

MARCH/APRIL 2000

# IOWA CONSERVATIONIST

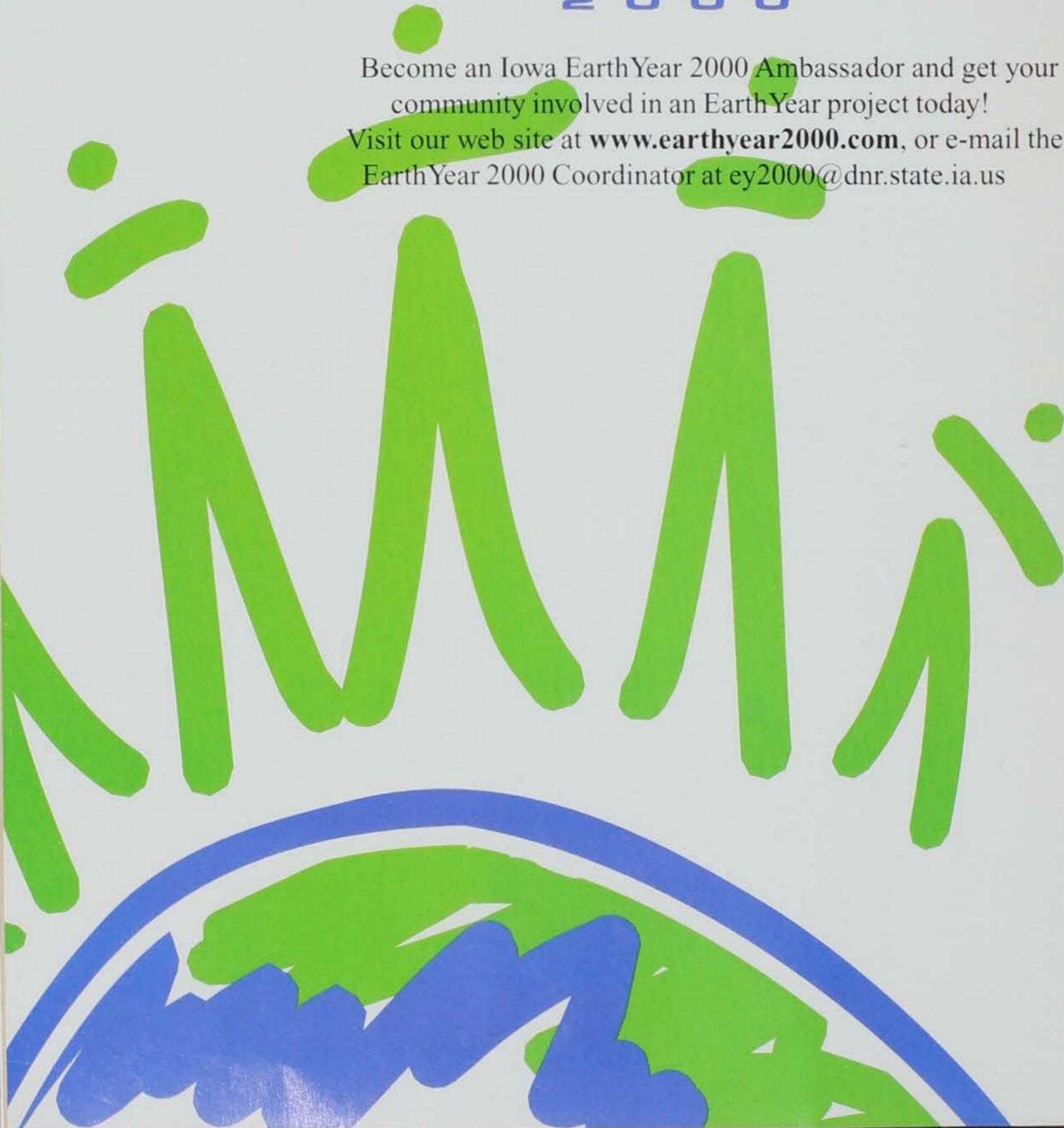
DEPARTMENT OF NATURAL RESOURCES





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COVERS

FRONT: A relaxing scene  
BACK: Turkey vulture

# IOWA CONSERVATIONIST

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## COVERS

FRONT: A relaxing pastime by Lowell Washburn  
BACK: Turkey poult by Roger A. Hill



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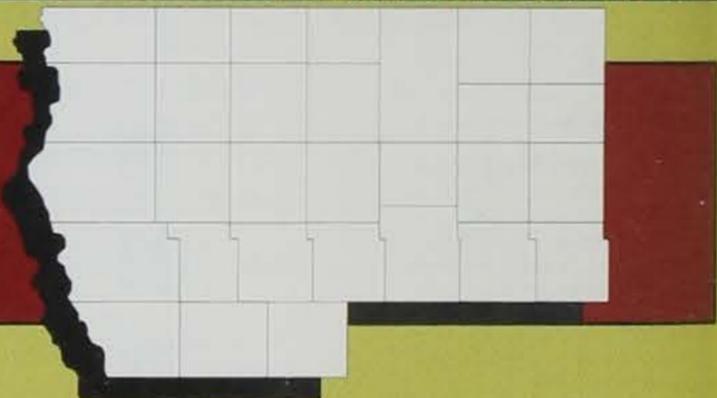




# Forecast 2000

## NORTHWEST

by Thomas W. Gengerke  
Regional Fisheries Supervisor



The accompanying table illustrates, among other things, a great diversity of opportunities for anglers who fish the natural lakes, small impoundments, border rivers and rich prairie streams of northwest and north-central Iowa. There are walleyes, yellow perch, black bullheads, channel catfish, muskellunge, bluegill, crappies, northern pike, smallmouth bass, largemouth bass and "other species," available.

It's the "other species" which deserve mention. Anglers shouldn't look past the unique species — those which have more limited distribution — or simply those which don't get much consideration because anglers have traditionally pursue the more commonly sought-after sportfish species.

**Yellow bass** can be found in Arrowhead Lake (Sac County) and Clear Lake (Cerro Gordo County), with the latter being the preferred lake. They're

abundant, scrappy fighters and taste great. Most of the fish run 8 to 10 inches. Work the rocky shorelines in the spring and deeper water in the fall. Yellows readily take night crawlers or small yellow or white jigs fished near the bottom, over gravel bars or around stakebeds.

**White bass** offer plenty of excitement, especially on light tackle! The white bass population has really taken off at Storm Lake (Buena Vista County) and anglers will have many opportunities for fish up to 17 inches. Most of these fish will be caught on crankbaits or twisters. The best late-summer fishing is with twisters, fished near shore during the evening hours.

Fishing for **flathead catfish** is a traditional summer favorite and live bait (with a little patience) is the secret to landing these large fish. The Big Sioux River (Woodbury County) and the Des

Moines River (Webster County) are top choices. Fish up to 50 pounds are caught in these rivers every year. Chubs, green sunfish and bullheads are traditional baits. It's recommended anglers practice selective harvest so others have the opportunity to experience catching a "trophy fish."

Many anglers fail to realize **freshwater drum** are a feisty — and tasty — fish. West Okoboji (Dickinson County) holds good numbers of freshwater drum. At times it's hard to fish a jig and not catch a "sheep-of-the-deep." Try a piece of crawdad tail on a jig. The initial strike is exciting.

Whether it's traditional favorites you're after or some of these other "unique" fish — enjoy the day and appreciate the diversity of opportunities available to you.

Species	Lake or Stream, County	Comments
WALLEYE	Cornelia, Wright	This lake provided good action for 2- to 4-pound fish during 1999. Cornelia is a relatively small lake with a limited number of fish. With this in mind, anglers are urged to practice selective harvest and/or catch-and-release in order to extend the years of good fishing.
	Silver, Dickinson	Strong year classes (1995 and 1996) have produced good numbers of 15- to 20-inch fish.

Ingham, *Emmet*

High, *Emmet*

Spirit, *Dickinson*

West Okoboji,  
*Dickinson*

Clear Lake, *Cerro Gordo*

Storm Lake, *Buena Vista*

Surveys conducted in 1999 indicate 15- to 20-inch-plus fish are found in this 377-acre natural lake.

There are quite a few 20-inch-plus fish available in this lake. Many of these fish came from Ingham Lake during the last high-water period.

Good fishing will continue to be the norm on Iowa's largest natural lake. Fish range from 15 to 20 inches and larger fish are always available.

Typically a consistent producer of 1-1/3- to 2-1/2-pound fish. Larger fish are frequently caught in the fall.

Fall electrofishing surveys showed good numbers of fish between 12 and 16 inches. Anglers fishing during the spring will notice an increase in the number of fish 14 inches and larger. The best months to fish are April through June.

More than 4,000 walleyes 15 inches or larger were harvested from Storm Lake in 1999 and the fishing should be just as good in the new millennium. May and June are the best months to catch walleye in Storm Lake. Trolling crankbaits or drifting live baits are proven methods.



#### YELLOW PERCH

Trumbull, *Clay*

Little Swan, *Dickinson*  
East Okoboji, *Dickinson*

Little Wall, *Hamilton*

Rice Lake, *Winnebago*  
*Silver, Worth*

Although there are large numbers of small fish present in the population, anglers will harvest plenty of 9- to 11-inch fish.

Plenty of 8- to 11-inch fish, with "jumbos" available.

Perch ranging from 8 to 10 inches will be common, especially during the early spring.

Large density of 7- to 9-inch fish. Excellent open-water and ice fishing during 1999.

Small fish are very abundant. Lots of sorting required.

Expanding population has provided 10- to 13-inch fish during 1999.

#### BLACK BULLHEAD

Black Hawk, *Sac*

Clear Lake, *Cerro Gordo*

Rice Lake, *Winnebago*

High Lake, *Emmet*

Ingham, *Emmet*  
Center Lake, *Dickinson*  
Little Swan, *Dickinson*  
East Okoboji, *Dickinson*  
Five Island, *Palo Alto*

Black Hawk Lake has a tremendous population of 6- to 7-inch bullheads. Early spring is the best time to catch and eat these tasty members of the catfish family. A slip-weight, hook and a night crawler are all that is needed to catch a mess of bullheads. By summer's end, fish should be 8 inches-plus. Population estimates completed during 1999 revealed nearly 3 million bullheads averaging nearly 1/2 pound.

Large population of fish averaging more than one-half pound apiece. Fish will begin biting shortly after ice-out.

Relatively unexploited population of 8-inch fish offers anglers the opportunity to harvest lots of fish.

Plenty of 9-inch fish available.

Large (11 inches) fish are plentiful.

Untapped resource of 8-1/2-inch fish can provide both quantity and quality.

Large and numerous!

Improving fishery for 9-inch and larger fish.

#### CHANNEL CATFISH

Storm Lake, *Buena Vista*

Clear Lake, *Cerro Gordo*

Lots of catfish in the 2- to 5-pound range. Top baits for shore anglers are nightcrawlers, stinkbait, chicken livers and crayfish. Remember to fish into the wind. Boaters caught limits drifting shrimp, cutbait and skinned chubs. Harvest exceeded 5,000 fish in 1999.

Des Moines River  
(East and West Fork)  
*Kossuth and Humboldt*  
Boone River, *Hamilton*  
Iowa River, *Hardin*  
Lake Pahoja, *Lyon*  
Big Sioux River, *Lyon,*  
*Sioux and Plymouth*  
Mill Creek, *O'Brien*

#### **MUSKELLUNGE**

Clear Lake, *Cerro Gordo*

#### **BLUEGILL**

West Okoboji, *Dickinson*

Little Wall, *Hamilton*  
West Okoboji, *Dickinson*

#### **CRAPPIE**

Black Hawk Lake, *Sac*

Snyder Bend, *Woodbury*

Pine lakes, *Hardin*  
Lake Smith, *Kossuth*

Beeds Lake, *Franklin*

Ingham Lake, *Emmet*

Five Island, *Palo Alto*

Silver Lake, *Palo Alto*  
East Okoboji, *Dickinson*  
Center Lake, *Dickinson*

#### **NORTHERN PIKE**

Crystal Lake, *Hancock*

Plenty of consistent action.

Try a float trip to reach the more remote areas on this scenic river. One- to 3-pound fish dominate this fishery. A successful cage rearing program has contributed to this very active fishery. Large numbers, especially of 2- to 3-pound fish.

Good numbers. Large (5-pound-plus) fish.

Most fish observed in last spring's surveys were 32 and 38 inches. The number of smaller fish has increased substantially. Look for improved fishing in the future.

A consistent producer. The fishery has improved; large fish are available.

Seven- to 9-inch gills are common. Try insect larvae or small leeches. An abundant population of 6- to 8-inch fish will provide plenty of action.

A good population of 8-inch crappies are present. The marina on the north end of the lake immediately after ice-out is a sure bet. Small jigs under a bobber, tipped with a waxworm, has proven to be a crappie-catching standby. Last year Snyder Bend Lake produced some great crappie fishing with fish up to 12 inches caught. This year looks promising for even better crappie action. Live minnows fished under a bobber and jigs are the hot baits. Both lakes have abundant populations of 7- to 8-inch crappie. Ten-inch crappie were common during 1999 surveys. Fish near the bridge in the spring when fish are spawning.

Most fish are between 7 and 8 inches, with some 10-inchers available. Fish near brush, stakebeds or rocks on the causeway and jetties.

Anglers fishing the submerged shallow water timber from April through mid-June should experience excellent fishing for 9-inch fish.

Panfish anglers will see an upswing to Five Island crappie fishing as good numbers of quality (8- to 10-inch) fish enter the fishery.

Anglers will get a bonus during 2000 as crappies have reached 10 inches. The 1996 year class (10 inches) will contribute heavily to the spring fishery. Eight- to 10-inch fish will be plentiful.

Good numbers of 3- to 6-pound fish. Fish up to 15 pounds have been taken in this shallow lake. Fish shortly after ice-out.



SMALLM

LARGEM

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Beeds Lake, *Franklin*

Little Swan, *Dickinson*

Tuttle Lake, *Emmet*

High Lake, *Emmet*

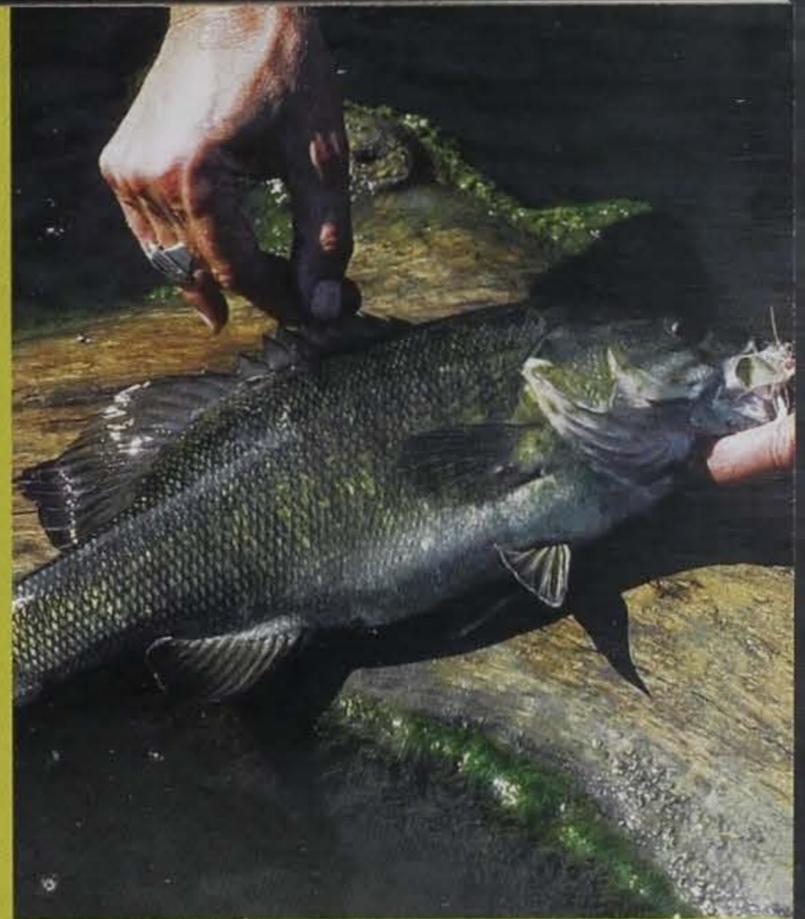
Trumbull, *Clay*

Pike are frequently caught in this lake and in the stream below the dam.

Most fish run about 24 inches, however, fish larger than 5 pounds are not uncommon. Excellent numbers of 4- to 8-pound fish.

Incidental catches by commercial anglers indicate a good number of large fish.

Thirty-inch fish are common. Fish early in the year.



### **SMALLMOUTH BASS**

Spirit Lake, *Dickinson*

West Okoboji, *Dickinson*

Iowa River, *Hardin*

Consistent. Excellent. Quality! Spring and early summer are the most productive times.

Find and fish the rock reefs and rocky points. All sizes — including a state record — present.

Good numbers of fish can be found between Alden and Eldora. Use crawdad-style lures in back eddy areas.

### **LARGEMOUTH BASS**

Lower Pine, *Hardin*

Little Wall, *Hamilton*

Mill Creek, *O'Brien*

West Okoboji, *Dickinson*

Surveys showed excellent numbers of fish larger than 15 inches.

Good density. Variety of sizes. Fish over submerged artificial structures.

Good number of 15-inch fish. Selective harvest and catch-and-release are important in this 23-acre lake.

A variety of sizes available. Has produced a nice fishery over the past years.

## **NORTHEAST**

by **Dave Moeller**  
Regional Fisheries Supervisor



The gentle sounds of crystal-clear water flowing over a rock and gravel riffle in a coldwater stream. The Mississippi River, with its tremendous diversity of quiet backwaters, flowing side channels and bustling main channel. A myriad of interior rivers and streams where, just around the bend, you are in a world all your own. A cattering of artificial lakes and impoundments where you can leisurely enjoy the serenity of quiet water from either the shoreline or a boat.

That diversity of water resources, coupled with quality fish populations, give good reason to go out and enjoy these beautiful areas Iowa has to offer. Having a great fishing experience will definitely add to the enjoyment of

spending time "on the water."

Very early in the spring, just after ice-out, is a prime time for sauger fishing on the Mississippi River. This close cousin of the walleye congregates in late March and early April in the tailwater areas immediately below the navigation dams. The tailwaters of dams 9 near Harpers Ferry, 10 at Guttenberg, 11 at Dubuque, and 12 at Bellevue are prime sauger hotspots. There is no minimum length limit on saugers; however, there is a 15-inch minimum on the similar-looking walleye. The distinguishing characteristic to look for is saugers do not have a white tip on the lower tail fin. The combined daily bag limit for sauger and walleye is 10; however, no more than

six can be walleye.

Like walleyes, saugers are excellent tablefare.

Also very early in the spring is the annual sucker spawning run in several interior rivers. Good fishing usually begins in late March and continues through April. The three species most commonly caught are the white sucker (also commonly known as black sucker), shorthead redhorse and golden redhorse. The Upper Iowa, Yellow, Turkey, Volga and Maquoketa rivers are prime sucker streams. The tackle is simple — a long-shanked hook baited with worms or nightcrawlers and just enough weight to hold it on the bottom — and the action is often furious. Sucker meat is delicious but bony, so



most anglers either pickle them or grind the meat and deep-fry as thin patties.

Another species providing a lot of angling enjoyment for Mississippi River anglers is the freshwater drum, also known as sheepshead. This fish is so plentiful it also supports a substantial commercial fishery. The serious action usually begins in June and continues through the warm summer months. Drum love current, so look for them along the borders of the main channel, side channels and near wing dams. They love nightcrawlers and crayfish tails. Try a live crayfish for a better chance of catching a really big one. Drum fillets are boneless; however, the best eating is from those weighing less than 2 pounds.

One of my personal favorites is the

white bass or striper. This speedster loves to hit lures and will test your equipment. Look for stripers primarily in the Mississippi River; however, Lake Delhi also supports a good striper population. Stripers like a combination of current and rock, which makes the Mississippi's wing dams a favored haunt. Baitfish jumping out of the water or seagulls actively diving and feeding on the water surface are good indicators a school of white bass are actively feeding. Fish the area using about any lure that resembles an injured baitfish.

It is up to you to get out and enjoy these beautiful water resources and their angling opportunities. Here's hoping your fishing outings are numerous, enjoyable and full of action.

### BLUEGILL

Casey Lake, *Tama*

Lake Delhi, *Delaware*

Lake Hendricks, *Howard*

Lake Meyer, *Winneshiek*

Mississippi River

*Pools 9-15*

Sweet Marsh Segment B

Marten's Lake, *Bremer*

Volga Lake, *Fayette*

Abundant 7- to 8-inch bluegill with some up to 9 inches. Concentrate on shallow waters in May and June.

Fish up to 7 inches. Fish the early spring and late fall to avoid heavy boating traffic.

Many 6- to 7-1/2-inch fish. Fish over the habitat installed three years ago during lake renovation.

Fish in the 5- to 6-1/2- inch range very abundant.

Bluegill populations have rebounded the past few years due to an increase in vegetation and mild winters. Expect numerous fish up to 7 inches.

Abundant number of 6- to 7-inchers with some up to 8 inches.

Concentrate along shorelines in May and June.

A consistent producer of 6- to 8-inch bluegills. Drift over flats during the spawn or try mid-lake cedar tree piles in the summer.

### CHANNELCATFISH

Cedar River Bremer, *Chickasaw,*

*Floyd and Black Hawk*

Lake Delhi, *Delaware*

Maquoketa River, *Delaware,*

*Jones and Jackson*

Meyer Lake, *Black Hawk*

Mississippi River,

*Pools 9-15*

Shell Rock River, *Butler*

Saints Lake, *Bremer*

Upper Iowa River, *Allamakee*

Volga Lake, *Fayette*

Wapsipinicon River, *Buchanan*

Abundant 1- to 2-pound fish from Mitchell downstream.

Good populations of all sizes. Fish early morning or late evening during midsummer to avoid high recreational boat traffic.

Good populations from Manchester downstream to the Mississippi River. Fish exceeding 5 pounds sampled in Jones County in 1998.

Good numbers of 3- to 5-pound catfish with an occasional fish exceeding 10 pounds.

Population numbers and average size continue to be very good. Early fishing generally begins in April or May drifting shad baits along main channel border riprap. As water temperatures warm in June through August, prepared baits and chicken liver become very effective near wing dams and running side channels.

