in, but we spaced them as suggested and stood back to let nature and time work. Even though it was a



Mark Burnham



Mark Burnham



Mark Burnham

The willow post streambank stabilization project at Camp Dodge in Johnston came about as the Eagle Scout service project of Andy Buchanan (left) from Des Moines.

The site (top) was highly eroded and the scouts "planted" willow and dogwood posts to help hold the soil in place. The National Guard provided tools and the scouts provided the labor.

The ground was so hard (almost a brick-like consistency) the trimmed willow and dogwood posts were very difficult to insert.

lot of effort, the project was really worth it."

"The ground was so hard I wasn't sure we were going to be able to get the posts in the ground. And, as tired as we were after placing the posts, it was almost hard to believe, looking at those bare, little 'sticks' after we'd placed them, that they would be able to make any difference," Buchanan said.

"But, what they have done has been dramatic. As the willows multiply, fast moving water will not eat so much of the bank away and the soil will remain in the bank, not in the water to be carried away. I'd encourage anyone who is thinking about doing a project like this to view the site itself and see how well it worked," Buchanan added.

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 Advisory Board of the Iowa Department of Natural Resources.

Agendas for these meetings are set approximately 10 days prior to the scheduled date of the meeting.

For additional information, contact the Iowa Department of Natural Resources, Wallace State Office Building, Des Moines, IA 50319-0034.

Natural Resource Commission:

- September 11, Sigourney
- October 9, Webster City
- November 13, Des Moines
- December 11, Des Moines

Environmental Protection Commission:

- September 15, Des Moines
- October 20, Des Moines
- November 17, Des Moines
- December 15, Des Moines

State Preserves Advisory Board:

- September 24, Ames

Warden's Diary

"Observations on a Duck Marsh"

Sometimes after duck season has been underway for a while, I just have to sit back and muse on what I have seen. The last time I felt like doing this I was lying on the bottom of Ken Lonneman's boat trying to tell myself I wasn't going to freeze solid before the sun came up.

It was another day on Big Wall Lake. Of course the sun was not up yet and, of course, it was cold. You know, the kind of cold that seeps into your bones and lets you feel just enough pain to know you are still uncomfortable and definitely NOT numb. While Ken was maneuvering the boat to a spot where we could watch hunters, I got on the bottom of the boat, did my best to pull my jacket up over my face, and tried to shove myself under the bow platform of the johnboat.

Okay, here's musing number one. Why do they call it a johnboat? It doesn't look like a... Well anyway, I tried to shove myself up under the platform because it was the only place I could find where the wind wasn't blowing. I probably resembled a muskrat, but when I'm cold I don't care. Once comfortable or, what passed for comfortable in these settings, I started thinking about some other things.

Musing number two. Earlier in the season, I had been working at Big Marsh north of Parkersburg. The first duck hunter I checked was wading out into the marsh.

"How's the hunting?" I asked.

"Terrible," he answered. "The water level is too high. I have to wade everywhere. Why don't you guys do something about it?"

I walked on and encountered another hunter. "How's the hunting?" I asked.

"Terrible," he answered. "The water level is too low. Why don't you guys do something about it?"

Yanked back to the present by the cold, I squirmed under the bow platform. The push pole poked me in the ribs. The first red glow appeared on the horizon. The duck calling began.

Listening to duck calling can be interesting. Some hunters are very good. Some are... well... some might possibly be lucky enough to make third chair in a duck calling orchestra if everyone else called in sick. As a sage warden once told me, "The best wildlife management tool ever invented is the duck call."

Ken interrupted my thinking. "Cold Hummy? Hee, hee, hee. You don't look frozen solid yet."

I let him laugh as I became lost in thought remembering the guy he caught last year.

Ken had walked off the marsh to find a hunter loading up his pickup. "Any luck?" he asked.

"Yeah!" the hunter answered, immediately (and proudly) brandishing a feathered creature. "I shot one of these!"

"Do you have any more?" Ken asked.

"Yeah, in the pickup."

Ken looked to verify. "You shot two grebes," Ken said.

I'm sure Ken got the same look I've gotten whenever I've caught someone shooting a grebe. You might as well have told the person he

shot a blue-footed booby. The look always says, "What in the world is a grebe?"

Grebes are *similar* to ducks, but not quite. They fly. Or do they? Do these guys shoot their grebes and ducks on the water? "NO!" they will always insist, but I can't recall ever seeing a grebe fly before. Have you? Anyway, grebes are protected. Ken proceeded to seize both grebes and write tickets.

The whole time the poor guy was saying over and over, both as much to himself as to Ken, "A @\$% grebe. A @\$% grebe."

"Yep," Ken answered. "How about that?"

The glow in the east was brighter. I raised the brim of my cap and peered over the side. "Let the games begin," I thought.

"POW!" The first shot. I looked at my watch. Ken and I nodded to each other. It appears the hunters were right on time this time. Many times we get early shooting complaints. We'll go from group to group hearing. "Hey, what about that early shooting? Did you catch those guys?" Then that group of hunters points down the marsh.

You go from group to group hearing the same thing, and getting pointed in the same direction until either you've reached the end of the marsh or circled it completely. Do those early shooting folks really exist? No hunter I've ever encountered has ever admitted to being in a boat with one. There are more confirmed sightings of bigfoot than of early shooters.