Good numbers throughout county. Try the shallow riffle areas in the fall. This 4-year-old lake located just west of Waverly holds an abundant population of 1- to 2-pound fish.

Good abundance of catfish from the mouth upstream to the lower dam. Fingerling stockings have built a strong population, with occasional trophies.

Good population of large catfish below Littleton. Fish the shallow

## CRAPPIE

Casey Lake, *Tama*

George Wyth Lake,  
*Black Hawk*  
Lake Delhi, *Delaware*

Lake Meyer, *Winneshiek*  
Mississippi River,  
*Pools 9-15*

Sweet Marsh Segment B  
(Marten's Lake), *Bremer*  
Volga Lake, *Fayette*

## LARGEMOUTH BASS

Casey Lake, *Tama*

George Wyth Lake,  
*Black Hawk*  
Greenbelt Lake, *Black Hawk*  
Lake Delhi, *Delaware*

Lake Meyer, *Winneshiek*  
Mississippi River,  
*Pools 9-15*

South Prairie Lake,  
*Black Hawk*



backwaters after ice-out, and tree and brush piles on the main river during the summer.

Average-size fish in deep-water structure; concentrate on shallow areas during the May spawning season.

Good numbers of 8- to 9-inchers. Handicap-accessible fishing pier available. Three new fishing jetties were constructed in 1999.

Average-size fish abundant. Concentrate fishing in spring and fall around fallen trees or woody structure.

Extremely high numbers of 7- to 8-inch fish.

Lots of fish in the 8- to 9-inch range with quite a few from 10 to 13 inches. Minnows and small jigs fished under a bobber around brush and woody structure still produce the best catches.

Good numbers of 8- to 10-inchers.

Rock along dam attracts 8- to 10-inch fish during the spawning season.

An 18-inch minimum length limit has produced an excellent population of largemouth bass with numerous fish exceeding 5 pounds. Fish along the dam and near woody structure.

Bass concentrate near the sunken tree piles, pallet bed structures, rocky areas and the new jetties.

Good numbers of quality-size fish.

Good populations of largemouths along the rocky shorelines and woody structure. Fish mornings and evenings to avoid heavy boating traffic.

Very good fishing with some bass approaching 20 inches.

The Mississippi River still supports the largest bass population in the state, due in part to the 14-inch minimum length limit and increased catch-and-release angling. Good numbers, but most fish are under 5 pounds. Fish in the backwater lakes and running sloughs near woody structure. Slow trolling spinner baits along brush piles is a favorite tactic. As water levels drop during the summer months, move out to the mouths of the backwater lakes or find slack water along the main channel border.

Newer 22-acre lake just south of Cedar Falls has abundant 12- to 15-inch largemouths. There is an 18-inch minimum length limit. Anglers are advised to check boats and trailers for Eurasian water milfoil before entering and leaving the lake.

Sweet Marsh Segment B  
(Marten's Lake), *Bremer*

High numbers of quality-size bass.

Anglers are advised to check boats and trailers for Eurasian water milfoil when leaving the lake.

## NORTHERN PIKE

Cedar River,  
*Black Hawk and Bremer*  
Maquoketa River, *Delaware*

Pike can be found in all backwater habitats.

Fingerling stockings have produced a quality population. A 13-pounder was caught in 1999

Mississippi River,  
*Pools 9-15*

Most fish from 5 to 8 pounds, with some up to 15. Fish large, live baitfish in the backwaters during the summer and fall and near the mouths of coldwater tributary streams during the hottest summer periods.

Sweet Marsh Segment B  
Marten's lake, *Bremer*  
Wapsipinicon River, *Buchanan,*  
*Black Hawk and Bremer*

Good northern pike population augmented with fingerling stockings. Best fishing from Independence upstream. Excellent number of all sizes.

**SMALLMOUTH BASS**

Cedar River, *Bremer and Black Hawk*

Cedar River, *Mitchell and Floyd*  
Maquoketa River, *Delaware*

Maquoketa River, *Jones and Jackson*  
Mississippi River, *Pools 9-15*

Shell Rock River, *Butler and Bremer*  
Shell Rock River, *Floyd*  
Turkey River, *Clayton, Fayette, Winneshiek and Howard*

Best habitat and numbers are downstream from Waverly and Waterloo.

Excellent population throughout both counties. The area from Otranto to St. Ansgar is catch-and-release only.

The smallmouth bass population is at a record high level in the catch-and-release area below the Lake Delhi dam. Big fish and lots of them. Great habitat and excellent numbers below Monticello and Canton. Many fish exceeding 15 inches sampled.

Smallmouth bass are responding to increases in river habitats and populations are on the rise. Fish rock structure in the current with either live or artificial baits. Fair number of fish in the 15- to 18-inch range.

Good population from Greene downstream to the confluence with the Cedar River.

Good numbers, but few trophies.

Excellent habitat from Eldorado downstream. Spotty habitat above Eldorado, but some quality fish are present.

Upper Iowa River, *Allamakee, Howard and Winneshiek*

Cast a lure almost anywhere in the river and you are likely to catch a smallmouth. From Decorah downstream to the Upper Dam is catch-and-release only.

Volga River, *Fayette*

Small (but scenic) river with lots of small fish.

Wapsipinicon River, *Buchanan*

The area from Littleton to Quasqueton has the best habitat. Good number of smallmouth up to 18 inches, with a few over 20.

**TROUT**

Bailey's Ford, *Delaware*

Stocked three times each week with catchable rainbow and brook trout.

Bigalk Creek, *Howard*

Brook and rainbow trout stocked weekly. Watershed and habitat improvements have resulted in limited natural reproduction of rainbows.

Ensign Hollow, *Clayton*

Abundant 12- to 17-inch brown trout with some larger fish present. A 6-pound brown was sampled in 1999. Rainbow population growing due to fingerling stockings. Catch-and-release and artificial lure only.

Fountain Springs, *Delaware*

Stocked with catchable rainbow and brook trout twice per week from April through August; once per week in September and October. A half mile of additional creek was purchased on the east side of the county park and will be stocked beginning this year.

French Creek, *Allamakee*

Catch-and-release area for wild brown trout. Artificial lures only. Limited reproduction of brook trout has also been documented in the upper reaches. Naturally reproducing brown trout population. Rainbow and brook trout stocked weekly.

Little Paint Creek, *Allamakee*  
Maquoketa River, *Clayton and Delaware*

Catchable brown and brook trout, and fingerling browns and rainbows stocked.

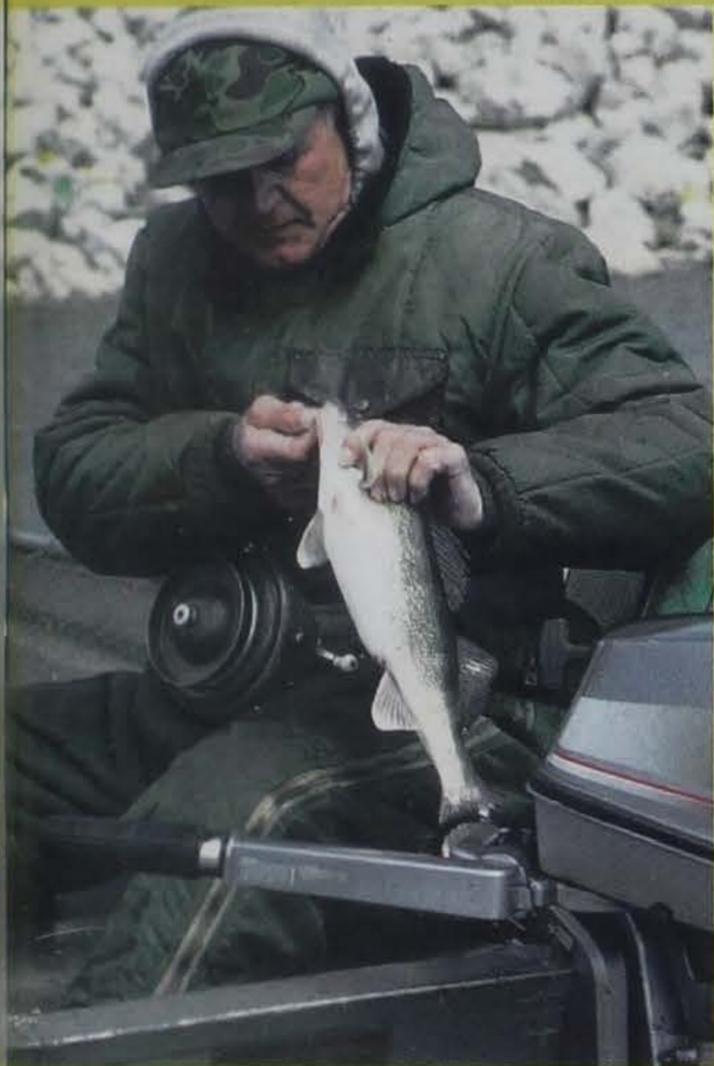
South Pine, *Winneshiek*

Naturally reproducing population of brook trout has increased almost four-fold since 1994. Catch-and-release and artificial lure only.

Spring Branch, *Delaware*

Watershed project has resulted in stabilized banks and abundant trout habitat. Spring Branch is an artificial-lure-only stream and there is a 14-inch minimum length limit on brown, rainbow and brook trout.





Shell Rock River, *Butler*

Wapsipinicon River,  
*Buchanan*

Trout River,  
*Winneshiek*  
Waterloo Creek,  
*Allamakee*

**WALLEYE**

Cedar River, *Bremer,*  
*Black Hawk, Floyd*  
*Chickasaw and*  
*Mitchell*  
Maquoketa River,  
*Delaware*

Mississippi River,  
*Pools 9-15*

Habitat improvements completed. Stocked weekly with brook and brown trout. Very strong population of wild brown trout on new public land south of Dorchester. The segment below the Highway 76 bridge is catch-and-release and artificial lure only. Stocked weekly with catchable rainbow and brook trout upstream of Dorchester.

Fingerling stockings have resulted in an excellent population of all sizes, with some up to 28 inches. A 10-pounder was sampled in 1999.

Good population of 14- to 20-inch walleyes below Manchester and the Lake Delhi Dam.

The 1997 year class will be keeper status (15-inch minimum length limit) this year. Fish the tailwaters during the pre-spawn period in March and April and in late fall. Fish the wing dams in the post-spawn and summer/early fall periods using crawlers and crankbaits.

Fingerling stockings have resulted in an abundant number of 16- to 20-inch walleyes. A 10-1/2-pound fish was sampled below Greene in 1999.

Excellent numbers from Littleton downstream, with abundant 14- to 18-inchers. Walleyes more than 10 pounds caught every year. Fish the deeper pools in late fall and winter using a jig and minnow.

# SOUTHWEST

by Joe Schwartz  
Regional Fisheries Supervisor

I look for 2000 to be another excellent fishing season in southwest Iowa. May is usually the best time to fish the small reservoirs which provide the majority of fishing in this part of the state. Southwest Iowa fishing centers on four species: largemouth bass, bluegill, crappie and channel catfish. There is good fishing for other species in some lakes and reservoirs, but the big four are everywhere.

Most people think of catfish as warm-weather fish, but good lake catfishing can occur right after ice-out. The best baits are winter-killed fish found along the shoreline or sour shad purchased from a bait store. Summer fishing for catfish can be exceptional on inland rivers when water levels are low

and the good holes are obvious.

Crappies usually start biting in mid-April and fishing peaks in May. It is common to see buckets of these tasty panfish being harvested each spring. Minnows and small jigs are the best baits. Bass start biting about the time crappies do, although it is often earlier in farm ponds where water warms more quickly. Crank baits and plastic worms are favorite bass catchers.

Bluegill fishing picks up significantly in mid-May as the crappie bite declines. Fastest fishing for bluegill occurs when they are spawning, often coinciding with Memorial Day in southern Iowa. Worms are the best bait for bluegill, but small jigs or other live bait also work well.

Summer heat moves fish to deeper water where they often are more difficult to catch. Drift fishing for bluegills and crappie, fishing deeper structure for bass and bottom fishing for catfish are all effective in midsummer. The cooler temperatures of autumn make for more pleasant fishing and better catches.

There are two new lakes in southwest Iowa that will hit their peak this year. Three Mile and Fogle lakes were first stocked in 1995 and probably the best fishing of their life-span will be this year. Both have excellent populations of panfish, bass and catfish.

Three Mile is an 880-acre lake located near Afton in Union County.

Development of the area has been under way for several years and boasts a new beach, picnic shelters, campgrounds, rental cabins, boat ramps, fishing jetties and accessible pier. Numerous underwater fish reefs and extensive flooded timber provide plenty of places to fish.

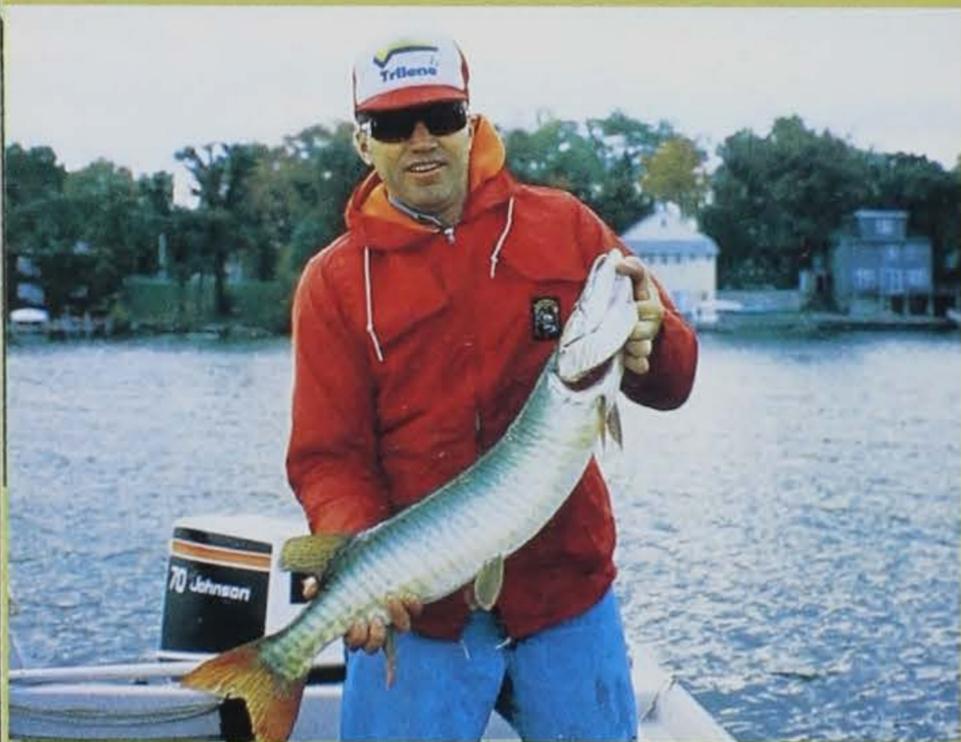
Those who had a chance to fish Twelve Mile two years ago when the crappie fishing was phenomenal can expect similar success at Three Mile this year. The lake is absolutely loaded with thick 9-inch fish. I expect thousands of crappies will be taken from mid-April through late May this spring. Early fall was excellent last year and should be again this year. Summer fishing will be slow, but some fish will be caught by drift-fishing or fishing deep structure.

Bluegills are also plentiful in the lake. Most are 7 inches and will be willing biters all summer. Bass fishing has been super the past two years and should be good again this year. Most bass will be 11 to 14 inches, but there are fish up to 19 inches. There's a few

smallmouth bass along the riprap on the dam and other rocky areas. Catfish have done exceptionally well and a good number of 1- to 3-pound fish are present. Walleye and redear sunfish have been stocked in the lake, but are more difficult to catch. If I had to pick one lake to fish this year, it would be Three Mile.

Fogle Lake was built and stocked the same year as Three Mile. Located in Ringgold County near Diagonal, this 40-acre lake is situated in a small recreation area. Facilities are limited to fishing jetties, boat ramp, picnic tables and shelter. Fishing pressure has been light at this lake so far. If you want to catch a stringer of nice bluegills or a limit of 1- to 3-pound catfish and do it away from the crowd, Fogle is the place to go.

The following table gives the best places to fish in southwest Iowa in 2000. If you are interested in a good trip, consider one of those listed. You will be glad you did.



### BLUEGILL

Ahquabi, Warren  
Anita, Cass  
Badger Creek, Madison  
Beaver, Dallas  
Big Creek, Polk  
Fogle, Ringgold  
Hickory Grove, Story  
Hooper, Warren  
Little River, Decatur  
Meadow, Adair  
Nine Eagles, Decatur  
Nodaway, Adair  
Three Mile, Union

Twelve Mile, Union  
Viking, Montgomery

### CRAPPIE

Ahquabi, Warren  
Anita, Cass  
Badger Creek, Madison  
Big Creek, Polk  
DeSoto Bend, Harrison  
Don Williams, Boone  
Easter, Polk  
Green Valley, Union  
Greenfield, Adair  
Icaria, Adams  
Littlefield, Audubon  
Little River, Decatur

Great redear population, but tough to catch. Good for 6- to 8-inch bluegill. Consistently large fish. Try fishing around structure.  
Good for large numbers of 7- to 8-inch fish.  
Good for 6-1/2- to 8-1/2-inch fish.  
Moderate number of 5- to 7-inch fish. Fish points, sandy areas and tree reefs. Seven- to 8-1/2-inch bluegills common; redear up to 10 inches.  
Fish average 7 to 9 inches. Try around pallets and shoreline structure.  
Redear population is good. Bluegills range from 6-1/2 to 8 inches.  
Good bluegill fishing; 7- to 8-inch fish are common.  
Good population of 6- to 8-inch fish. Quality redear fishery.  
Good redear population. Little fishing pressure. Try marked fishing reefs.  
Good for 7-inch fish.  
Tremendous population of 7- to 8-inch fish, with some up to 9. Redear up to 10 inches.  
Bluegills between 7 and 8 inches common. Fish around flooded trees.  
Best in spring and early summer; 6- to 8-inch fish common.

Nice 9-inch-plus fish.  
Very healthy 8- to 10-inch fish.  
Nice 8- to 9-inch fish.  
Most fish will be 7 to 10 inches. Fish the new structure or the jetties.  
Good fishing for 8- to 10-inch crappies in the early spring. Fish structure.  
Good population of 8- to 10-inch fish. Try fishing along dropoffs.  
Good population of 7- to 9-inch fish, with a few up to 11.  
Crappie up to 14 inches are possible, but 7-1/2- to 9-inch fish are common.  
Good population of 8- to 10-inch fish.  
Lots of 8-inch fish. Try fishing near riprapped areas.  
Eight- to 10-inch fish. Spring fishing should be good. Fish the dam face.  
Lots of 8- to 9-inch fish, with some up to 12. Fish near flooded trees.

Manawa, *Pottawattamie*  
 Mariposa, *Jasper*  
 Orient, *Adair*

Prairie Rose, *Shelby*

Red Rock, *Marion*  
 Rock Creek, *Jasper*  
 Saylorville, *Polk*  
 Slip Bluff, *Decatur*  
 Three Mile, *Union*

Twelve Mile, *Union*  
 Viking, *Montgomery*  
 West Lake Osceola, *Clarke*

**LARGEMOUTH**

Ahquabi, *Warren*  
 Anita, *Cass*  
 Badger Creek, *Dallas*  
 Beaver, *Dallas*  
 Big Creek, *Polk*

Don Williams, *Boone*

Easter, *Polk*  
 Farms ponds  
 Green Valley, *Union*  
 Hooper, *Warren*  
 Little River, *Decatur*  
 Mariposa, *Jasper*  
 Meadow, *Adair*  
 Nine Eagles, *Decatur*  
 Prairie Rose, *Shelby*  
 Red Rock, *Marion*  
 Saylorville, *Polk*

Springbrook, *Guthrie*  
 Lake of Three Fires, *Taylor*

Good early fishing in lagoons.  
 Lots of 7- to 8-inch fish.  
 Although the water is always turbid, crappie fishing is still good. Most fish are 8 to 9 inches.  
 Most fish are 8 to 10 inches. Fishing is good all summer, but is best in the spring. Fish the structure.  
 Lots of big fish. Fish when water is clear. Try feeder stream embayments.  
 Good population of 7- to 8-1/2-inch crappie. Fish the bays and near points.  
 Most fish are 8 to 11 inches. Fish near the marina and mile-long bridge areas.  
 Good population of 8- to 9-inch fish. Very little fishing pressure.  
 Tremendous number of 8-1/2- to 9-1/2-inch fish, with a fair number of 11- to 13-inchers.  
 Good number of 7- to 9-inch fish.  
 Good number of 7- to 9-inch fish.  
 Fall surveys showed impressive number of 9- to 10-1/2-inch fish.

Excellent catch-and-release fishing. There is an 18-inch length limit.  
 Perennial favorite, with bass up to 6 pounds. Fish the structure.  
 Lots of 12- to 15-inch bass with an occasional lunker.  
 Good catch-and-release fishery. Most fish are under 15 inches.  
 Fish around new structure, the face of the dam, new silt dikes and jetties. In the early spring, fish near woody structure along the shoreline and in coves.  
 Most fish are 13 to 17 inches, with an occasional lunker. Try the points and woody structure in coves and in the northern portion of the lake.  
 Most fish are 10 to 14 inches, with some up to 5 pounds.  
 Many private ponds in southwest Iowa provide good bass fishing.  
 With a 22-inch length limit, any keeper will be a real trophy.  
 Excellent catch-and-release fishery, with 18-inch minimum length limit.  
 Good number of 2- to 3-1/2-pounders. Fish submerged brush and trees.  
 Good catch-and-release fishery.  
 Good bass lake for fish up to 5 pounds.  
 Good number of smaller fish, with an occasional large fish.  
 Fish the stake beds and brush piles.  
 Best from mid-May to mid-July.  
 Lots of 10- to 13-inch fish, few legal fish. Fish the face of the dam, Big Creek outlet or any rocky area.  
 Good catch-and-release fishery.  
 Can be good for bass up to 5 pounds if the water is clear. The lake tends to be muddy.

Three Mile, *Union*  
 Twelve Mile, *Union*  
 Viking, *Montgomery*  
 West Lake Osceola, *Clarke*

Tremendous fishing for 11- to 14-inch fish, with a good number of 15- to 19-inchers.  
 Excellent bass fishery for 12- to 18-inch fish.  
 Good population of 12- to 15-inch bass. Fish the structure.  
 Good summer time bass fishing.

**WALLEYE/SAUGEYE**

Big Creek, *Polk*

Des Moines River,  
*Polk and Boone*

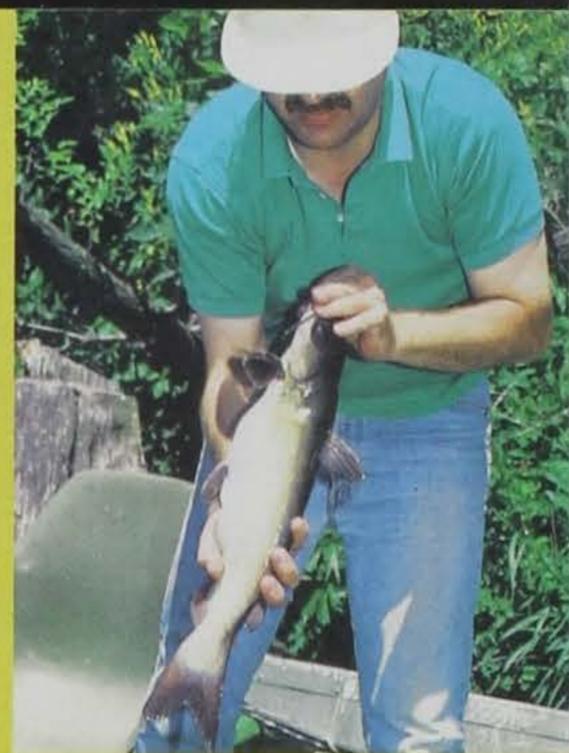
DeSoto, *Harrison*

Fishing outlook is good for 2000, with a good population of 16- to 22-inch walleyes.  
 Fish below Corps dams, low-head dams and gravel riffles.  
 The Scott Street dam is good in the spring.  
 Best in the spring. Fair number of 14- to 17-inch fish.



Little River, *Decatur*  
 Manawa, *Pottawattamie*  
 Saylorville, *Polk*  
 Three Mile, *Union*  
 Twelve Mile, *Union*

Fish average 14 to 18 inches, up to 9 pounds.  
 Should be good fishing in 2000. Most fish are 14 to 16 inches. Fish sandy points, the old river channel and old road beds. Fairly new lake. Try the flooded road beds and humps for 15- to 24-inch fish.  
 Fish average 13 to 24 inches, with potential for up to 9 pounds. Best walleye lake for numbers in southwest Iowa.



**BULLHEADS**

Beaver Lake, *Dallas*  
 Little River, *Decatur*  
 Manawa, *Pottawattamie*  
 Rock Creek, *Jasper*  
 Three Mile, *Union*

Fish average 10 inches-plus, however, numbers are down. Nice size fish averaging 10 to 13 inches. Nice size fish averaging 1 pound. Fish are definitely keepers; numbers are down slightly from the past. Lots of 10- to 13-inch fish.

**CHANNELCATFISH**

Ahquabi, *Warren*  
 Big Creek, *Polk*  
 Cedar, *Madison*  
 Easter, *Polk*  
 Fogle, *Ringgold*  
 Green Valley, *Union*  
 Icaria, *Adams*  
 Little River, *Decatur*  
 Littlefield, *Audubon*  
 Manawa, *Pottawattamie*  
 Meadow, *Adair*  
 Morman Trail, *Decatur*  
 Nine Eagles, *Decatur*  
 Nodaway, *Adair*  
 Orient, *Adair*  
 Red Rock, *Marion*  
 Rock Creek, *Jasper*  
 Saylorville, *Polk*  
 Summit Lake, *Union*  
 Southwest Iowa Rivers  
 Three Mile, *Union*  
 Twelve Mile, *Union*  
 Viking, *Montgomery*  
 West Lake Osceola, *Clarke*

Nice size fish, averaging 19 to 23 inches. Really nice fish, lots of them and relatively little fishing pressure. Good number of 4- to 6-pound fish. May have to sort through smaller fish. Excellent population of 12- to 20-inch fish. Great number of 1- to 3-pounders. Good number of 14- to 18-inch fish, with some up to 5 pounds. All sizes up to 5 pounds. May have to sort through smaller fish. Many 3- to 10-pounders. Fish small bays in midsummer. Fish the north shore during a strong south wind. Good numbers. Most fish are 2 to 6 pounds, with some up to 12. Fish average 2 to 6 pounds. Good population of catfish. Abundant population of 1- to 4-pound fish; little fishing pressure. Best fishing early in the year; fair during summer months. Stocked every year. Fish the camping area during a strong south wind. Fish average 12 to 20 inches. Best fishing from mile-long bridge to dam. Shallow, fertile lake with good number of large catfish. Excellent fishing. Lots of 2- to 4-pound fish. One- to 3-pounders common. Catfish are abundant in all Iowa rivers. Good number of 1- to 3-pound fish. Two- to 6-pounders are common, with a few up to 10 pounds. All sizes of catfish up to 6 pounds, with a few large fish. Good number of 2- to 4-pound fish, with a few up to 12 pounds.

**YELLOWBASS**

Carter Lake, *Pottawattamie*  
 Icaria, *Adams*  
 Manawa, *Pottawattamie*  
 Twelve Mile, *Union*  
 Viking, *Montgomery*

Lots of small fish. Lots of 6- to 9-inch fish. Hard hitters; good eating. Lots of small fish, with an occasional pounder. Large number of 7- to 9-inch fish. Moderate number of 8- to 9-inch fish.

**MUSKELLUNGE**

Three Mile, *Union*

Newest southwest Iowa musky lake. Fish up to 36 inches and growing fast.

**WHITE BASS/WIPERS**

Red Rock, *Marion*  
 Saylorville, *Polk*

Fish midsummer, from the dam toward the beach or marina. Fishing is good in the reservoir and below the dam. Try below the Big Creek Lake spillway. White bass average 8 to 13 inches.

# SOUTHEAST

by Stephen J. Waters  
Regional Fisheries Supervisor



A review of last years fisheries surveys indicate we will start the new century with an excellent fish population in southeast Iowa. This is no Y2K glitch, the fish are there and are waiting to put smiles on the faces of Iowa anglers. Those who have included in their New Year resolutions to go fishing will be handsomely rewarded.

If you enjoy channel cat fishing or are just looking to get out and try your new Christmas fishing equipment, give ice-out channel cat fishing a try. Early season catfishing was made for the family, because the fishing is easy and the action is fast. Also, this type of angling is typically done from shore.

When water temperatures reach about 50 to 55 degrees, catfish begin a feeding spree — feeding on fish that have died during the winter. Fish the bait (cutbaits are best) in the shallower (2- to 6-foot), warmer portion of a lake or river with the wind blowing across or toward you. Use an egg-type sinker to lighten the bait, and set the hook after a short run. The best areas for early spring catfish angling are lakes Rathbun, Coralville, Darling, Kent, Macbride, the Mississippi River and all inland rivers.

The Mississippi's "Mr. Whiskers" can be caught in nearly all parts of the river using a variety of baits, but best bets are above and below wingdams and riprapped heads of islands where there is a current. Stumpfields and riprapped shorelines are hotspots during the prespawn and spawning periods. The size limit set on commercial fishing in 1985 has resulted in more spawning-sized adults. This allowed nature to replenish catfish numbers, benefiting both sport anglers and commercial fishers.

The Great River's walleye and sauger angling is what legends are made of. The lock-and-dam habitat produces great catches in late winter, early spring and late fall. Jigging Sonars or jig-and-

minnow combinations are highly effective. Wingdam fishing during summer and early fall will also produce stimulating action. Try backtrolling crankbaits or three-way nightcrawler rigs on the upstream side of the wingdams. An upside to the summer angling period is the peace and quiet of having a portion of the river to yourself, whereas, the lock-and-dam fishing can be a bit competitive for some. Keep in mind, there is a 15-inch minimum length limit for walleye on the Mississippi River.

The Mississippi River also produces excellent catches of white bass, drum, carp, crappie, bluegill and largemouth bass. White bass can be found in the same habitat as walleye and sauger, and serve as a great bonus fish. Look for crappie, bluegill and largemouth bass in the river's backwaters near stumpfields, brush and vegetation. Remember, there is a 14-inch length limit on largemouth bass.

Interest in flathead catfish seems to have reached a new high in southeast Iowa due primarily to great fishing for these "big ones." Bank pole or rod and reel, with green sunfish, bullheads or bluegill for bait, are the preferred techniques. Fish deep holes in summer and fall, and around bridge pilings in interior rivers and in side channels, eddy areas and below locks and dams on the Mississippi River. At Rathbun Lake concentrate on riprap in the Bridgeview area in late spring to early summer for excellent action.

For bluegill and crappie, traditional baits and techniques are highly successful, but don't put your ice-fishing equipment away when the warm season arrives. Keep your ice flies,

waxworms and small bobbers handy because these baits often out-produce the traditional bluegill baits. Give flyfishing for spring crappie and bluegill a try. Drift fish for bluegills and crappie during the summer when they have moved away from shore and are suspended about 8- to 12-feet below the surface.

Effective bass size regulations are a benefit to all anglers. With an excellent bass population, these important predators can whittle away at the panfish, improving their size for positive angler benefits. Additional benefits are improved bass catch rates and larger sizes of bass to catch. Give size limits a chance, release a bass and do as the bass does — eat the panfish.

Southern Iowa is blessed with several excellent bass/bluegill lakes, but perhaps the best systems are the small farm ponds. Ponds are excellent spots to start the new fishing season. Because of their size, they are the first systems to warm up, meaning a lot of early action. Also, they are the best



fishing holes to catch lunker bass and bluegill. But, many of these mini-lakes are located on private property and require owners' permission to fish.

You can read all the information written about fishing and spend Saturday and Sunday in front of the television watching fishing programs, but until you gather up the equipment and head to a fishing hole, you haven't enjoyed the full experience. I can't think of a better way to spend a day than taking the family on a fishing trip.



### BLUEGILL

Mississippi River

*Pool 16*

*Pool 17*

*Pool 18*

*Pool 19*

Farm Ponds

Pleasant Creek, *Linn*

Geode, *Henry*

Hannen, *Benton*

Hawthorn, *Mahaska*

Lake Iowa, *Iowa*

Kent, *Johnson*

Keomah, *Mahaska*

Miami, *Monroe*

Wapello, *Davis*

White Oak, *Mahaska*

Union Grove, *Tama*

Sugema, *Van Buren*

Andalusia backwaters, Credit Island Slough, Wyoming Island Slough, Big Timber, Cleveland Slough, Hidden Acres, Bogus Island, Blanchard Slough, Eagle Fill.

Huron Island, Burnt Pocket, Johnson Slough, Dasher Chute.

Burlington Island, Turkey Chute, Blackhawk Bottoms, Lead Island Chute, Niota weedbeds, Rabbit Island riprap, Devils Creek weedbed and Gray's Bay.

Exceptional angling. Best chance for a trophy.

Good quality, many 7- to 9-inch fish available.

Average harvest size 7 to 8 inches-plus. Trophy fish available.

Good numbers, 6 to 8 inches, with 10-inch fish reported.

Good numbers of 6- to 8-inch fish.

Good numbers of 6- to 8-inch fish.

All sizes, easy shoreline access.

Good numbers of 6- to 8-inch fish.

Good numbers of 7- to 8-inch fish.

Excellent numbers of 8 inch and larger fish, look to artificial habitat.

Good numbers of 7- to 8-inch fish.

Good quality with fish over 9 inches.

Tremendous numbers of 7- to 8-inch fish; a bluegill angler's dream.

### CRAPPIE

Rathbun, *Appanoose*

Mississippi River

Coralville, *Johnson*

Odessa, *Louisa*

Lake Iowa, *Iowa*

Darling, *Washington*

Hawthorn, *Mahaska*

Miami, *Monroe*

Diamond, *Poweshiek*

Macbride, *Johnson*

Sugema, *Van Buren*

Pleasant Creek, *Linn*

Keomah, *Mahaska*

Superb crappie lake. Average size 9 to 12 inches; trophy fish available.

Crappie fishing will mirror bluegill fishing on the Mississippi River.

Excellent numbers of 8- to 12-inch fish, 13- to 15-inchers available.

Average harvest size 8 to 10 inches.

Good numbers from 8 to 10 inches.

Two sizes of fish are available; 6 to 8 and 10 to 14 inches.

Excellent numbers of 8- to 11-inch fish available.

Excellent numbers of 8- to 11-inch fish.

Good numbers of 9- to 11-inch fish.

Excellent for 8- to 10-inch fish, 11- to 13-inch fish common.

Good angling; 9- to 10-inch fish most common.

Good in spring for 9- to 11-inch fish.

Outstanding crappie fishery for 9- to 12-inch fish.

### LARGEMOUTH BASS

Mississippi River

Farm ponds

Miami, *Monroe*

Pleasant Creek, *Linn*

Lake Iowa, *Iowa*

Geode, *Henry*

Macbride, *Johnson*

Try the same areas as bluegills and crappies.

Best chance for a trophy. Great fishing.

Excellent numbers, various sizes.

Excellent catch-and-release (18-inch size limit) with fish up to 8 pounds.

Good numbers, various sizes.

Good catch-and-release fishery.

Good numbers of 2- to 4-pounders; fish in all size ranges.

Diamond, *Poweshiek*  
Wapello, *Davis*  
Hawthorn, *Mahaska*  
Keomah, *Mahaska*

#### CHANNELCATFISH

Mississippi  
Inland Rivers  
Corydon, *Wayne*

Rathbun, *Appanoose*  
Coralville, *Johnson*  
Miami, *Monroe*  
Macbride, *Johnson*  
Darling, *Washington*  
Geode, *Henry*  
Lake Iowa, *Iowa*  
Keomah, *Mahaska*  
Hawthorn, *Mahaska*

#### FLATHEADCATFISH

Mississippi  
Skunk, lower Iowa, Des Moines  
Wapsipinicon and Cedar rivers  
Coralville, *Johnson*  
Rathbun, *Appanoose*

#### BULLHEAD

Wapello, *Davis*  
Keomah, *Mahaska*  
Macbride, *Johnson*

#### WALLEYE

Mississippi  
Rathbun, *Appanoose*  
Macbride, *Johnson*  
Des Moines River, *Wapello*

Coralville, *Johnson*

#### SAUGEYE

Iowa River, *Johnson*  
Coralville, *Johnson*  
Union Grove, *Tama*

#### WHITE BASS

Mississippi  
Rathbun, *Appanoose*  
Coralville, *Johnson*  
Macbride, *Johnson*  
Pleasant Creek, *Linn*

#### REDEAR SUNFISH

Hawthorn, *Mahaska*  
Keomah, *Mahaska*  
Miami, *Monroe*

Good numbers of 2- to 4-pound fish with trophy sizes present.  
No-kill regulation; lots of 10- to 15-inchers.  
Good numbers of 12- to 16-inch fish for catch-and-release angling.  
Excellent numbers of 11- to 18-inch fish.

All pools excellent; recruitment good.  
Good to excellent; catfish factories!  
Good numbers with a variety of sizes. Fish up to 29 inches collected in survey.

Exceptional fishery, all sizes. Post ice-out period excellent.  
Exceptional fishery, all sizes. Post ice-out period excellent.  
Excellent number of all size fish.  
Excellent for all sizes.  
Good for a variety of sizes.  
Good for a variety of sizes.  
Good numbers of 2- to 4-pound fish.  
Good for a variety of sizes.  
Excellent fishery; fish up to 25 inches.

Best below locks and dams, wingdams and side channels.  
Big fish in deep holes around bridge pilings during summer. Good numbers of 5- to 30-pound fish.  
Good numbers of 10- to 30-pound fish.  
Fair numbers of 2- to 20-pound fish available. Concentrate on rip-rap in Bridgeview area in late spring to early summer.

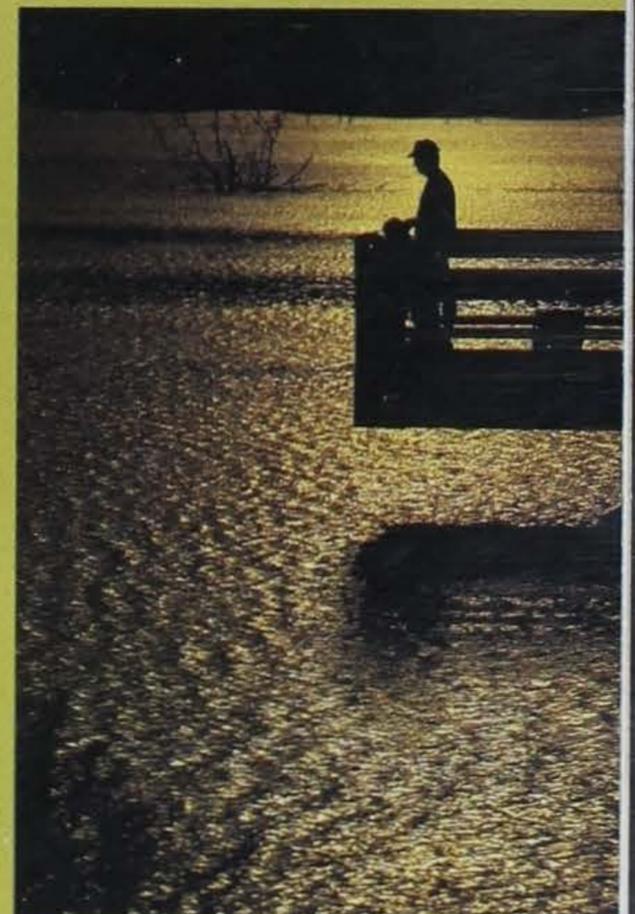
Ten- to 14-inch fish available.  
Ten- to 12-inch fish available.  
Best east of causeway in May for 8- to 10-inch fish.

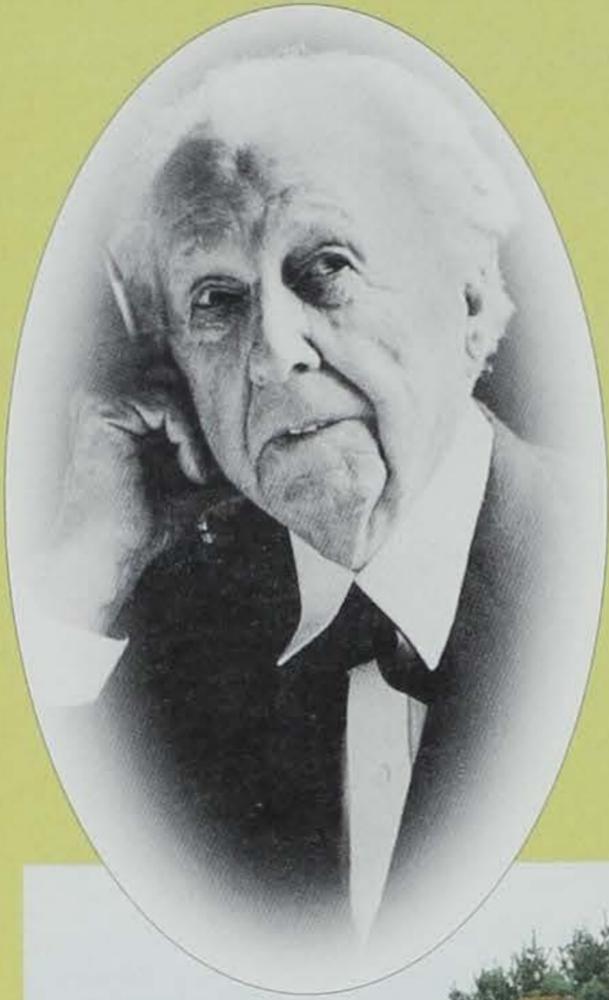
Seek locks and dams, and wingdams. Excellent for sauger.  
Large numbers of 15- to 21-inch fish.  
Good numbers of 15 to 20- inch fish with trophy sizes available.  
Quality angling below the Ottumwa hydropower dam; trophy fish are available.  
Good in spring and late fall in upper end and around I-380 bridge.

Exceptional fishery; lots of 2- to 4-pound fish up to 10 pounds.  
Best in early spring and late fall around I-380 bridge; good number of 2- to 3-pounders.  
High numbers of 14- to 18-inch fish with some up to 6 pounds.

Seek locks and dams and wingdams.  
Excellent numbers of 11- to 15-inch fish; target humps and points.  
Lots of 12- to 14-inch fish. Best in late summer on shad-colored crankbaits.  
Fair numbers of 12- to 14-inch fish.  
Excellent for summer topwater action.

Average harvest size 8 inches-plus.  
Good numbers of 8- to 11-inch fish.  
Good numbers of 8-inch-plus fish.





# Cedar Rock:



# Wright

## Place On The Left Bank

by Pat Lewis



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Ken Forman  
ABOVE:  
Ross Harris

**A**t a very young age, Lowell Walter discovered he loved to hunt and fish. He favored a local area with a sandstone rock outcropping along the left bank of the Wapsipinicon River, just upstream from the town of Quasqueton. Pioneers named the outcropping Cedar Rock, and the scenic and productive spot on the Wapsipinicon River became etched in young Walter's mind.