The shooting was underway now all around us. The ducks were flying. A flock flew over at high altitude. "KAPOW!" We shook our heads — skybusting. During the last season we'd checked a hunter who had complained about skybusters. "Makes duck hunting about as much fun as a toothache," he'd observed.

The shooting tapers off. Ken begins to start the motor. Another musing began — motors. The two of us and a federal agent saw a couple of hunters motoring around the lake chasing and pass-shooting at ducks. They had a small outboard. We had one just a *little* smaller plus an additional person in the boat.

We gave chase. The problem is we're all going so slow they don't realize it's a chase. You know how when you want to make the boat go faster you start rocking back and forth? The three of us looked like a kid's round-bottom toy wobbling back and forth as we tried to go faster. It looked like the famous L.A. freeway chase of a year or so ago — like everyone was moving but in such slow motion it was hard to be sure. We were, at max, going at least nine miles per hour. We covered half the lake, and finally reached them as they pull up on shore to leave. Some chase — all the thrill and excitement of watching paint dry combined with the breathtaking adrenaline rush of seeing grass grow.

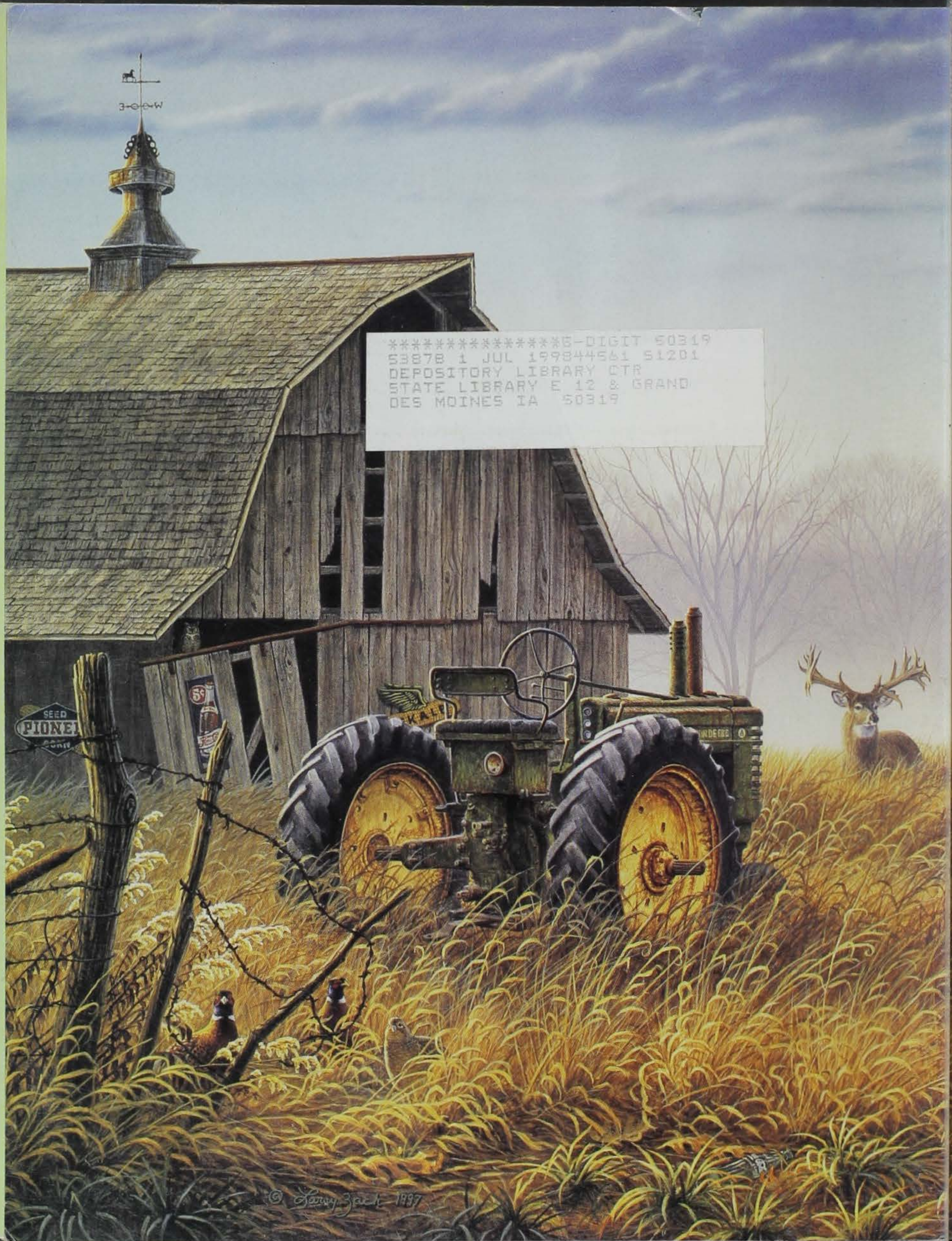
The musing ended as the motor started. The sun was up now. The light streamed through the cattails. The coots scurried around us. A few scattered flocks passed over while an occasional late-resident teal zipped low across the water. The sun's warmth was welcome. It was back to work so I could store up adventures for next time's musings.

by Chuck Humeston



Roger Hill

Beaver log chain



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