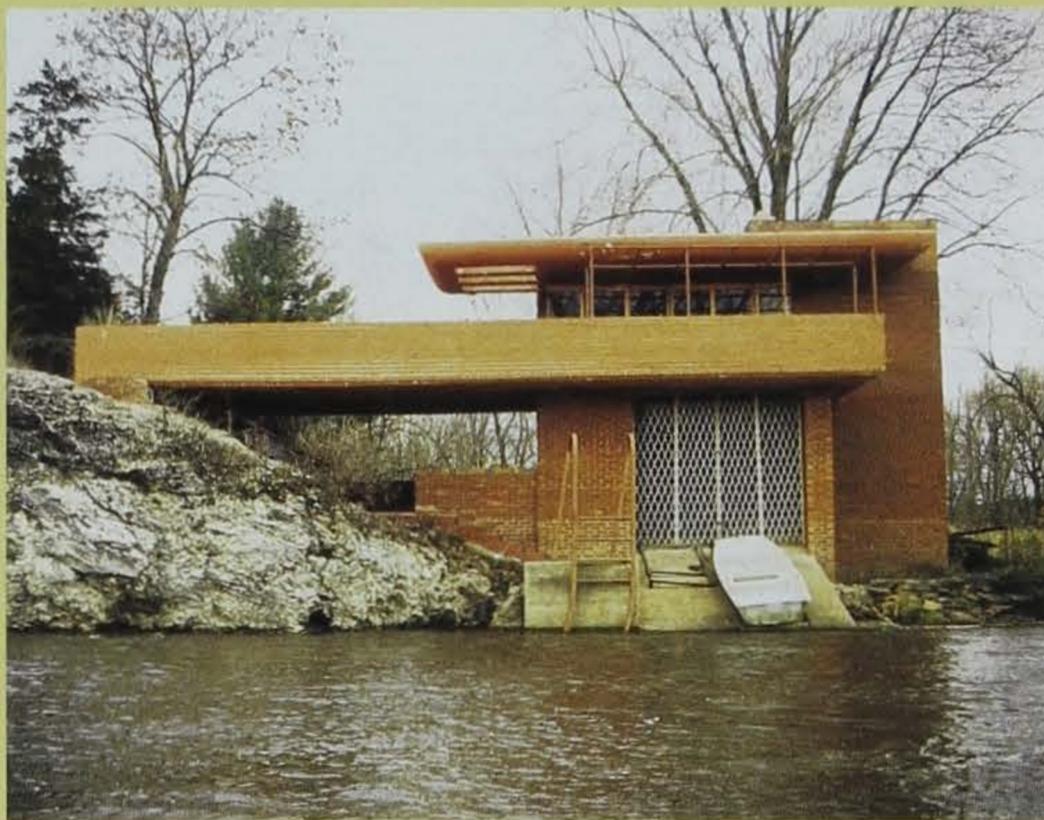
His childhood days soon faded into adult life for Walter, but those early impressions would forever be etched in his mind.

Walter graduated from the Capital City Commercial College in Des Moines March 2, 1914. After working for a lumber company, he and a partner bought the Des Moines-based Iowa Road Building Company. Like it did to so many others, World War I disrupted the young businessmen's plans, and the two left for the armed forces. When they returned, Walter's partner declined to re-enter the business, and Walter went at it alone.

As the automobile grew in popularity, so did the need for improved roads. Walter's business, which applied a hot bituminous oil coating over dirt roads, thrived.

A young, successful businessman, Walter married Agnes Nielsen Nov. 17, 1917. She joined her husband in the business, keeping books and managing the company's office.

Road building was a seasonal business, and thus Walter grew concerned for his employee's financial welfare. To keep them busy year-round, he turned to retail sales. Walter would purchase various products in bulk, such



as pocket knives and wicker baskets, and create brochures to market these wares. Some employees would help sell the products, while others would fill orders. Walter's plan provided regular income and allowed him to keep valued employees. An astute businessman, Walter seemed able to marry civic obligations with sound business decisions.

An early newspaper article tells of how "a Quasqueton farm youth made good in the city, but he didn't forget his home community's farm lands when he looked for a place to invest his money." Walter acquired a little more than 5,000 acres in Buchanan County. Possibly his most meaningful purchase, however, was 11-1/2 acres of woodland encompassing his most cherished childhood getaway — Cedar Rock. A short time later, the Walters had a two-room cabin and a small garage built.

The Walters enjoyed their time at Cedar Rock so much, they decided to build a summer home there. Given the couple's intense appreciation of the area, the home had to be special, even uncommon. Therefore, the search began for an equally "uncommon" architect. The search eventually led to world-renowned architect Frank Lloyd Wright, one of the most sought-after architects of his time. In January 1945, Walter sent a letter to Wright seeking his services.

### Convincing The Best

Frank Lloyd Wright was a silver-haired, outspoken, colorful renegade. He had such a profound effect on American architecture the American Institute of Architects chose to designate 17 of his American buildings as examples of his contribution to American culture.

Considering Wright's architectural credentials and impressive portfolio, Walter knew it would take more than a simple request to entice the much sought-after architect to accept the project. Therefore, in his letter, Walter included a photograph of Cedar Rock to further convince the architect of the merit of the assignment. Before agreeing to accept this commission, however, Wright paid a visit to the special site. During his visit he roamed every corner of the 11-1/2 acres, no small feat considering he was 77 years old.

In a Feb. 3, 1945 reply letter, Wright confirmed in one small paragraph, that he "would design a dwelling for them. It would include neither attic nor basement." So began a five-year process to build their "uncommon" summer home.

Cedar Rock is derived from Wright's glass house designed for and published in the *Ladies Home Journal* June 1945 issue. It was headlined

#### UPPER LEFT: Frank Lloyd Wright

DNR Photo

#### CENTER LEFT: The Walter residence

DNR Photo

#### LOWER LEFT: Wright left his "autograph" on the Walter residence — a red signature cornerstone.

Ken Formanek

#### ABOVE: Cedar Rock boathouse

Ross Harrison

"Opus 497 . . . The world's most distinguished architect designs a crystal house, for town or country, which can have far-reaching effects on future living for all of us."

The architectural editor of the magazine, Richard Pratt, writes glowingly of the manipulation of four simple accessible materials by the architect. "Materials that are available anywhere, at any normal time and are basically inexpensive." Wright remarks, "They make the house fireproof, vermin-proof, and pretty near foolproof."

Cedar Rock is built exclusively of these same materials -- brick, concrete, glass and steel. This is not to say that wood is not to be seen, it is just not required.

According to Pratt in the *Ladies Home Journal*:

"Each material works completely at its best for the pleasure of the occupants and the appearance of the house . . . Glass no longer means a mere transparent hole in the wall; glass here

means a whole light-giving wall. Metal isn't the secret hidden strength of the house; metal in the form of stainless steel is the beautiful outspoken strength of slender T sections that support the roof and hold glass panels in place . . . And the graceful uplift lines of the roof are what can happen when an artist explores the possibilities of lightweight precast concrete . . . While sunlight and fresh air are free, few houses have ever taken full advantage of the health, comfort and beauty they can provide. This house does. The glass walls are fixed in place, for the sake of tightness and simplicity; but from the few outside doors there can be a full sweep of air, and in addition there can be completely controlled ventilation through the movable sash of the clerestory that rises above the main roof."

And so began the love affair with Cedar Rock. Construction began in the spring of 1948. The curiosity and press attention continued long past the time the home was finished.



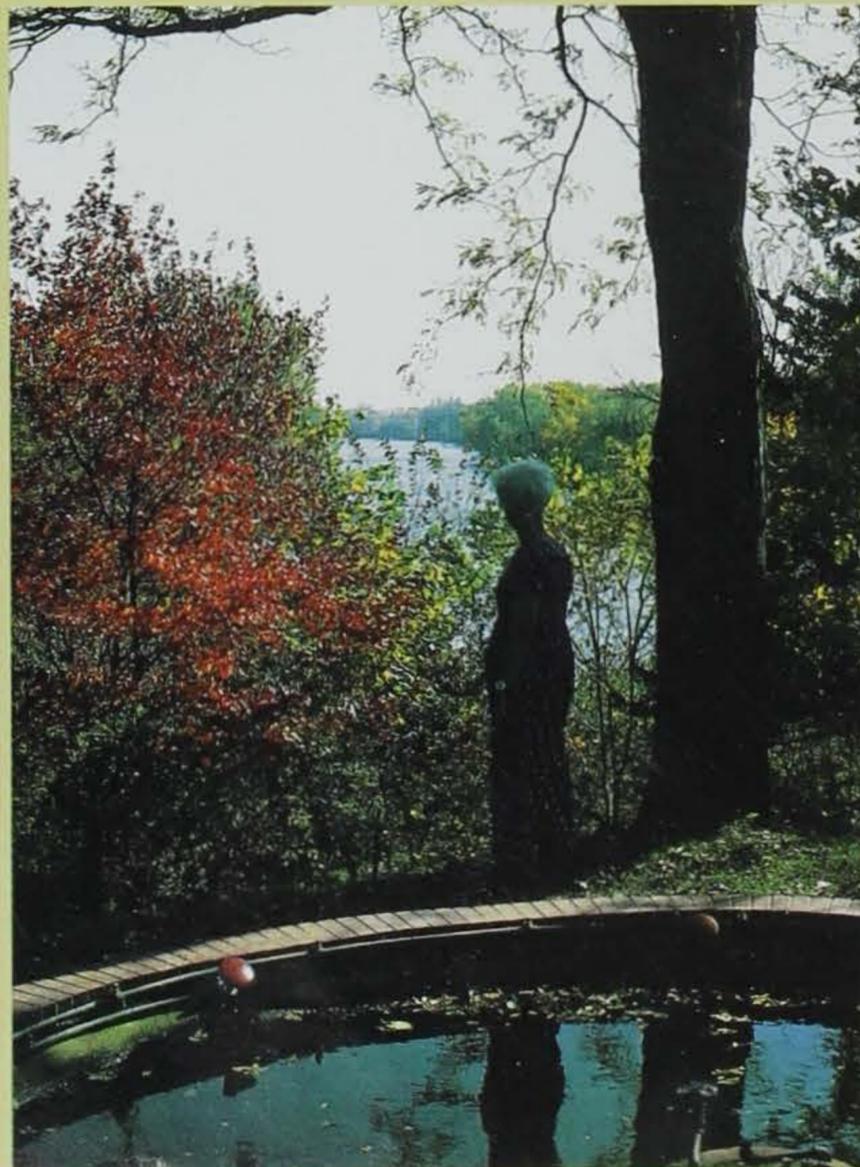
Wright designed the home, the landscaping, a Council Fire for outdoor cooking and entertaining, a boat pavilion and an entrance gate to the property. Inside, he designed the furniture, draperies and upholstery fabrics. He even went so far as to recommend what china, silver and linens to buy, and where to place a few acceptable accessories.

Like any great artist, Wright "signed" his work with a red signature tile block permanently affixed to the outside of the home. The Walters were very proud of this signed tile; partly because the tile was one of only a few with Wright's actual signature.

Lowell Walter died in 1981, and even though his will gave his wife lifetime use of the home, she chose to donate the home and its contents to the citizens of Iowa in 1982.

The Walters also left a trust fund to provide for the home's maintenance. The Lowell and Agnes Walter Trust also provides two college scholarships annually to the local high school, donations to several local civic organizations, treats at Halloween and support to the children's Christmas Party.

Cedar Rock overlooks the Wapsipinicon River



Ken Formanek



This group shot was taken during a final inspection by Wright of the home. The event evolved into a celebration barbecue at the Council Fire, an outdoor feature Wright designed specifically for entertainment and recreation purposes. More than 50 guests showed up. Pictured from right to left are Frank and Agnes Walter and Olgivanna Wright. Architect Frank Lloyd Wright is pictured at center, wearing the hat. The child and the couple on the left are unidentified.

DNR photo

## The Later Years

In 1989 a Visitor Center was opened on land purchased by the Trust. Among the displays at the center include several donated items, the original Thompson VT boat with motor Walter once owned, a Volvo similar to the one Mrs. Walter drove and scrapbooks of memorabilia from the Iowa Road Building Company and construction of the home.

The Eastern Iowa Pond Society donated supplies and labor in 1998 to create a pond and brook system at the Visitor Center. Picnic tables and park benches nearby provide quiet spots to sit and watch the birds and butterflies.

The staff at Cedar Rock provides visitors transportation to and from the home every half-hour. For those who prefer to walk, a short hiking trail leads from the Visitor Center to the home.

Cedar Rock also includes a little more than 375 acres of public hunting. Some of the land is rented out for crops, the rest includes assorted woodland, prairie, savannah, river bottom and wetlands. A small section is only accessible from the Wapsipinicon River.

The Wapsipinicon River, from Independence to Quasqueton, is a

popular spot with anglers, canoeists and boaters. Canoe and boat access is available at several locations along the stretch, although access is not provided at Cedar Rock itself.

The Walter home and grounds are open May 1 through Oct. 31. A guided tour is required to view the interior of the home. Free guided tours begin at 11 a.m. and leave every half-hour from the Visitor Center. The last tour of the day leaves at 4:30 p.m.

Two special-events are held each year: the second Saturday of June is Cedar Rock's "Candlelight Walk," and the first Saturday of October is "Cedar Rock Under Moonlight." Both events offer visitors a unique opportunity to view the home under night lighting.

A special event celebrating the 50th "birthday" of Cedar Rock will be held Saturday, June 10. Festivities will begin at midday and continue through the Candlelight Walk.

During the afternoon, public speakers, people who participated in the construction of the home, and Walter family members will be honored as guests. A lawn picnic with music both inside the home and around the grounds are planned.

In the evening, there will be more music, popcorn, marshmallow roasting and refreshments around the Council Fire and piano and marimba music inside the home. The home's night lighting is periodically varied to allow guests a chance to experience the assorted lighting modes Wright designed. The Boat Pavilion will also be open to experience the sounds of nature along the river. More information about the celebration will be available in early June.

Cedar Rock State Park is located three-fourths of a mile north of Quasqueton on Buchanan County Highway W-35. Quasqueton is approximately 45 minutes north of Cedar Rapids, or 30 minutes east of Waterloo. For further directions, park information, and further information on the 50th Birthday Celebration, call the park office at (319)-934-3572. To e-mail, go to the DNR's state park web site at [www.state.ia.us/parks](http://www.state.ia.us/parks).

*Pat Lewis is the park ranger at Cedar Rock.*

Second in a series **THE  
BEAUTIFUL  
LAND**

The uplands were dominated by prairie grasses so tall and lush they covered a rider's stirrups. In north-central Iowa, thousands of potholes, sloughs and marshes dotted the landscape. The floodplains were forested and bordered by hillsides covered with oak savanna. Brushy ravines and draws penetrated the surrounding upland prairies bringing forests and grasslands together. Early naturalists estimated about 70 percent of Iowa was prairie, 20 percent was forested and 10 percent was wetlands.

The origins of the gentle landscape and the great diversity of life it supported are found far back in the midst of Iowa's geologic record.

### Water and Ice Shape an Ancient Landscape

Hundreds of millions of years ago most of the earth's land masses were huddled nearer the equator and had lush tropical climates. Interior North America was covered with a vast inland sea that ebbed and flowed over the eons but remained essentially intact. The calcareous lime-rich shells and skeletons of dying marine organisms accumulated on the sea floor for millennia, eventually compacting and hardening into limestone, sandstone, dolomite and shale, the

sedimentary bedrock underlying most of Iowa. Near shore, the death and decay of tropical vegetation resulted in coal deposits in some areas.

Although it occurred at a snail's pace, a gradual northward drift of the continent eventually brought it close to its current position. A cooler climate and the uplift of the Rocky Mountains, which blocked humid westerly breezes from the Pacific, eventually caused the inland seas to dry up. Gradual uplifting of the earth's surface and millions of



Ron Johnson

### A Brief History of Wildlife Conservation In Iowa

by Terry W. Little

Lake Okoboji, above

When the first European explorers entered Iowa in the 18th century, they found an incredibly diverse and beautiful land populated by an amazing abundance of wildlife. The landscape they encountered was, for the most part, gently rolling and easy to traverse. As they traveled from east to west they encountered a succession of relatively gentle rivers that had carved out shallow floodplains. Even in the rough eroded lands adjacent to the rivers the hills were low and the slopes not unbearably steep.

years of erosion of the soft, sedimentary bedrock created an ancient topography similar to that seen in northeast Iowa today — deep, sheer-walled valleys separated by wide upland plains.

Continued climatic cooling eventually resulted in the Ice Age, the other powerful influence that shaped Iowa as we know it. Beginning a relatively recent 2.5 million years ago, vast sheets of ice thousands of feet thick moved out of Canada and across much of North America. Warmer periods during the Ice Age caused the glaciers to temporarily melt and retreat.

The great ice juggernauts moved slowly but with a destructive power greater than any earth moving equipment available today. Hills were ground down, valleys were filled and rivers were blocked or rerouted. The ice pushed or carried within it a vast quantity of glacial drift — boulders, rocks, sand and soil picked up along the way and deposited thousands of miles from their points of origin. As they melted, the great ice sheets spewed forth unimaginable volumes of meltwater that scoured out great river valleys. The Mississippi and Missouri river systems and all their many tributaries were developed from this meltwater.

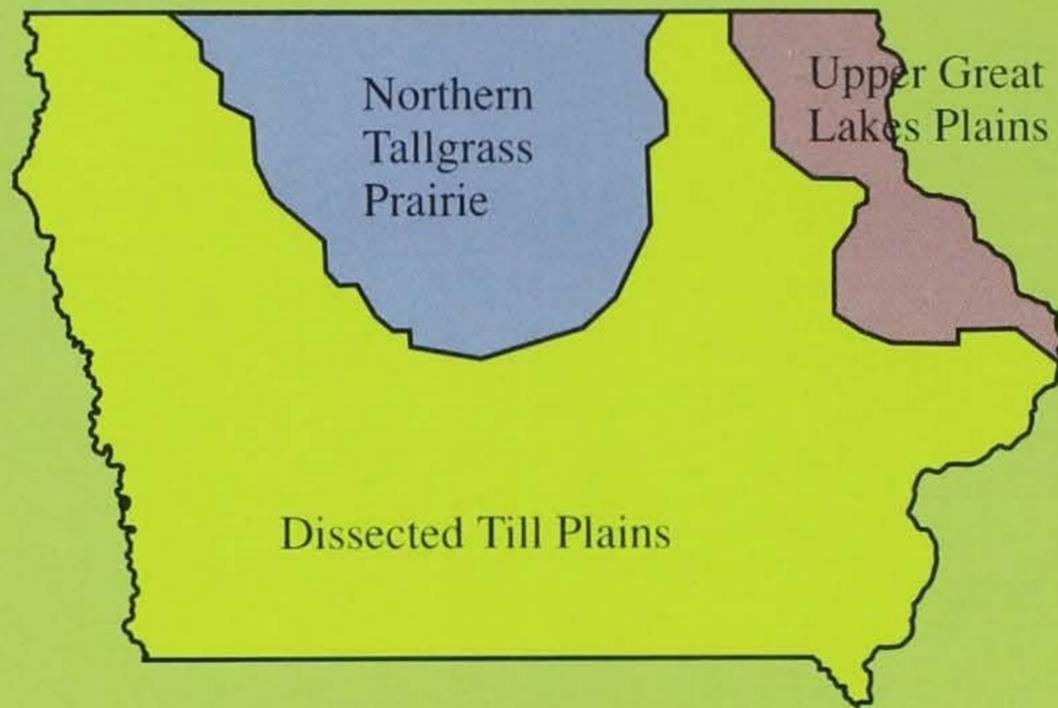
As glaciers retreated, strong winds were fueled by the temperature difference between ice-free and ice-covered regions. Winds blew drying sediments across the landscape, depositing them on older glacial deposits. These windblown soils or loess are common across much of Iowa and can be dozens of feet thick. Between ice advances, new drainage patterns developed and erosion immediately began reshaping the glacial deposits and loess left behind. Then another ice sheet would appear and rearrange the landscape again. Geologists now know several ice sheets covered at least portions of Iowa at some time in the past 2 million years.

The last glacial advance, the Wisconsin, moved across north central Iowa between 12,000 and 14,000 years ago but only penetrated as far south as Des Moines. When it receded, it left Iowa with several dominant landforms



Ron Johnson

Bluffton Area, along the Upper Iowa River



Physiographic Regions of Iowa



Topographic Relief of Iowa



DNR photo

Haefner Kettle Hole

that would affect the rest of its botanical and faunal history.

The terrain on the Des Moines lobe after the ice retreated was fairly level but was marked by low ridges and mounds of glacial drift that had settled out of the ice. Occasional larger till ridges (moraines) formed where an ice sheet temporarily advanced and retreated as it gradually melted. Sloughs, marshes or natural lakes were created where areas

of poorly drained soils were surrounded by low ridges of glacial till. Thousands

of smaller scattered depressions contained remnant ice-blocks. These filled with water as the ice melted and became potholes. Surface soils were littered with rocks and small boulders that originated in Minnesota, Wisconsin and on the Canadian shield.

Most of Iowa's interior rivers originate from or had their courses modified by the melting of the Des Moines lobe. They radiate outward from the path of the retreating ice to empty into either the Mississippi or Missouri.

Outside of the Des Moines lobe the rest of the state exhibits a much older and better drained topography. Although different regions have different glacial histories and have had varying times for erosion to work, their landscapes are superficially similar. Most of Iowa was formed from gently rolling upland glacial till plains that have been dissected by a network of rivers and their interconnected creeks, ravines and draws.

The roughest terrain is concentrated in the river "breaks," the most deeply eroded areas that border and open onto the floodplains of the major rivers. Slopes of ravines and valleys gradually become less steep, shallower and narrower as they move toward their headlands. Eventually they disappear into gently rolling upland valleys and ridges that separate Iowa's major river systems. In general, southern Iowa has older landscapes that are more highly eroded and sharply dissected than in northern Iowa.

There are two major exceptions. The oldest, nearly drift-free landscapes are in the Paleozoic Plateau in extreme northeast Iowa. Fast-flowing, cold water streams have cut deep, steep, narrow valleys through hundreds of feet of sedimentary bedrock. Western Iowa's loess hills resulted first from the build up of silty loess soils that blew out of the Missouri River basin in interglacial periods, followed by thousands of years of erosion.

## From Tundra to Prairie

A climate harsh enough to push a sea of ice as far south as central Iowa also created an uninviting environment for most forms of life. A wide zone around the ice was covered with tundra — the same mix of lichens, mosses and scrub birch and willows lying over a bed of permafrost that is found today at the Arctic Circle. As the ice retreated, tundra was replaced by spruce-fir boreal forest, then by temperate pine forests and then by mixed hardwoods as the climate gradually warmed. (White Pine Hollow State Preserve in Dubuque County is the last example of ancient pine forests that would have been common across Iowa centuries ago.)

About 6,000 years ago the climate was even warmer than today. Grasses invaded where trees and shrubs found it too dry and warm to flourish. These grasses had to face a constant onslaught of periodic droughts, frequent fires and intensive grazing by herds of ancient herbivores. To survive, prairie grasses developed deep root systems to provide nourishment for regrowth when the above-ground stems and leaves were consumed. These incredible root systems broke up the glacial tills to depths of several feet and provided a high organic content and incredible fertility to prairie soils as the roots died and decayed.

The prairie was more than just a monolithic sea of grass. Prairie plants are adapted to subtle changes in moisture and soils that occur along a gradient from lowlands to drier prairie ridges. Poorly drained wetlands and wetland margins supported rank growths of sedges, slough grass, cord

grass, bluejoint, prairie muhly grass, and panic grass, with common forbs such as gayfeather, prairie dock, Turk's-cap lily and New England aster. Better-drained loamy soils on slopes and broad ridges were covered with more moderate stands of switchgrass, big bluestem, Indian grass and forbs like compass plant, rattlesnake master, smooth aster, wild indigo and goldenrod. Drier sites on gravel and sand ridges or steep slopes supported shorter and more open stands of



Roger A. Hill



Roger A. Hill

*“... The uplands were dominated by prairie grasses so tall and lush they covered a rider’s stirrups.”*

little bluestem, side-oats grama and needlegrass, with forbs like pasque flower, silky aster, yellow pucoon and common milkweed.

Around 3,000 years ago the climate began cooling again until it resembled the humid continental climate we have today — a short, cold winter; a warm dry summer; and cool, rainy spring and fall. Cooler, wetter weather permitted forests to return to some areas.

Closed-canopy mature forests as we know them today existed only on the floodplains where fire could not routinely penetrate. Silver maple, American elm and swamp white oak dominated on the wettest sites, with hickories, hackberry, black walnut, white ash, red oak, basswood and

slippery elm on lower slopes. Shrubs were not abundant and were primarily young silver maples and hackberry with catbriar, poison ivy and grape.

Forests on drier slopes and uplands were primarily oak openings or savannas — scattered old oak trees or small clumps of oaks with an understory of prairie or mixed prairie-forest shrubs and herbs. Burr oak, with its thick, fire-retardant bark dominated with some red and white oaks on moister sites. The understory was primarily prairie grasses and forbs, but hazel, coralberry, sumac and grape occurred where fire was less common.

The heaviest concentrations of timber were in the cooler and moister eastern third of the state. In the west,

only the floodplains and the coolest sites on north and east facing slopes in the deepest river valleys were timbered. Because of the many river systems penetrating the prairies to the north and west, however, at least some timber and shrub lands were found all across the state.

Drought, fire and grazing combined to make Iowa's prairie-wetland-forest ecosystem an even more diverse place. In wet years water levels were high, wetland vegetation gradually died out and marshes began to look like ponds or small lakes. But dry weather runs in approximately 10-

year cycles on the prairies, with severe drought at roughly 20-year intervals. Drought caused wetland basins to temporarily dry out, but this dewatering was a beneficial process. Seeds buried in moist wetland soils were able to germinate once the water was removed, and dense stands of emergent

vegetation were replenished. Thus regenerated, wetlands awaited only the end of drought to return them to their former productive condition.

In wet years, fire was also less likely on the prairie. Without burning, the dead stems and leaves of grasses and forbs accumulated on the ground, creating a cooler, moister environment. In some cases, coralberry and other shrubs were able to survive and spread from forest edges farther into the grasslands. During drought, fire burned off large areas of prairie and forest, killed invading shrubs and trees, eliminated the litter, returned nutrients to the soil and allowed grasses to regain their dominance. Fire also allowed annual plants like ragweed, fleabane, thistle and primrose to take a temporary foot-hold before the longer-lived grasses and forbs recovered and choked them out.

Although fires were common, it is impossible to say how much and how frequently the prairies burned. Weather is seldom in complete synchrony over all of Iowa. Local dry spells undoubtedly created mini-droughts, which lowered wetlands and produced frequent fires, while just a few miles away precipitation was normal. Even in normal years, a dry late summer could result in a partial draw down of marshes and subsequently, occasional fires. The network of wetlands, creeks and rivers probably stopped smaller fires from expanding too greatly.

Grazers and browsers, such as bison, elk and deer, also had an effect. Where feeding was intense, they suppressed shrubs and slowed the growth of tall grasses. Elk and bison created wallows, sandy areas where they rolled in the loose earth to remove hair and discourage insects. Prairie dogs, though not common in Iowa, kept the vegetation around their towns clipped short. Even gophers created small openings over their mounds where annual plants could gain a foothold.

The result of all this variety in soils, topography, weather, fire and animal activity was a great patchwork of plant communities in both time and space.



Ken Formanek

*“... The heaviest concentrations of timber were in the cooler and moister eastern third of the state.”*

Not only were prairies, forest and wetlands in close proximity, but at any given location plant communities were in a state of growth, retrenchment or suppression depending on their local history.

## Human Influence

The first influence of humans on Iowa's landscape and its wildlife long predated European settlement. Paleo-Indians invaded Iowa as far back as 11,500 years ago. They were descendants of Asians that crossed the Bering land bridge when sea levels were depressed during the Wisconsin glaciation. These early hunter-gatherers were attracted by herds of ancient game like woolly mammoths, mastodons, musk-ox, camel, caribou, horse and bison. Intense hunting pressure from these rapidly expanding human societies may be the reason many of these ancient species became extinct.

By the time of European exploration, seven different Indian tribes representing two distinct cultures were settled in Iowa. Sauk and Fox (Mesquakie) tribes lived along the inland tributaries of the Mississippi River in eastern Iowa. The Ioways lived in central Iowa along the Des Moines and Raccoon rivers. These three groups were of Algonquian (eastern) origin. They lived in semi-permanent wickiups and log houses and practiced cultivation of vegetables like Indian corn and squash to supplement game and fish. Indians of Siouan origin — the Brule Sioux, who commanded the prairies north and west of the forks of the Des Moines River, and the Otoes, Omahas and Missouris, who lived in southwest Iowa — were nomadic hunters and warriors who lived in teepees or open-sided tents and depended on meat for most of their diet. Until the coming of Europe-

ans, they probably lived in harmony with their environment, taking only what they needed for food and fiber.

Our Indian predecessors learned early in their history to use fire as a tool to improve their hunting. Fires were probably first set to drive unsuspecting game animals into ambush. Hunters soon learned herds of grazing animals were attracted to the lush new green growth that sprouted almost as soon as the ashes cooled. Forests were also burned to kill the understory and keep them open enough for travel by horseback. Wildlife were probably impacted more by fire and its effect on plant communities and wildlife habitat than by the Indians who consumed them.

The first white travelers across Iowa kept records of the game animals they encountered as a source of food or pelts for trade. Large predators were also noted because they were a threat to livestock. Little mention was made of animals that did not affect their daily survival or welfare. Yet the number of species that couldn't be shot, trapped or eaten was far greater than those that

could. The incredibly diverse plant communities supplied an equally diverse selection of niches or habitats supporting more than 450 species of birds, mammals, reptiles, amphibians and perhaps many more never recorded.

That richness did not last. Within a century, nearly a quarter of those species were extinct (gone forever from the earth), extirpated (eliminated from Iowa) or reduced in numbers so severely their continued existence was in peril. The great diversity of plant communities was in equally sad condition. By 1900, more than 95 percent of Iowa had been converted to agricultural land — 95 percent of the wetlands, 99 percent of the prairies and two-thirds of the forest land were gone. A single century of civilization changed forever what had taken thousands of millennia to create.

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*Terry W. Little is the Wildlife Research Supervisor for the department in Des Moines.*



Ron Johnson

Loess Hills



Two anglers enjoy the bountiful fishing at Red Rock.

# SPORT FISH RESTORATION

## 50 YEARS OF SUCCESS

Article by Martin Konrad  
Photos by Clay Smith



Courtesy Smith

Staff photographer Clay Smith makes sure his catch-of-the-day gets photographed.

For 50 years anglers have been supporting more fishing opportunities and improved fishing and boating programs through the taxes paid when buying fishing equipment and boat fuel. That's right, buying a first rod and reel for a child, stocking up on tackle before the season begins or filling the boat tank with fuel all help support the sport anglers enjoy.

Taxes anglers have paid for 50 years have gone to the Sport Fish Restoration Program. Since 1950, this federal program has been expanded several times to benefit more anglers and boaters. The program now places a 10 percent tax on most fishing equipment. Three percent of the cost of electric trolling motors and flasher-type fish finders support the program. A portion of the federal gas tax from motor boat fuels also goes to the program.

### How the Program Works!

The Sport Fish Restoration funding cycle is shown at right. Although it appears complex, it is quite simple. When an angler or boater makes a purchase, the tax they pay is

built into the wholesale cost of the item. The manufacturer passes the excise tax collected on to the federal government, which then distributes the money to state fish and wildlife agencies. The amount each state receives is dependent on the number of fishing licenses sold and land area. Since 1986, the Iowa Department of Natural Resources has received an average \$2.5 million annually in program funds.

For example, Gill Fisher walks into Wallys Tackle Shop and purchases a fishing rod. The manufacturer sold the rod to Wally for \$20 and paid \$2 in excise tax to the Sport Fish Restoration Program. Add that \$2 to the amount collected from millions of other purchases over the past 50 years. To date, the U.S. Fish & Wildlife Service has passed more than \$44 million to the DNR to improve fishing and boating recreation.

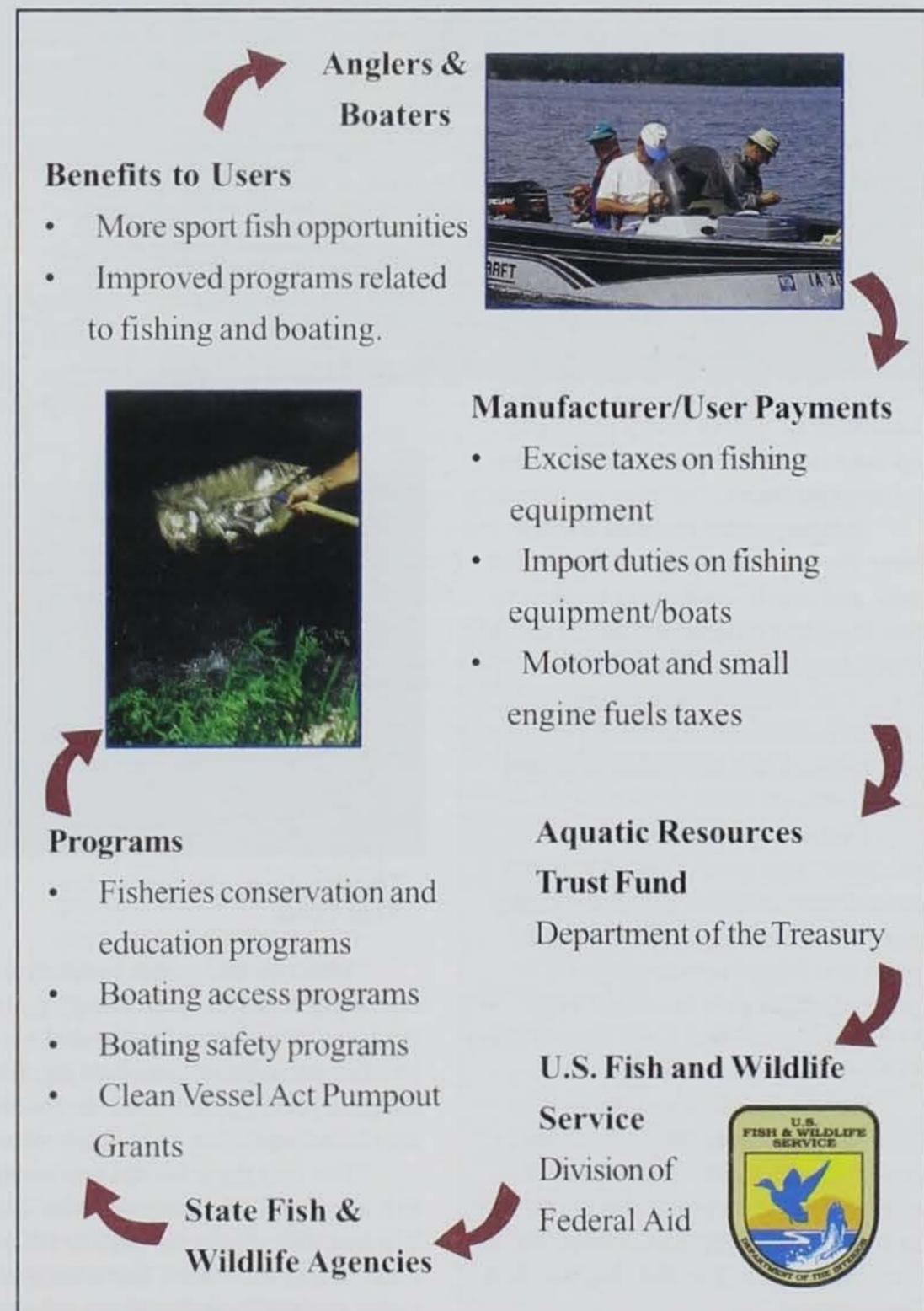
### What Sport Fish Restoration means to Iowa Anglers!

Since 1950, Sport Fish Restoration has brought more than \$44 million to the Iowa Department of Natural Resources, \$35 million since 1985, when Congress significantly expanded items subject to tax collection. With these funds the DNR has:

- Implemented an Aquatic Education Program in which 11,000 teachers annually reach 500,000 students in more than 65 percent of Iowa's school districts.
- Provided improved shore fishing opportunities at 27 lakes and two trout streams, and statewide maintenance activities at boat ramps.
- Constructed three lakes and restored four lakes.
- Constructed fish habitat in 11 Iowa lakes, six rivers and six trout streams.
- Improved and restored two fish hatcheries.
- Conducted research studies resulting in management techniques to improve and create better sport fisheries.
- Acquired 5,115 acres to construct five lakes and to protect fish habitat and water quality in six lakes.
- Acquired 3,743 acres at 14 trout streams.



Okoboji canals can be a great spot for bass fishing.



## Iowa High School

# TEACHER

*helps*

*Students*  
connect with their environment

Article by Lowell Washburn  
Photos by Clay Smith

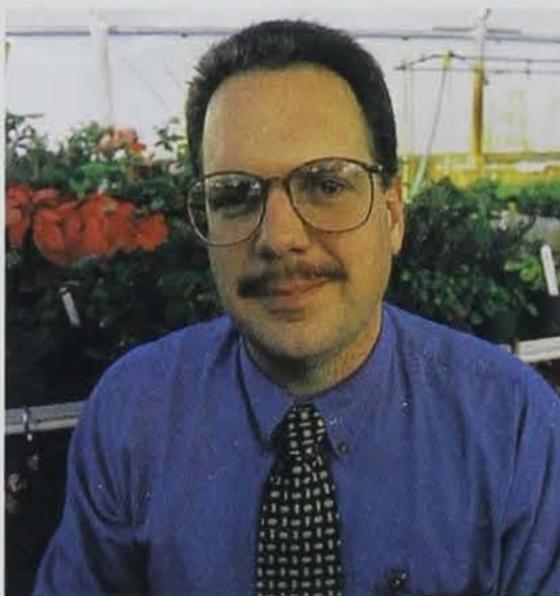
The Iowa Department of Education has named Carroll High School instructor Tom Paulsen, Teacher of the Year 2000. Paulsen teaches vocational agriculture to grades 9 through 12, where he places heavy emphasis on land stewardship and environmental responsibility.

"I believe that students should have the opportunity to see, hear, feel, taste and touch -- whatever it takes so that they can truly understand what is being taught," said Paulsen. "You have to be creative to get some students' attention, but once you do, you just can feel the enthusiasm and interest bloom."

Paulsen's first environmental project began during the 1992-1993 school year when he enlisted students from the Carroll agricultural department in a Trees Forever program, planting thousands of walnut and hickory nuts at Swan Lake State Park in Carroll County.

"At Swan Lake the kids got involved in a lot of other activities as well," said Paulsen. "They pruned trees, made brush piles for wildlife, and even helped supply teepee poles for the local naturalist. The kids had fun and they learned."

Paulsen's next opportunity to provide students with his "hands on" approach to education came when he was granted permission to use an undeveloped tract of land owned by the school district.



**Tom Paulsen, Teacher of the Year 2000.**

"What we did on this property was develop a series of small test plots," said Paulsen. "The space was limited and, looking back, there's no denying that the plots were crude — but they were also effective."

"The first thing we did was establish a test plot of high population corn. The test plot was in the Middle Raccoon [river] watershed, and what was really exciting was that it not only gave

us a chance to look at agronomic issues but also provided an opportunity to look at water quality issues at the same time. It was the idea of water quality that got the students interested in establishing buffer strips, and from there things began to get very exciting as their enthusiasm grew."

By the time the '96 school year rolled around, Carroll High School agriculture students were actively recruiting local landowners to establish buffer strips along the Middle Raccoon River. Pheasants Forever provided native prairie seed and absorbed all of the farmer's cost share. By the end of the 98-99 school year, the students had been involved in implementing more than 400 acres of native grass buffer strips along the Middle Raccoon.

"Another very exciting thing that happened during the '96 school year was that the students were able to establish a 12-acre buffer of native prairie grasses around the Carroll water treatment plant. The treatment plant is also located along the river, and it gave us one more way to focus on water quality," said Paulsen.

As their accomplishments continued to multiply, the activities of the local vocational agriculture department did not go unnoticed by the citizens of the community, the state or even the nation. In 1998, and again in 1999, the



Paulsen taking special care of the green house plants.

Carroll High School vocational agriculture department received the Monsanto Operation Green Stripe, Best in the Nation Award for outstanding achievement. As a result of that award the department received \$8,000

*“You have to be creative to get some students’ attention, but once you do, you just can feel the enthusiasm and interest bloom.”*

over the past two years. According to Paulsen, most of that money was used to make improvements to the school’s greenhouse.

“At this point, we’re getting very close to having several miles of continuous buffer strips along the Middle Raccoon. We’ve had public

tours of those buffer strips and the prairie buffer at the water treatment plant. This spring, we’re going to try something new by conducting a community prairie burn,” said Paulsen.

“So far, it has been a very positive experience for everyone involved. This spring, we’ll be moving into a new 35-acre test plot and that should bring new opportunities.

I think our conservation projects have served as a very important, ongoing educational tool. I don’t think there is any question these hands-on activities have

enabled our students to understand the importance of things like water quality and buffer strips at an early age,” said Paulsen.

“All educators must be able to answer the student who asks, ‘Why do I need to know this?’ and I feel that if teachers can create relationships or

partnerships with the community, they will be able to answer this question.”

*Paulsen was born and raised on an Iowa family farm. His mother, a teacher in country schools, made education and agriculture top priorities in their home. Paulsen became involved in the local 4-H club and developed an interest in agriculture education as a career. After graduating from Northwest Missouri State University, Paulsen taught agriculture education at Lynnville-Sully High School in Sully before moving to Carroll High School in 1992.*

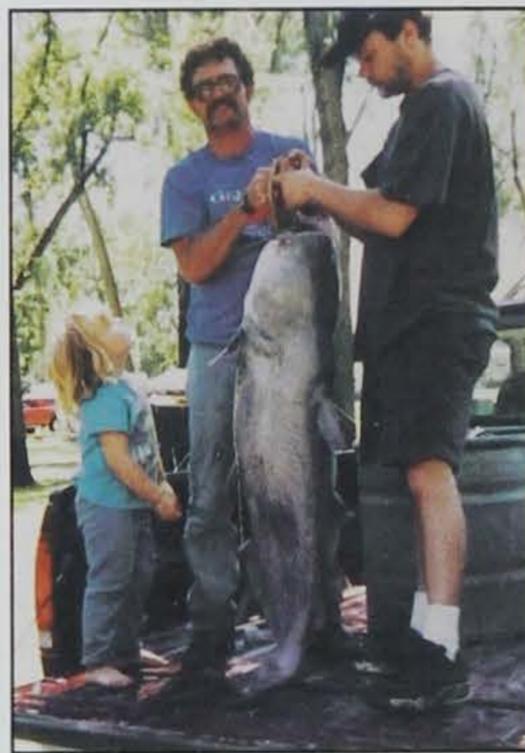
*As Iowa’s Teacher of the Year, Paulsen is granted a one-year sabbatical beginning in July 2000. During that time, he will visit schools and communities as Iowa’s “Ambassador for Education.”*

NEW  
STATE  
RECORDS  
CAUGHT IN  
1999

If you catch a fish eligible for a new all-time record, the fish must be examined and verified by Department of Natural Resources personnel. A list of state-record fish and the top 10 fish awards for 1999 can be found in the special fish awards insert.

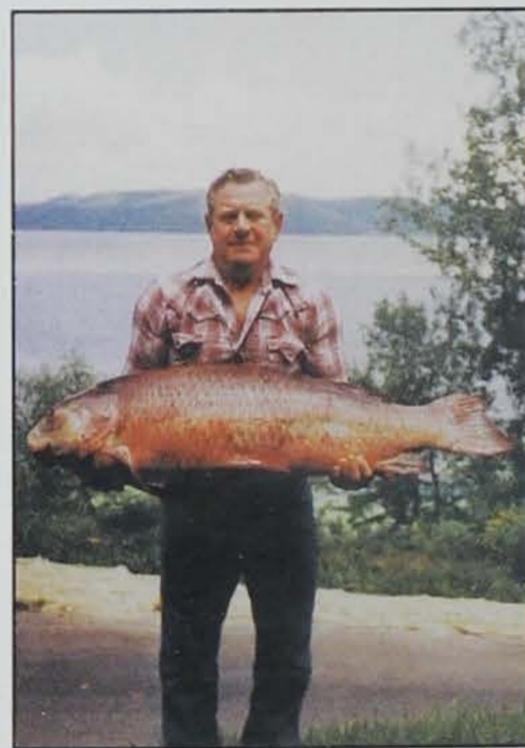
Blue catfish  
74 lbs. 8 oz.

Pat Lutz of Panora set the new Iowa record for blue catfish with a 74-pound, 8-ounce fish caught Aug. 14 in the Missouri River, Pottawattamie County. The previous record of 62 pounds was held by Darrell Carter of Jefferson.



Buffalo  
63 lbs. 6 oz.

Jim Winters of Jesup set the new state fish record for buffalo, surpassing Terry Gann's 1996 record by 7 pounds, 6 ounces. Winters caught the 63-pound, 6-ounce fish in the Mississippi River, Allawakee County, Aug. 14.



Saugeye  
10 lbs. 9 oz.

Mark Jon Havinga of Webster City broke the saugeye record with a 10-pound, 9-ounce fish caught February 19 in the Des Moines River, Polk County. Mike McGilligan of Webster City held the previous record for three years.



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# IOWA CONSERVATIONIST MAGAZINE

The following list includes the top 10 entries and released of each species taken in 1999. Current state records are in **bold** type. An (\*) indicates a new state record this year.

# 1999 FISH AWARDS

Weight/Length	Date	Angler, Hometown	Location, County
<b>Bass, Largemouth (Minimum – 7 lbs. or 22")</b>			
<b>10lbs 12oz</b>	<b>5/84</b>	<b>Patricia Zaerr, Davenport</b>	<b>Lake Fisher, Davis</b>
10lbs 2oz	5/16	Karla Landers, Grinnell	Arbor Lake, Poweshiek
8lbs 9oz	6/15	Arlie VanderHoek, Pella	Quarry, Poweshiek
8lbs 6oz	6/14	David Duede, Anita	Farm Pond, Cass
8lbs 4oz	7/3	Greg Franson, Grant	Farm Pond, Montgomery
8lbs	6/28	Rick Edwards, Oskaloosa	Farm Pond, Marion
8lbs	5/22	Mark Greiner, Mapleton	Farm Pond, Monona
8lbs	3/22	Ryan David Stout, Des Moines	Sun Valley Lake, Ringgold
7lbs 12oz	7/17	Chris Floyd, Des Moines	Sand Pit, Polk
7lbs 10oz	6/20	Matt Truman, Lacona	Farm Pond, Warren
7lbs 9oz	5/31	Kevin M Eppens, Batavia	Farm Pond, Wapello
7lbs 9oz	4/7	Mike Monteleone, Newton	Farm Pond, Union
<b>Released</b>			
24"	5/31	Clifford D. Morris, Augusta	Farm Pond, Ringgold
23.5"	5/21	Randall Berg, Somers	Smithway Quarry, Webster
23.25"	8/13	Jerry D. Jenkins, Adel	Farm Pond, Dallas
23"	7/17	Chris Floyd, Des Moines	Sand Pit, Polk
23"	6/13	Nickolas E. Neppl, Council Bluffs	Farm Pond, Pottawattamie
23"	6/12	Robert Alan Shoning, Des Moines	Pond, Warren
23"	6/6	Terry Stockstrom, Indianola	Sun Valley Lake, Ringgold
22.5"	7/18	Dennis Carbaugh, Red Oak	Farm Pond, Montgomery
22.5"	7/4	B.J. Franson, Grant	Farm Pond, Montgomery
22.5"	5/5	Mike Hertges, Waterloo	Farm Pond, Poweshiek
22.5"	11/14	Mike Wilson, Waterloo	Upper Pine Lake, Hardin
22.25"	5/31	Marty Witt, Buckingham	Farm Pond, Tama
22"	6/24	John S. Baldwin, Omaha	Farm Pond, Shelby
22"	8/14	James Buck, Cherokee	Dog Creek, O'Brien
22"	6/29	Joe Buckley, Omaha	Badger Lake, Webster
22"	8/23	Tom Preston, Omaha	Lenox Lake, Taylor
22"	7/3	Scott Spires, Omaha	Farm Pond, Madison
22"	4/23	Edward Van Prooyen, Washta	Randy Walker Gravel Pit, Ida
22"	8/22	Steven J. Walker, Red Oak	Pond, Montgomery

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

<b>7lbs 12oz</b>	<b>9/90</b>	<b>Rick Gray, Dickinson</b>	<b>West Okoboji, Dickinson</b>
5lbs 1oz	5/1	Shane Timmerman, Worthington	Big Spirit, Dickinson
4lbs 12oz	9/24	Scott Echelberger, Otha	Quarry Pond, Webster
4lbs 12oz	5/14	Lanny M Pierce Sr, Joice	West Okoboji, Dickinson
4lbs 10oz	9/22	Greg L Norris, Spencer	Spirit Lake, Dickinson
4lbs 8oz	10/29	Gerry Korver, Orange City	Spirit Lake, Dickinson
4lbs 8oz	6/18	Bob Miene Jr, Monona	Turkey River, Clayton
4lbs 8oz	4/20	Larry O'Connell, Charles City	Floyd Iowa, Floyd
4lbs 8oz	5/29	Brett Wingfield, Spirit Lake	Big Spirit, Dickinson
4lbs 6oz	5/8	Larry Kunz, Curlew	Spirit Lake, Dickinson
4lbs 5oz	5/10	Ricky L Carlson, Ackley	Beaver Creek, Butler
4lbs 5oz	8/11	Steve Hansen, Milford	West Lake, Dickinson
4lbs 5oz	8/13	Merlyn Scheller, Spirit Lake	Big Spirit, Dickinson
<b>Released</b>			
21"	9/26	Michael Garthman, Spencer	West Okoboji, Dickinson
21"	10/3	Shaw La Doux, Arnolds Park	West Okoboji, Dickinson
20.75"	8/21	Chad McKeag, New Hampton	Cedar River, Floyd
20.5"	2/7	Mike Salzman, Granville	West Okoboji, Dickinson
20.25"	7/6	Ryan Ruhs, Sioux Rapids	West Okoboji, Dickinson
20"	9/11	Mitchell Creswell, Spencer	West Okoboji, Dickinson
20"	7/24	Tom Draper, Sutherland	Spirit Lake, Dickinson
20"	4/24	Dwane Krogman, Lismore	West Okoboji, Dickinson
20"	8/4	Courtney Magnussen, Sioux Rapids	West Okoboji, Dickinson

### Bass, White (Minimum – 2.5 lbs.)

<b>3 lbs 14oz</b>	<b>5/72</b>	<b>Bill Born, Milford</b>	<b>West Okoboji, Dickinson</b>
3lbs 7oz	4/18	Anthony Harrel, Sioux City	Snyder Bend, Woodbury
3lbs 6oz	4/25	Merlyn Scheller, Spirit Lake	Spirit Lake, Dickinson
3lbs 5oz	5/17	Ron Holladay, Cedar Rapids	Cedar River, Linn
3lbs 4oz	2/10	Bill Ferns, Spirit Lake	Spirit Lake, Dickinson
3lbs	10/23	Adam Kraayenbrink, Sioux Center	West Okoboji, Dickinson
3lbs	5/2	Justin Urger, Spencer	West Okoboji, Dickinson
2lbs 15oz	4/30	Joi Dublinski, Arnolds Park	Big Spirit, Dickinson
2lbs 14oz	8/2	Ron Day, Indianola	Lake Red Rock, Marion
2lbs 14oz	10/22	Mike Monteleone, Newton	Red Rock Dam, Marion
2lbs 12oz	7/2	Justin Fevold, Humboldt	West Lake, Dickinson
2lbs 12oz	11/13	Logan Kruse, Clinton	Mississippi River, Jackson
2lbs 12oz	9/20	Karen Tratchell, Newton	West Okoboji, Dickinson

### Bass, Wiper (Minimum – 4 lbs.)

<b>18lbs 15oz</b>	<b>9/97</b>	<b>Don Ostergaard, Des Moines</b>	<b>Des Moines River, Polk</b>
10lbs 13oz	10/13	Henry Trinidad, Cedar Rapids	Iowa River, Johnson
8lbs 8oz	9/15	Rodney Powell, North Liberty	Iowa River, Johnson
8lbs 6oz	9/11	Scott Kleppe, Solon	Iowa River, Johnson
7lbs 8oz	10/26	John Dirks, Anamosa	Coralville Spillway, Johnson
7lbs 8oz	11/29	Ron Holladay, Cedar Rapids	Coralville, Johnson
6lbs 8oz		Joe Willis, East Dubuque	Mississippi River, Dubuque
6lbs 4oz	10/27	Dan C Crow, Cedar Rapids	Iowa River, Johnson
6lbs	4/26	Arnie Niswander, Iowa City	Iowa, Johnson
6lbs	7/24	Christian Olson, Red Oak	Twelve Mile, Union
5lbs	7/25	Robert Coleman, Iowa City	Iowa River, Johnson

1999  
FISH AWARDS

**Bass, Yellow (Minimum – .75 lbs.)**

1lbs 9oz	4/91	<b>Bill Campbell, Council Bluffs</b>	<b>Lake Manawa, Pottawattamie</b>
1lbs 2oz	4/20	Rick L Olson, Indianola	Lake Anita, Cass
1lbs 1oz	4/3	John H Millspaugh, Mount Pleasant	Geode, Henry
1lbs 1oz	4/3	Matthew Millspaugh, Mount Pleasant	Geode, Henry
1lbs 1oz	6/5	Larry Stark, Wall Lake	Gravel Pit, Sac
13 oz	8/1	Cody Vanden Brink, Lytton	Arrowhead, Sac

**Bluegill (Minimum – 1 lbs.)**

3lbs 2oz	7/86	<b>Phil Algreen, Earlham</b>	<b>Farm Pond, Madison</b>
2lbs 3oz	9/3	Richard E Schoenauer, Dubuque	Mississippi River, Clayton
2lbs 2oz		Karli Borcharding, Ankeny	Farm Pond, Madison
2lbs 1oz	7/19	Jason Carlson, Le Mars	Farm Pond, Monona
2lbs 1oz	4/22	Andrew Meimann, Nevada	Farm Pond, Story
1lbs 14oz	4/20	Mike Augustin, Colo	Farm Pond, Story
1lbs 12oz		Daryl E Dinkla, Urbandale	Farm Pond, Adair
1lbs 8.5oz	7/3	Kathy Adrian, Madison	Farm Pond, Marion
1lbs 8oz	8/1	Brian Bland, Ruthven	Farm Pond, Palo Alto
1lbs 8oz	5/18	Van Gilmore, Clarinda	Farm Pond, Page
1lbs 8oz	3/30	Cody Kreutz, Wellman	Farm Pond, Washington
1lbs 6oz	5/23	Jill Bentley, Iowa City	Farm Pond, Johnson

**Bowfin/Dogfish (Minimum – 5 lbs.)**

11lbs 9oz	5/94	<b>Bill Gretten, Blue Grass</b>	<b>Mississippi River, Clayton</b>
5lbs 10oz	4/3	Gary L Huffman, Washington	Cone Lake, Muscatine
5lbs 10oz	6/7	Matt Lovelace, Coralville	Iowa River, Johnson

**Buffalo (Minimum – 20 lbs.)**

*63lbs 6oz	8/99	<b>Jim Winters, Jesup</b>	<b>Mississippi River, Allamakee</b>
34lbs	4/24	Barry Strang, Milford	Lost Island, Palo Alto

**Bullhead (Minimum – 2.5 lbs.)**

5lbs 8oz	1/89	<b>Michael Hurd, Ellsworth</b>	<b>Farm Pond, Hamilton</b>
2lbs 10oz	5/22	Douglas Wayne Farrell, Forest City	Pond, Adams

**Carp (Minimum – 25 lbs.)**

50lbs	5/69	<b>Fred Hougland, Glenwood</b>	<b>Glenwood Lake, Mills</b>
43lbs	4/7	Eric Paul, Cherokee	Spring Lake, Cherokee
31lbs 8oz	7/23	Dennis Dougherty, Marengo	Farm Pond, Iowa
25lbs 11oz	11/17	Andrew C Iverson, Fort Dodge	Des Moines River, Webster
25lbs	4/14	Shane Jacobs, Sioux City	Missouri River, Woodbury

**Catfish, Blue (Minimum – 20 lbs. or 35")**

*74lb 8oz	8/99	<b>Pat Lutz, Panora</b>	<b>Missouri River, Pottawattamie</b>
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**Catfish, Flathead (Minimum – 20 lbs. or 35")**

81lbs	6/58	<b>Joe Baze, Chariton</b>	<b>Lake Ellis, Lucas</b>
72lbs	8/27	Robert Sterling Mc Quire, Des Moines	Des Moines River, Polk
59lbs	5/1	Ron Mc Dowell, Farmington	Des Moines River, Van Buren

# 1999 FISH AWARDS

53lbs 8oz	6/7	John J Toms, Lowden	Wapsipinicon, Cedar
48lbs 8oz	9/26	Pat Lutz, Panora	Missouri River, Pottawattamie
45lbs	7/27	Jason Toms, Iowa City	Iowa River, Johnson
45lbs	9/11	Andy Smith, Central City	Cedar River, Linn
43lbs	9/3	Bub Goodwin, Washington	Skunk, Keokuk
42lbs 2oz	8/13	Marvin D Thompson, Cedar Rapids	Cedar River, Linn
41lbs	9/13	Morris Webber, Missouri Valley	DeSoto Bend, Harrison
<b>Released</b>			
43"	6/28	Ken E. Allsup, Oskaloosa	Edmonson Pond, Mahaska
42"	9/23	Mark Haffner, Lytton	Raccoon River, Sac
41"	9/18	John McPherson, Ankeny	Saylorville Lake, Polk
39.25"	6/19	Kevin L. Wardrip, Davenport	Mississippi River, Scott
37"	7/1	Ryan Wassink, Hull	Big Sioux River, Lyon

## Catfish, Channel (Minimum – 15 lbs. or 30")

36lbs 8oz	8/93	<b>Ron Godwin, Earlham</b>	<b>Mid. Raccoon River, Dallas</b>
33lbs 6oz	5/21	Mark Klepper, Waterloo	Cedar River, Black Hawk
23lbs 8oz	6/2	Tim Smith, Marion	Cedar River, Linn
22lbs	8/11	Shon Agard, Ankeny	Farm Pond, Polk
20lbs 6oz	6/22	William Sandvig, Rolfe	Des Moines River, Pocahontas
20lbs	6/14	Travis Mc Donald, Sanborn	East Okoboji, Dickinson
18lbs 12oz	5/17	Delano Bergemann, Welcome	Lower Gar
18lbs 4oz	5/20	Wally Johnson, Stanton	Viking Lake, Montgomery
17lbs 8oz	9/5	Breck Norton, Hartley	East Okoboji, Dickinson
17lbs 8oz	7/21	Richard Rhinehart, Brooklyn	Diamond Lake, Poweshiek
16 lbs	8/8	Bob Hike Jr, Bellevue	Green Valley, Adams
<b>Released</b>			
34"	7/5	Mark Cottrell, Kensett	Keunans Quarry, Worth
34"	8/1	Jerald Raihsback, Cedar Rapids	Pleasant Creek, Linn
34"	8/1	John Raihsback, Palo	Pleasant Creek, Linn
32"	4/4	Kent K. Kruger, Ionia	Wapsipinicon River, Bremer
31"	10/31	Brett K. Monteleone, Newton	Green Valley Lake, Union
31"	5/2	Steven J. Walker, Red Oak	Pond, Montgomery
30.5"	7/20	Mike Schwarck, Eldora	Sand Pit, Marshall
30"	5/30	Chris Grover, Olewein	Volga Lake, Fayette
30"	7/11	Gary L. Kaut, Isanti	Pleasant Creek, Linn
30"	10/10	Richard Vaughn, Muscatine	Mississippi River, Dubuque

## Crappie (Minimum – 2 lbs.)

4lbs 9oz	5/81	<b>Ted Trowbridge, Marshalltown</b>	<b>Green Castle Lake, Marshall</b>
2lbs 10oz	9/6	Jeffrey A Joens, Frederika	Wapsie River, Bremer
2lbs 10oz		Michael Rife, Williamsburg	Farm Pond, Iowa
2lbs 10oz	6/5	Raymond Uthof, Fenton	West Swan Lake, Emmet
2lbs 8oz	4/7	Thomas R Dibble, Sioux City	Farm Pond, Woodbury
2lbs 8oz	6/11	Curt Moats, Anamosa	Jones County Central Park, Jones
2lbs 6oz	9/10	David Govig, Clarinda	Farm Pond, Page
2lbs 6oz	10/31	Jim Karaidos, Des Moines	Red Rock, Marion
2lbs 5oz	3/29	Norm Rehnelt, Jackson	Big Spirit, Dickinson
2lbs 4oz	5/11	Wade Clark, Cedar Falls	Diamond Lake, Poweshiek
2lbs 4oz	4/24	Jim L Cusick, Independence	Wapsipinicon, Buchanan
2lbs 4oz	4/4	Roger Faltys, Sioux City	Iowa River, Johnson
2lbs 4oz	5/30	David Kruger, Waverly	Interstate Lake, Franklin
2lbs 4oz	7/18	Jack Machacek, Central City	Farm Pond, Jones

# 1999 FISH AWARDS

2lbs 4oz

4/1

Brian Kurt Peterson, West Des Moines

Farm Pond, Polk

## Freshwater Drum (Minimum – 15 lbs.)

46lbs

10/62

R.F. Farran, Clarion

Spirit Lake, Dickinson

16lbs 4oz

7/22

Robert M Olson, Janesville

Mississippi River, Allamakee

## Gar, Shortnose (Minimum – 2 lbs.)

4lbs 7oz

2/96

Mark Lindeman, Dysart

Des Moines River, Marion

3lbs 7oz

6/26

Mark Milleman, Ames

West Lake Okoboji, Dickinson

2lbs 12oz

7/1

Kyle Richey, Milford

East Okoboji, Dickinson

## Muskellunge (Minimum – 15 lbs. or 40")

45lbs 9oz

9/95

Jerry Curry, Mitchellville

Spirit Lake, Dickinson

37lbs 8oz

4/12

Charles E Elbert, Mason City

Clear Lake, Cerro Gordo

31lbs 12oz

8/28

Melvin Tibbetts, Cedar Falls

Spirit Lake, Dickinson

31lbs

8/8

Paul Hansch, Clarion

West Okoboji, Dickinson

29lbs 15oz

9/25

Mike Nitch, Palmer

Big Spirit, Dickinson

29lbs 8oz

9/11

Kim Krause, Overland Park

West Lake Okoboji, Dickinson

26lbs 8oz

11/21

Paul Fredrickson, Estherville

West Okoboji, Dickinson

17lbs 9oz

8/10

John Carl Doely, Sheldon

West Okoboji, Dickinson

16lbs

8/4

Dan Nieuwendorp, Annandale

East Okoboji, Dickinson

## Northern Pike (Minimum – 10 lbs. or 34")

25lbs 5oz

2/77

Allen Forsberg, Albert City

West Okoboji, Dickinson

18lbs 1oz

5/31

Dave Henkle, Vinton

Rock Quarry, Benton

15lbs

6/20

Jesse Niemeyer, Alford

Lake Pahoja, Lyon

14lbs 5oz

8/26

Kathy Spengler, Ocheyedan

West Okoboji, Dickinson

14lbs 1oz

3/28

David D Kruger, Waverly

Cedar River, Bremer

13lbs 15oz

1/10

Howard Johnson, Ruthven

Trumbull Lake, Clay

13lbs 5oz

2/24

David L Carlson, Coggon

Wapsi River, Linn

13lbs 5oz

2/6

Terry Dodson, Spencer

Big Spirit, Dickinson

12lbs 5oz

Taner Mai, Greene

Shell Rock River, Butler

12lbs 5oz

10/10

Larry Pavelec, Readlyn

Bremer

12lbs

5/6

Dallas W Shear, Alexander

Lake Cornelia, Wright

### Released

42"

7/11

Ed Thelen, Spirit Lake

Big Spirit Lake, Dickinson

41"

10/28

Mike Wilson, Waterloo

Cedar River, Black Hawk

38.5"

3/31

Alan Krueger, Center Point

Wapsipinicon River, Linn

36.5"

11/27

Barry J. Anderson, Arnolds Park

East Okoboji, Dickinson

36.5"

Michelle A. Wolfe, Newton

Red Rock, Marion

34.5"

4/20

Greg Hase, Sioux City

Snyders Bend, Woodbury

34"

6/12

Kathleen Buck, Cherokee

Dog Creek, O'Brien

34"

2/8

Chuck Tlusty, Plainfield

Cedar River, Bremer

## Paddlefish (Minimum – 25 lbs.)

107lbs

3/81

Robert Pranschke, Onawa

Missouri River, Monona

83lbs

7/25

Jason Carlson, Le Mars

Missouri River, Monona

## Perch, Yellow (Minimum – 1 lbs.)

2lbs 3oz

3/94

Daniel Borchardt, Mason City

Morse Lake, Wright

1lbs 12oz

1/17

Jon Matz, Algona

High Lake, Emmet

# 1999 FISH AWARDS

11lbs 11oz	1/17	Robert W Johnson, Milford	High Lake, Emmet
11lbs 10.5oz	1/16	Scott Severeid, Spencer	Trumball, Clay
11lbs 10oz	2/21	Mark Haffner, Lytton	Trumball Lake, Clay
11lbs 9oz	1/11	Shane Kendall, Spirit Lake	High Lake, Emmet
11lbs 8.5oz	1/15	Randy Schaffer, Storm Lake	High Lake, Emmet
11lbs 8oz	1/30	Allen Bohr, Royal	Trumball Lake, Clay
11lbs 8oz	1/14	Robert Fitzgerald, Milford	High Lake, Emmet
11lbs 8oz	2/21	Pat Flynn, Storm Lake	Trumball, Clay
11lbs 8oz	2/21	Steve Johnson, Estherville	Trumball Lake, Clay
11lbs 8oz	2/19	Greg Seaman, Dickens	Trumball Lake, Clay
11lbs 4oz	2/25	Bill Koopman, George	Trumball, Clay
11lbs 4oz	1/16	Yancy Morris, Sioux Falls	Trumball Lake, Clay
11lbs 2oz	2/17	Stanley Tinkham, Meriden	Trumball, Clay

## Sauger (Minimum – 2.5 lbs. or 18")

<b>6lbs 8oz</b>	<b>10/76</b>	<b>Mrs. W. Buser, Sloan</b>	<b>Missouri River, Woodbury</b>
4lbs	3/14	Dan Brenner, Dubuque	Mississippi River, Dubuque
4lbs	10/11	Lyle D Risinger, Sioux City	Missouri River, Woodbury
3lbs 8oz	7/14	George Karam, Cedar Rapids	Cedar River, Linn
3lbs 8oz	2/10	Wes Mahan, Sioux City	Woodbury
3lbs 8oz	11/7	Kevin Strom, Sioux City	Missouri River, Woodbury
3lbs 7oz	3/19	Curt D Wood, Garnaville	Mississippi River, Clayton
3lbs 3oz	3/12	Dan Glann, Guttenberg	Mississippi River, Clayton
3lbs 1oz	3/5	Kidron Knox, Andrew	Mississippi River, Jackson
3lbs	12/8	Ed Fox, Silvis	Mississippi River, Scott
3lbs	10/9	Kevin Ira, New Hampton	Mississippi River, Allamakee
3lbs	11/21	Donald L Ringier, East Moline	Mississippi River, Scott
3lbs	11/15	Jeanette R Wilson, Walker	Mississippi River, Clayton
<b>Released</b>			
20.5"		Chris Bremel, Muscatine	Mississippi River, Muscatine
19.5"	4/1	Larry Goranson, Manchester	Mississippi River, Clayton
19"	9/4	Ryan Hingtgen, Andrew	Mississippi River, Jackson
19"	10/30	Bob Valleroy, Stockton	Mississippi River, Muscatine

## Saugeye (Minimum – 6 lbs. or 25")

<b>*10lbs 9oz</b>	<b>2/99</b>	<b>Mark Jon Havinga, Webster City</b>	<b>Des Moines River, Polk</b>
6lbs 8oz	10/11	Albert A Mews, Inwood	Big Sioux River, Lyon
6lbs 8oz	6/26	David W Rutherford, Bellevue	Lake Icaria, Adams

## Sturgeon, Shovelnose (Minimum – 3 lbs.)

<b>12 lbs</b>	<b>4/74</b>	<b>Randy Hemm, Douds</b>	<b>Des Moines River, Van Buren</b>
5lbs 13oz	5/8	Colt Martin Age 7, Mount Vernon	Cedar River, Linn

## Sucker (Minimum – 4 lbs.)

<b>15lbs 1oz</b>	<b>9/83</b>	<b>Glen E. Dittman, Onawa</b>	<b>Missouri River, Monona</b>
4lbs 7oz	11/16	William O Sass, Waterloo	Cedar River, Black Hawk

## Sunfish (Minimum – 1 lbs.)

<b>11bs 14oz</b>	<b>6/97</b>	<b>Russ Farrell, Prairie City</b>	<b>Farm Pond, Union</b>
11bs 9oz	5/22	Ralph Mayer, Knoxville	Farm Pond, Marion
11bs 3oz	7/5	Kelley Doggett, New London	Farm Pond, Van Buren

# 1999 FISH AWARDS

1lbs 2oz	6/22	Lyle Lundgren, Orange City	Springbrook Lake, Guthrie
1lbs	6/5	Louis K Fisher, Blue Grass	Lake Sugma, Van Buren
1lbs	6/12	Danny Wulfekuhler, Lansing	Kuenes Quarry, Cerro Gordo

## Trout, Brook (Minimum – 1.5 lbs. or 15")

<b>7lbs</b>	<b>7/96</b>	<b>David Kovarik, Marion</b>	<b>Fountain Springs, Delaware</b>
4lbs	10/8	Jay L Appleby, Monticello	Bailey's Ford, Delaware
3lbs 9oz	1/4	Robert L Conrad, Washburn	Black Hawk
3lbs 9oz	8/24	William J Wilson, Walker	Coldwater Creek, Winneshiek
2lbs 15 oz	1/30	Thomas R Osterkamp, Cedar Rapids	Spring Branch, Delaware
1lbs 12oz	8/18	Deb Turnbull, Janesville	Grannis, Fayette
1lbs 8oz	6/10	Linda Merck, Marion	Little Paint Creek, Allamakee

## Trout, Brown (Minimum – 3 lbs. or 18")

<b>15lbs 6oz</b>	<b>6/95</b>	<b>Gerold Lewis, Gladbrook</b>	<b>North Prairie Lake, Blackhawk</b>
9lbs 12oz	5/21	Curt Saland, Waterloo	Glovers, Fayette
7lbs 4oz	4/9	Brad Giesking, Coralville	Little Paint, Allamakee
7lbs 4oz	5/23	John M Michel, Bellevue	Mill Creek, Jackson
4lbs 14.5oz	5/14	Trever Rhines, Manchester	Spring Branch, Delaware
4lbs 8oz	10/11	Rob Stromley, Mason City	Silver Creek, Allamakee
4lbs 3oz	2/25	Steve Hepke, Independence	Spring Branch Creek, Delaware
3lbs 13oz	2/29	Adam Sears, Charles City	Burr Oak, Mitchell
3lbs 8oz	3/21	Douglas Blunt, Charles City	Burr Oak, Mitchell
3lbs 8oz	10/10	Dean Steffen, Orchard	Burr Oak, Mitchell
3lbs 3oz	3/15	Cody Blunt, Charles City	Burr Oak, Mitchell

## Trout, Rainbow (Minimum – 3 lbs. or 18")

<b>19lbs 8oz</b>	<b>7/84</b>	<b>Jack Renner, Waterloo</b>	<b>French Creek, Allamakee</b>
14lbs 3oz	2/16	Cody A Blunt, Charles City	Trout River, Winneshiek
11lbs 8oz	5/1	Glen Peterman, Oelwein	Otter Creek, Fayette
10lbs 10oz	5/13	Curt Saland, Waterloo	Clear Creek, Allamakee
9lbs 14oz	5/24	George Meyer, Dubuque	Swiss Valley, Dubuque
9lbs 12oz	5/5	Paul Steger, Dyersville	Sny McGill, Clayton
9lbs 10oz	5/4	Willard Felderman, Bellevue	Big Mill, Jackson
8lbs 15oz	5/13	Roger Mc Connaha, Muscatine	Big Paint, Allamakee
7lbs 13 oz	6/25	David L Kock, Bettendorf	Big Mill, Jackson
7lbs 2oz	5/6	Tony Wortinger, Waterloo	Joy Springs, Clayton
6lbs 2oz	10/21	Bob Marriott, Bettendorf	Little Mill, Jackson

## Walleye (Minimum – 8 lbs. 28")

<b>14lbs 8oz</b>	<b>9/86</b>	<b>Gloria Eoriatti, Ankeny</b>	<b>Des Moines River, Polk</b>
11lbs 9oz	3/27	Dwayne Gordon, Avoca	Mississippi River, Allamakee
11lbs 8oz	10/8	Neil G Rosemeyer, East Dubuque	Mississippi River, Dubuque
10lbs 13oz	10/1	Jim Wilson, Waterloo	Wapsi River, Buchanan
10lbs 10oz	3/17	Paul M Hallberg, Cedar Rapids	Mississippi River, Allamakee
10lbs 9oz	6/14	Jack Olds, Davenport	East Okoboji, Dickinson
10lbs 8oz	5/2	Wes Bowers, Sioux City	West Lake Okoboji, Dickinson
10lbs 6oz	3/26	Bill Mc Kean, Waterloo	Cedar River, Black Hawk
10lbs 4oz	10/21	Ronald D Behrends, Monticello	Mississippi River, Jackson
10lbs 4oz	10/3	Jason Lee, Denison	West Okoboji, Dickinson
10lbs 2oz	3/23	Gerry Oberbroeckling, Holy Cross	Mississippi River, Clayton
10lbs 2oz	4/2	Tammy Steffen, Sumner	Mississippi River, Allamakee

# 1999 FISH AWARDS

10lbs 2oz	3/30	Richard E Walton, Dubuque	Mississippi River, Dubuque
<b>Released</b>			
30"	10/14	Robert E. Christensen, Maquoketa	Maquoketa River, Jackson
29.75"	6/13	Dan Brenner, Dubuque	Mississippi River, Allamakee
29.5"	5/1	Jon Ruenle, Cleghorn	West Okoboji, Dickinson
29.25"	3/29	Ed Reed, Cedar Falls	Shellrock River, Butler
29"	4/1	David Markert, Manson	Des Moines River, Webster
29"	6/15	Chris Paul, West Branch	Mississippi River, Allamakee
28.75"	11/11	Kim Swanson, Dolliver	East Okoboji, Dickinson
28.5"	7/2	Ira Dunsworth, Davenport	Mississippi River, Clinton
28.5"	5/6	Rick Krebsbach, Spencer	West Okoboji, Dickinson
28.5"	10/15	Shaw Le Doux, Arnolds Park	West Okoboji, Dickinson
28.25"	9/1	Dwight Durfey, Cedar Rapids	Mississippi River, Allamakee
28"	2/14	Zac Binder, Royal	West Okoboji, Dickinson
28"	1/20	George L. Bishop, Pella	Des Moines River, Marion
28"	5/2	Randy Meyer, Sibley	West Okoboji, Dickinson
28"	5/21	Terry Stockstrom, Indianola	Sun Valley Lake, Ringgold

## White Amur (Minimum - 25 lbs.)

61lbs 8oz	5/98	Tyler Warner, Greenfield	Lake Greenfield, Adair
55lbs	6/20	Jeff Powell, Casey	Lake Greenfield, Adair
53lbs 5oz	4/12	Ron Tamez, Bellevue	Schley Park, Harrison
50lbs 1oz	4/6	Matt Kono, Center Point	Farm Pond, Linn
45lbs	5/27	Terry Green, Walnut	Viking Lake, Montgomery
43lbs 8oz	8/10	Bill Harsha, Baxter	Farm Pond, Jasper
40lbs	7/11	Christine Frazer, West Union	Volga Lake, Fayette
33lbs 8oz	5/29	Marty Erickson, Massena	Cold Springs, Cass

# 1999 FISH AWARDS 1999

•If you catch a fish eligible for submission for a big fish award, please fill out this entry blank. For many of the predator species, you may release the fish and still receive the big fish award by meeting the listed length limitations.

One witness must attest to the weight of the fish to the nearest ounce on scales legal for trade, or to the length, which is measured from the tip of the snout to the tip of the tail (total length). If there is some doubt in species identification, the angler should contact the nearest DNR personnel in the area for verification.

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

•The entry blank should be filled out and mailed with a photo or color slide of the angler and fish to:

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

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

Name \_\_\_\_\_  
 Street/RFD \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Species \_\_\_\_\_  
 Date \_\_\_\_\_  
 Name of Lake/Stream \_\_\_\_\_  
 County where caught \_\_\_\_\_  
 Length \_\_\_\_\_ Weight \_\_\_\_\_  
 Bait or lure used \_\_\_\_\_  
 Was this fish released? (circle one)    Yes    No  
 Witness  
 Name \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

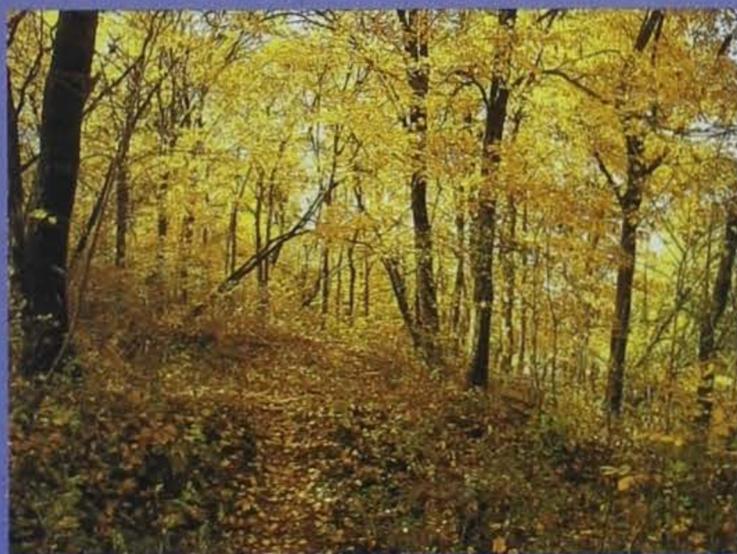
(Entries of fish caught during the current year must be sent to the Iowa Department of Natural Resources by January 15 of the following year.)

# There's a Change in the Air



## CONSERVATIONIST

DEPARTMENT OF NATURAL RESOURCES



The Electronic Licensing System for Iowa (ELSI) is coming later this year, providing a new way to buy recreational licenses in Iowa. As a thank-you to hunters, anglers and trappers for using the new system, a special one-year subscription rate to the *Iowa Conservationist* will be offered to each individual buying a license.

We couldn't, with good conscience, offer the special rate to them without offering it to our regular subscribers. Therefore, we are offering YOU the same discounted rate available through the electronic licensing

system — one full year, six exciting issues, for the low price of \$6. Subscribers receive five issues packed with spectacular color photos and natural resource articles, as well as our popular calendar issue.

This is the last chance to get a great deal on a one-year subscription before rates increase July 1. After more than eight years without a price change, the *Iowa Conservationist* subscription rates will increase to \$12 for one year, \$18 for two and \$24 for three.

So subscribe now at the low one-year rate of \$6. Just consider it a thank-you from us.

Send this form with \$6 to the Iowa Department of Natural Resources, Wallace State Office Building, Des Moines, Iowa 50319-0034. Limit 1 one-year subscription per person. Please clip and enclose mailing address from back cover.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_

SS# \_\_\_\_\_



Jon Christensen

# Timing is Key

by Jon Christensen

After the ice goes out in the Iowa Great Lakes area many anglers put away their ice fishing gear and wait for the walleye season to open. But some anglers have chosen another, often overlooked option. They've turned to the excellent panfish fishing occurring on East Okoboji from late April through July.

During the spring and early summer period several species of panfish move from the deeper, cooler waters of East and West Okoboji to the shallow (warmer) waters for spawning. This behavior pattern is predictable and anglers can take advantage of a great opportunity!

## An Optimal Spawning Environment

### Temperature

Several factors combine for optimal spawning conditions. Weather and time of year, which affect water temperatures

and day length, are two very important components. Another critical factor is physical habitat, which is dependent on the natural characteristics of a lake or artificial objects that improve the physical habitat.

East Okoboji has a maximum depth of approximately 7-feet north of the "Narrows" (local terminology for a noticeably constricted area in the upper one-third of East Okoboji). This shallow area of the lake is one of the first locations to warm up in the spring, offering ideal spawning temperatures for bluegill, crappie, yellow perch and white bass. The inflow of water from East Okoboji Slough as well as the spillway, which carries water from Spirit Lake, also attracts fish to the north end of East Okoboji. East Okoboji Slough provides warmer water to the lake, which raises the water temperature in the area and provides ideal water temperatures for spawning. Water flowing out of the

spillway from Spirit Lake attracts various species of fish; some come to spawn while others come to feed on smaller fish or invertebrates. Panfish also find suitable "early" spawning habitat on Upper Gar, Lower Gar, Minnewashta and other areas of East Okoboji.

Fish may be more active in different areas throughout the day. In the morning panfish are often found along the west shore of the lake. The morning sun warms this side of the lake first. The west shoreline north of the Highway 9 Bridge can be a great area to fish in the early morning hours. Boat and shore anglers often find panfish on the west shoreline near brush habitat and docks.

Panfish will move to deeper areas throughout the day and throughout the spring as the water warms. Towards late afternoon and evening panfish will usually be more active on the east shoreline since the setting sun will offer a few more hours of warmth. Anglers should concentrate efforts around docks, and in the area south of the Pioneer Bait Shop to the north end of the Highway 9 Bridge. Another area to fish during late afternoon and evening is the shoreline below Camp Foster.

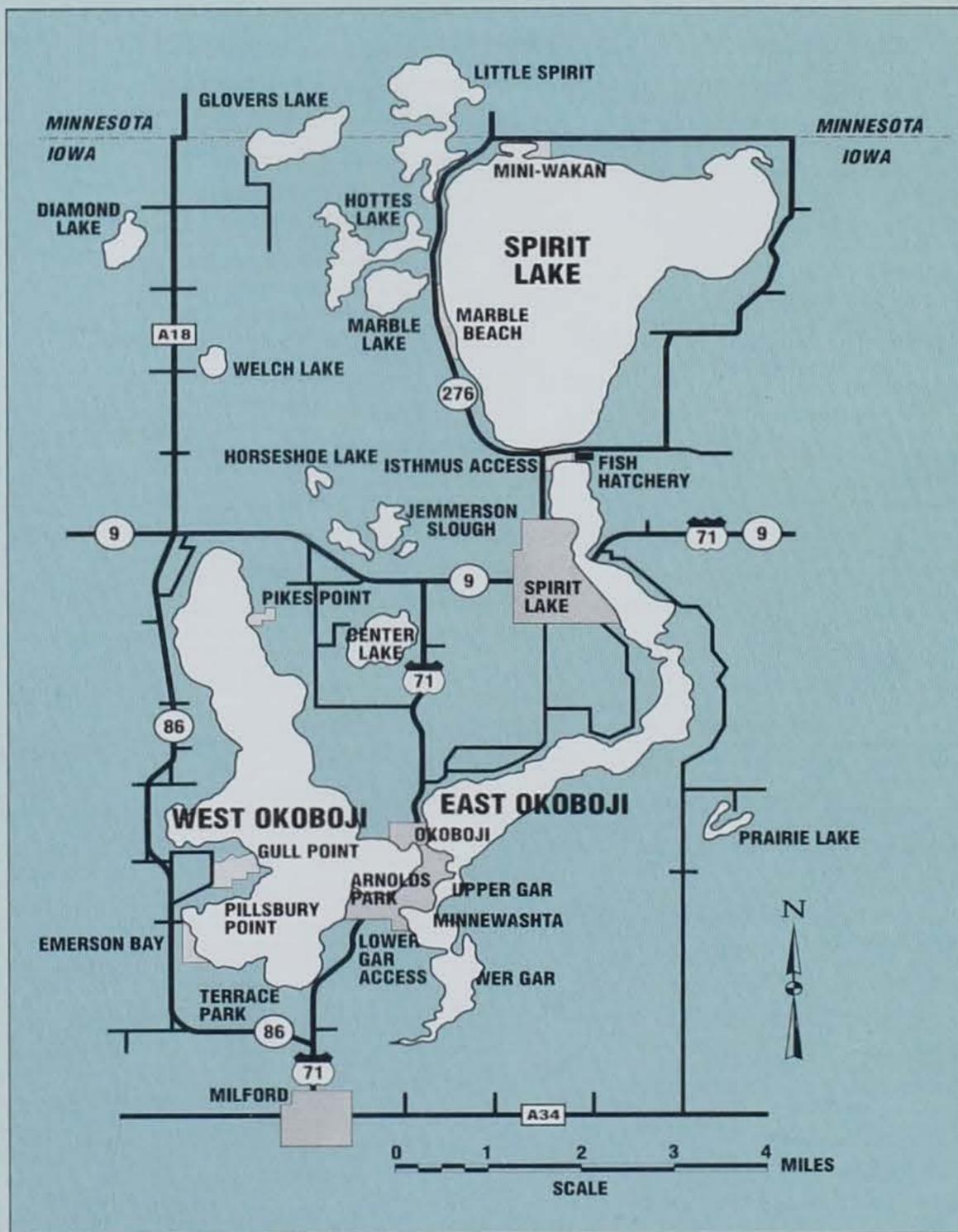
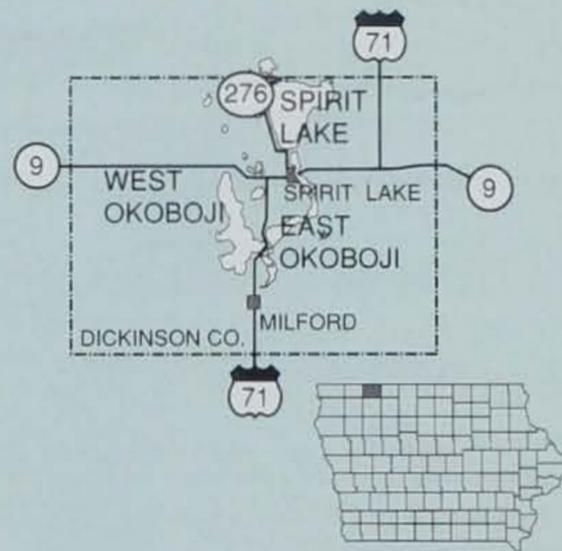
### Habitat

Once panfish find the ideal water temperature to spawn, they will seek the best physical spawning habitat in that particular area. Panfish use many different types of natural habitat. Shallow areas with sand and gravel are ideal for panfish to build nests.

Panfish usually like some cover. Besides being ideal for spawning purposes, cover provides protection from predators and also attracts food such as baitfish and insects. Brush, logs, aquatic plants and overhanging limbs are suitable areas to locate panfish. Cover can make the difference between a good fishing outing and a poor one.

Spawning panfish can be finicky, but once the bait is placed in the spawning area, a strike is almost a

certainty because nesting crappie and bluegill will strike baits out of aggression rather than hunger. At times, spawning beds can be difficult to locate in East Okoboji because the water is often turbid. Instead of relying solely on seeing a spawning bed, anglers should consider fishing around structure or look for fish suspended below the surface. A pair of polarized sunglasses can really make a difference under these conditions.



**In the Great Lakes area, yellow perch are the first panfish to spawn, usually around mid-April.**

Many fish species also use the artificial habitat in East Okoboji. Private and public docks are constructed soon after ice out. These docks can offer great fishing for both shore and boat anglers. Docks in deeper water with either vegetation or brush nearby usually attract larger numbers and bigger panfish. Anglers may have greater success fishing docks with wood pilings covered with algae, which attracts insects and baitfish — a food source for panfish. Other artificial structures worth trying are the Highway

9 Bridge, Hinshaw Bridge and the Trestle Bridge where East and West Okoboji connect. Once an area with good numbers of fish is located, remember it — panfish often use the same areas to spawn each year.

### **East Okoboji's Panfish**

One of the components of an integrated fishery assessment protocol for East Okoboji involves fyke netting, conducted during mid-April in the area north of the Narrows. Yellow perch and crappies are the primary species of panfish found in the nets at this time of the year. Good numbers of quality (8- to 9-inch) as well as 10-inch and larger yellow perch were sampled during the spring in 1999. Anglers can also expect to find several 10-inch crappie from the 1996-year class. Larger adult bluegills were also observed in the nets, which bodes well for the 2000 fishing season.

### **Yellow Perch**

Yellow perch are the first panfish to spawn in the Iowa Great Lakes. They move from deeper wintering areas to shallow spawning areas around mid-April, once the water reaches 43 to 48 degrees F. The male perch are the first to arrive at suitable spawning areas. The larger female perch are found in deeper water immediately prior to spawning.

Perch will use a variety of spawning habitat, but prefer areas with sand and gravel or rocky areas with scattered vegetation and woody debris. East Okoboji has several yellow perch spawning areas. They can be found in the spring along the east side of the lake north of the Highway 9 Bridge and also near the Lutheran Camp, Parks Marina and Camp Foster. Look for long clear gelatin-like strands of yellow perch eggs in potential spawning habitat. Since all yellow perch do not spawn at once, these are good areas to fish or to keep in mind for the future.



Ron Johnson

Spawning perch are relatively easy to catch once they are located. Anglers usually know perch are biting when they feel a quick tap on the line. Both live and artificial baits work well. Slip bobber rigs equipped with smaller short-shanked hooks or 1/16- to 1/32-ounce jigs are preferred because of the perch's smaller mouth. Minnows, worms, waxworms or wigglers also work well. Tube jigs, ice flies and small spinners are sometimes effective and anglers may want to experiment with a variety of colors. Perch are usually attracted to bright flashy baits, but darker colors can sometimes trigger a bite. Allow the bait to sink slowly and set the hook when you feel the slightest bite. Small splitshot sinkers can be added for easier casting. Jigs cast from a boat towards shore work well this time of year if the bait is allowed to swing slowly back to the boat until fish are located.

After spawning, yellow perch can still be found in spawning areas. The perch will eventually seek deeper, cooler water once East Okoboji's water temperature begins to warm.

### Crappie

Crappie are the next to spawn and usually begin spawning in East Okoboji around early to mid-May when the water reaches about 62 to 65 degrees F. Most crappies in East Okoboji begin moving off spawning areas shortly after Memorial Day.

Crappies can be found spawning anywhere from 2 to 10 feet deep with white crappies spawning in slightly deeper water than black crappies. Crappies are notorious for spawning around woody debris. They become very vulnerable to angling during the spawn since they move in close to the shoreline and are easy to locate around logs, sunken trees and docks.

Some good areas to find East Okoboji crappie are along the west shoreline north of the Highway 9 Bridge. The lake does not have a lot of aquatic vegetation or woody debris;

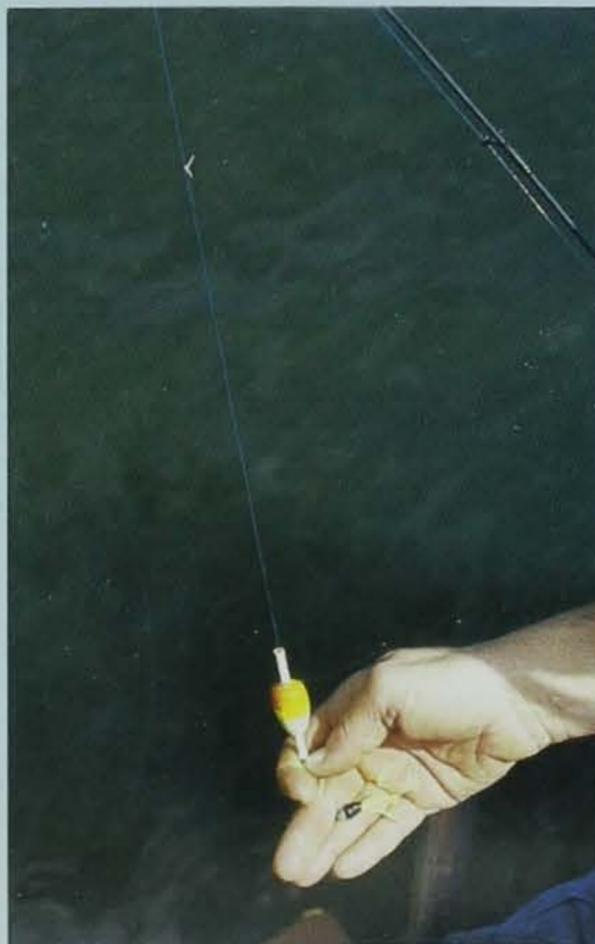
however, there are some brushpiles and logs along the Highway 9 shoreline which yield fish. Another area for crappie is in the northwest corner of the lake. Most crappie caught in the northwest corner are caught prior to spawn.

According to creel harvest records compiled for East Okoboji, anglers caught the most crappies in May and June. April crappie fishing can also be good for pre-spawning crappies, but it may be tougher to locate fish because they are a bit more sedentary.



Ken Formanek

Areas with woody debris are favorites of spawning crappies. Slip bobber rigs such as this one (below) with a crappie jig, work well.



Jon Chistensen



Jon Christensen



Sonny Satre

The bulk of all white bass caught in the Great Lakes are caught in the spring. The catch at top was taken in May from the East Okoboji spillway.

Opposite page: Bluegill nests resemble large bowl-like depressions or elephant tracks.

Crappie can be caught on a variety of tackle and baits. Slip bobber rigs again work well for crappie as well as other panfish. Crappie can accept larger baits than other panfish due to their larger mouths. Number 4- or 6-sized hooks baited with a minnow work well for crappie. Hook the minnow through the back above the spine when vertical fishing under slip bobbers.

When crappies are really active, jigging around brush or docks also work well using 1/16-ounce jigs fished either with or without bait. Both marabou and plastic-bodied jigs in black, white, yellow, chartreuse or a combination of these colors catch fish. Minnows used on jigs should be hooked through the lips for proper jig action.

Small spinners can work great on crappies, too. There is a variety of tackle on the market, but it usually comes down to whichever tackle you have had success with and have confidence in. Look for suspended crappies above nests. Boat anglers should not approach too close to potential fishing spots and keep noise to a minimum because crappies can be easily spooked.

### White Bass

White bass spawn about the same time as the crappies. Their spawning time peaks around mid-May in East Okoboji when the water temperature reaches about 60 degrees F. The runoff of water from Spirit Lake into East Okoboji has been a traditional spawning area for white bass. There is usually plenty of current around the sand and gravel bottom, where white bass prefer to spawn. White bass also come to the area during the spring to forage on the abundant numbers of spottail shiners in this area.

White bass usually spawn for about a two week period in East Okoboji — providing some dynamite fishing! When spawn is in full force, the shoreline is clustered with anglers catching large numbers of white bass. The bulk of all white bass harvested in the Great Lakes area are caught in the spring, and the

majority are likely caught below the spillway. Fewer adult fish are caught throughout the rest of the year, since white bass seek deeper open-water after they spawn.

White bass can be caught readily with the right tackle and technique. Live bait, especially medium-sized shiners or minnows, works great on white bass. Shiners can be either cast or fished below a bobber. Anglers are also successful using artificials, such as small crankbaits and spinners. White jigs work very well fished alone or in combination with live bait.

### Bluegill

Bluegill are the last of the panfish species to spawn in East Okoboji. Activity begins anytime from late May to mid-June when the water temperature reaches the high 60- to 70-degree F range. The bulk of East Okoboji's bluegills are harvested in the months of May, June and July.

Bluegills begin looking for warmer water soon after ice-out. An early fishing spot for bluegills is in the shallow northwest corner of East Okoboji. This water warms fairly rapidly and offers some protection from the wind. Bluegills will typically stage near spawning habitat prior to spawning.

Pre-spawning bluegills may be found from mid- to late May, around crappie spawning sites, offering anglers a mixed bag of fish. They move into shallow areas near the shoreline to construct their nests, which resemble large bowl-like depressions ("elephant tracks") in sand or gravel. These nests can be seen when the water is clear. Male bluegills can be caught off these nests, while the females are usually found in slightly deeper water.

The area north of the Highway 9 Bridge is a good place to find both pre-spawning and spawning bluegill. Look for these fish in shallow water near docks and brush along the west shoreline of East Okoboji. Spawning bluegill

can also be found along the east shoreline just north of the Highway 9 Bridge, near the Hinshaw Bridge, around the public docks below the Trestle Bridge between East and West Okoboji and the shoreline below Camp Foster.

Catching spawning bluegills does not adversely affect the overall population since these fish are very abundant and prolific spawners (bluegills produce an average of about 64,000 fry per nest).

The bluegill's mouth is designed primarily for eating small insects. Small artificial baits that resemble insects usually work well. Some good artificials to use are flies, ice flies, poppers and small jigs. Live bait such as waxworms, wigglers, mealworms and worms are also very effective on artificial lures, or used with slip-bobber rigs on number 10, 12, or 14 hooks.

### Tackle and Gear

Fishing is a lot like golf in one aspect; just as different clubs are used throughout a golf game; it takes different gear for different species of

fish. Panfish anglers should consider using 5-foot, 6-inch to 6-foot spinning rods with an ultra-light, light or medium-light action. Smaller ultra-light spinning reels or slightly larger reels will work well for panfish. Select a good 2- to 6-pound monofilament for panfish. When fishing heavy cover anglers will have fewer problems if they use a 4- or 6-pound line.

Spring fishing for panfish on East Okoboji is an overlooked experience providing a variety of quality-sized fish and many memories. There is a 25-fish limit on yellow perch. There is no minimum size or catch limits for bluegills, crappies and white bass. Now, you know when, where and how to fish for panfish. It's springtime — winter is over — enjoy the day and remember timing is key!

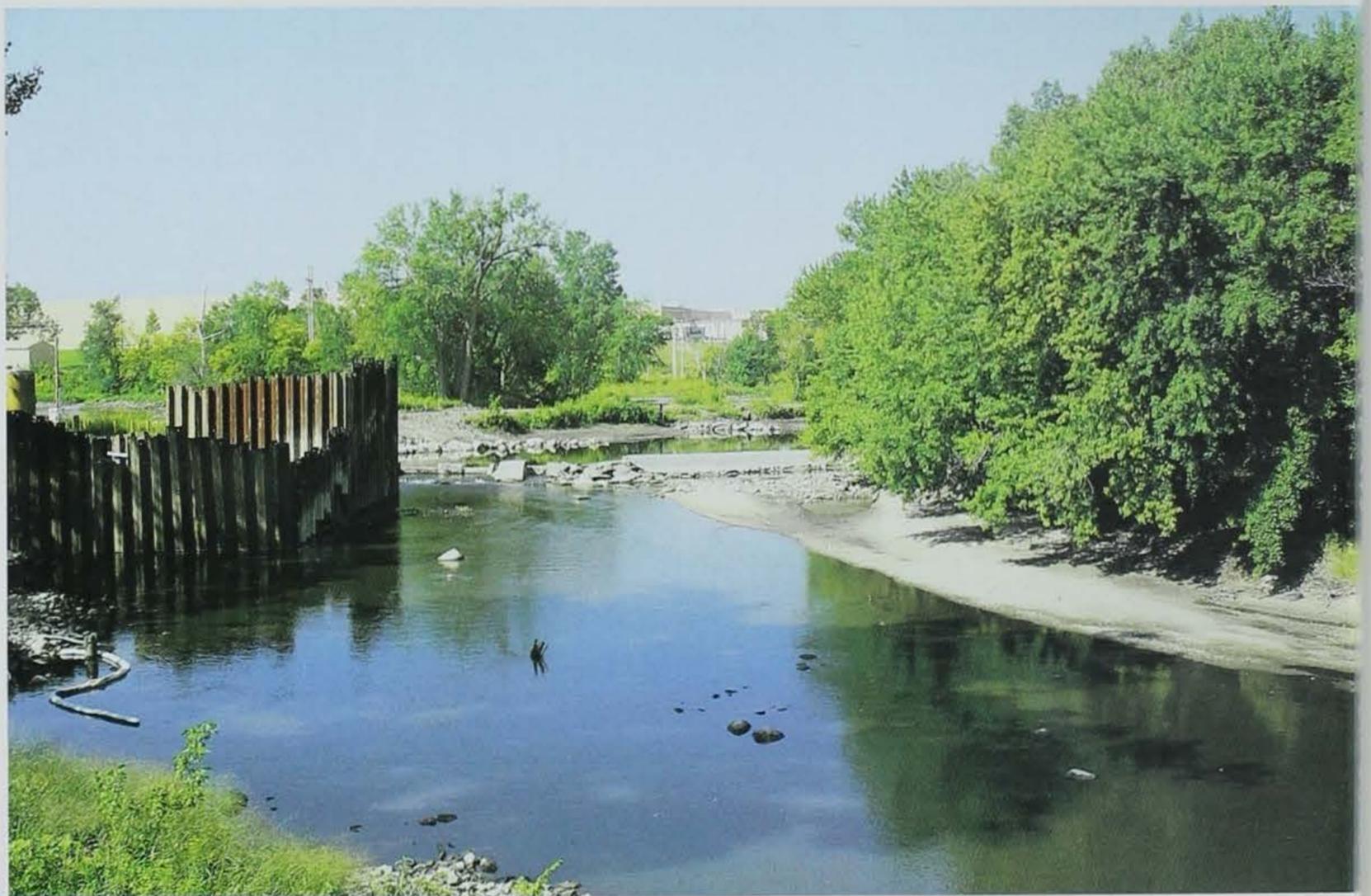
*Jon Christensen is a natural resource aide stationed in Spirit Lake.*



Jim Christanson

# Coal Tar Cleanup On The Boone River

## Webster City Remedies A Potential Problem



The Frigidaire plant overlooks the site of last summer's work on the Boone River. The plant sits on the site where the former manufactured gas plant operated for nearly 40 years.

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Article and photos by  
Mick Klemesrud

Sure, there were problems. Rain. Flooding. Migrating contaminants. But overall, the project to clean up the coal tar in the Boone River in Webster City went smoothly.

Webster City spent about \$1.5 million and 11 months to remove coal tar from under the rock and sediment in the Boone River, and to install a containment system to prevent any more from reaching the river. The area is a floodplain and is just below a former manufacturing gas plant site. The plant operated from 1907 to 1947.

A Frigidaire Company plant sits there now.

Manufacturing gas plants burned coal to provide fuel for street lamps in growing frontier communities. Coal tar is a by-product of that process. After the plant was demolished, Electrolux built a facility where the plant once stood, possibly damaging the underground area where the coal tar was stored. The coal tar migrated toward the river and pooled in the flood plain area.

The DNR and Barr Engineering designed a system to intercept the flow

of the product and to collect and pump the material to a central location for disposal. The system was operating successfully until a few years ago when the rains came. High waters eroded the riverbank, removing a barrier and helping release the coal tar.

Johanshir Golchin, project coordinator for the DNR, emphasized the danger in working with coal tar.

"Health and safety training is required when working with coal tar," Golchin said. "What we had was a combination of toxic and carcinogenic material."

Investigators discovered three channels of coal tar migrating toward the river from its original depository, a main channel and two smaller branches on each side. Signs warned residents to stay away from the area.

Brian Stroner, the environmental and safety coordinator for Webster City oversaw the project. Stroner said in the beginning they discovered the coal tar on the riverbed and four to five feet below the river bottom, but it stopped at the impermeable clay layer below the river.

Webster City, Barr Engineering and the DNR developed a plan to enhance the collection and recovery system, remove the coal tar and contaminated soil from the river and rebuild the river bottom and stream bank. Construction began in January 1999. To better manage the project, the contaminated riverbed was divided into several areas called cells.

"The first cell we did was the smallest section and we did that intentionally," Stroner said. "We tried to get an idea of how to do the bigger ones a little bit better. We had a little trouble with that first cell because that stuff is just like water, it goes anywhere it want's to."

It took the five-man construction crew eight to 10 days to drive the sheet pilings into the river and riverbank to make a cell. The pilings interlock and a mixture of bentonite, sawdust and cracked corn is packed outside the

beams to help keep the water out. "Nothing keeps it completely waterproof, but it helps," Stroner said.

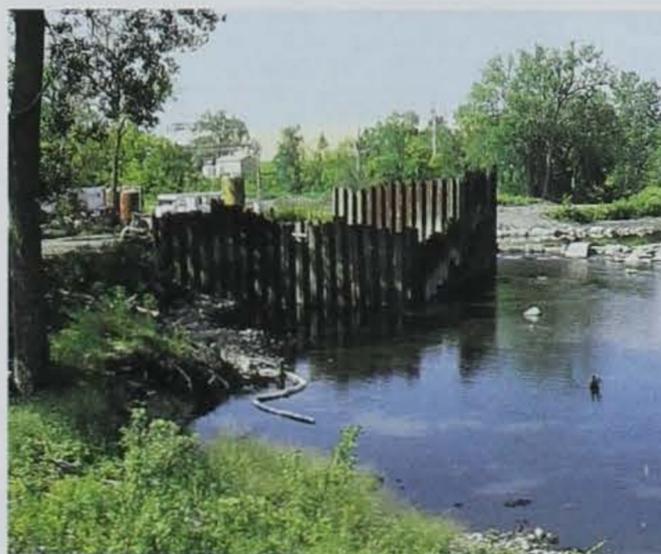
Pumps remove the water at a rate of 400 gallons per minute and will run while the work goes on inside. A backhoe scoops the river bottom and gently searches for the clay liner. Each scoop sends the black material rushing toward the surface glistening in the sunlight. It smells like diesel fuel.

The water pumped from the cell goes through an oil and water separator, a carbon filter and a bio-med clay filter to remove the coal tar. The filtered water is sent to the sanitary sewer for final treatment.

An nearby area about the size of a football field was graded and packed to be the drying site for the excavated soil. The plan was to ship the soil to Minnesota for incineration, but it would not dry to an acceptable level.

"It has to be seven percent or less (moisture content) and we let our's dry out for months and months and worked it and worked it and the lowest we could get it was 10 percent," Stroner said. So, now disposal became an issue.

The silt and excavated soil, estimated at more than 5,750 tons, was put through a series of tests to determine the level of contamination and if it could be accepted at the Hamilton



The product swirls around on top of the water after the backhoe digs into the riverbank. There is a strong smell of diesel fuel.

Outside the beams a mixture of bentonite, sawdust and cracked corn was packed to help keep the water out. "Nothing keeps it completely waterproof, but it helps," Stroner said.

County landfill. Tests proved it could go to the landfill, but the bad news was it would cost them. The total disposal bill was more than \$265,000.

Work progressed slowly on the five areas where coal tar was discovered. Crews were flooded out three times.

"We'd get good weather, come down, pump out the pods, work one day and here come the rains," said Bob Williams, construction site superintendent.

The crew used the same pilings for each cell. After cleaning out the contaminated soil, the work shifted to rebuilding the riverbank and bottom.

Compacted clay and loose rock replaced the silt and river rock. A collection system was installed to intercept any remaining coal tar, so it could be removed.

The collection system drains the coal tar-based liquid material and water to four collection points where it will be

pumped and stored in two holding tanks and allowed to separate. The coal tar moves to the bottom, is removed and sent for treatment.

Large boulders were arranged as wing dams to protect the new riverbank from fast currents that could expose more coal tar. The reliability of the system is critical because there is no way to tell how much coal tar was stored on the site and how much has pooled down by the river.

"Estimates vary," said Golchin. "Anywhere from 35,000 gallons to as much as 60,000 gallons. The production records from the old gas plant would have given us an indication, but they are not available."

The project was completed in early November. The machinery is gone, as are the pilings and soil.

There are plans this spring or summer to finish a bike and recreation trail that follows the river. The old city pond that sits in the flood plain near the river may be converted to a wetland and the area possibly turned into a park.

The Boone River is one of the more scenic rivers in Iowa. "It is probably one of our most popular canoeing streams," said Jim Wahl, fisheries biologist for the DNR. "The water quality is very good."

"The old dam, removed in the clean-up, was a popular fishing hole for local anglers, producing smallmouth bass, catfish, crappie and an occasional pike," Wahl said.

"There is no problem eating fish from the river," Wahl said. "And it sounds like the new dam will provide some good habitat."

According to Golchin, whenever



**The contaminated soil was stacked nearby to dry before going to the landfill.**

**The new wing dams (right) will protect the riverbank from future erosion and provide some new river structure.**



one of these projects are completed, generally the value of the property goes up.

"What has happened, is many of these sites are centrally located in the communities, in the prime real estate areas," Golchin said. "When the pollution happened, the land was a liability. After the remedial activity, the value of the real estate increases and,

historically, so does the value of the surrounding neighborhood."

Golchin cited a number of examples.

In Davenport, the Quad City Times building sits on a former manufactured gas plant site. The \$20 million investment helped spur other downtown development.

Waterloo Recreation and Art Center

was built a few years ago on one of these sites.

After finishing a clean up at a Cedar Rapids site, a high-rise federal building will be built.

"It is always a good idea to go after these sites not only to fix the problem, but because history has shown us that development will occur after the clean up," said Golchin.

Iowa has 52 former manufactured gas plant sites in different stages of cleanup.

*Mick Klemesrud is an information specialist for the department in Des Moines.*

## Manufactured Gas Plant Sites Under Consent Order

Ames (College Park Site)

Anamosa

Atlantic Poplar Street

Atlantic State Street

Belle Plaine

Boone

Burlington

Carroll

Cedar Rapids

Centerville

Chariton

Charles City

Cherokee

Clarinda

Creston

Davenport (Rejuvenate Davenport)

Davenport - Marquette St. Service Center

Des Moines (Two Rivers)

Dubuque (Key City)

Grinnell

Hampton

Independence

Iowa Falls

Keokuk

Knoxville

Marshalltown

Mt. Pleasant

Muscatin

Nevada

Oelwein

Osceola

Oskaloosa

Ottumwa

Pella

Pleasant Hill (Vandalia Road)

Red Oak

Sioux City

Storm Lake

Vinton

Washington

Waterloo

(Recreation

Center)

Waverly

Webster City

### EPA Lead Sites

1) Fairfield

2) Dubuque

(Peoples Natural Gas Site)

3) LeMars

4) Iowa City

5) Council Bluffs

6) Decorah

7) Clinton

8) Waterloo (Sycamore Street site)

9) Mason City

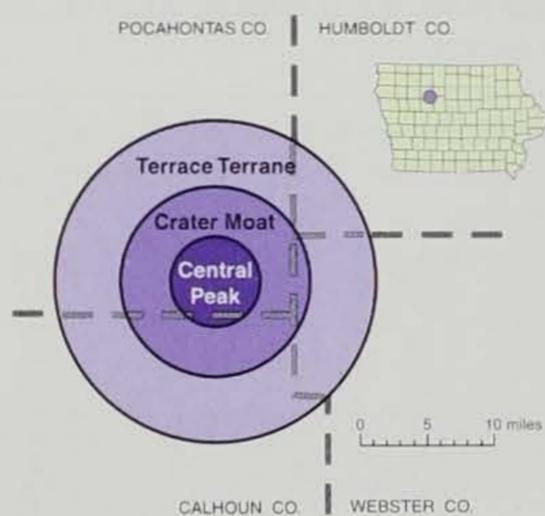


**After 11 long months, the job is complete. Nature will work magic this spring and it will be hard to tell there was ever a problem.**

# IOWA'S

## MANSON IMPACT

# STRUCTURE



Location of Manson Impact Structure and principal features of its crater.

by Raymond R. Anderson

**S**eventy-four million years ago, near the end of the Cretaceous Period, central Iowa lay near the shoreline of an inland seaway that separated eastern North America from rapidly rising mountains to the west. The low-lying Iowa landscape was home to a rich and varied population of plants and animals, including dinosaurs and small mammals. These organisms lived in a fern-rich, mixed conifer and deciduous forest with a warm, moist climate much like today's Gulf Coast. The environment dramatically changed when a stony meteorite, more than one mile in diameter, weighing about 10 billion tons and traveling about 45,000 miles per hour, blasted through the atmosphere and crashed to earth.

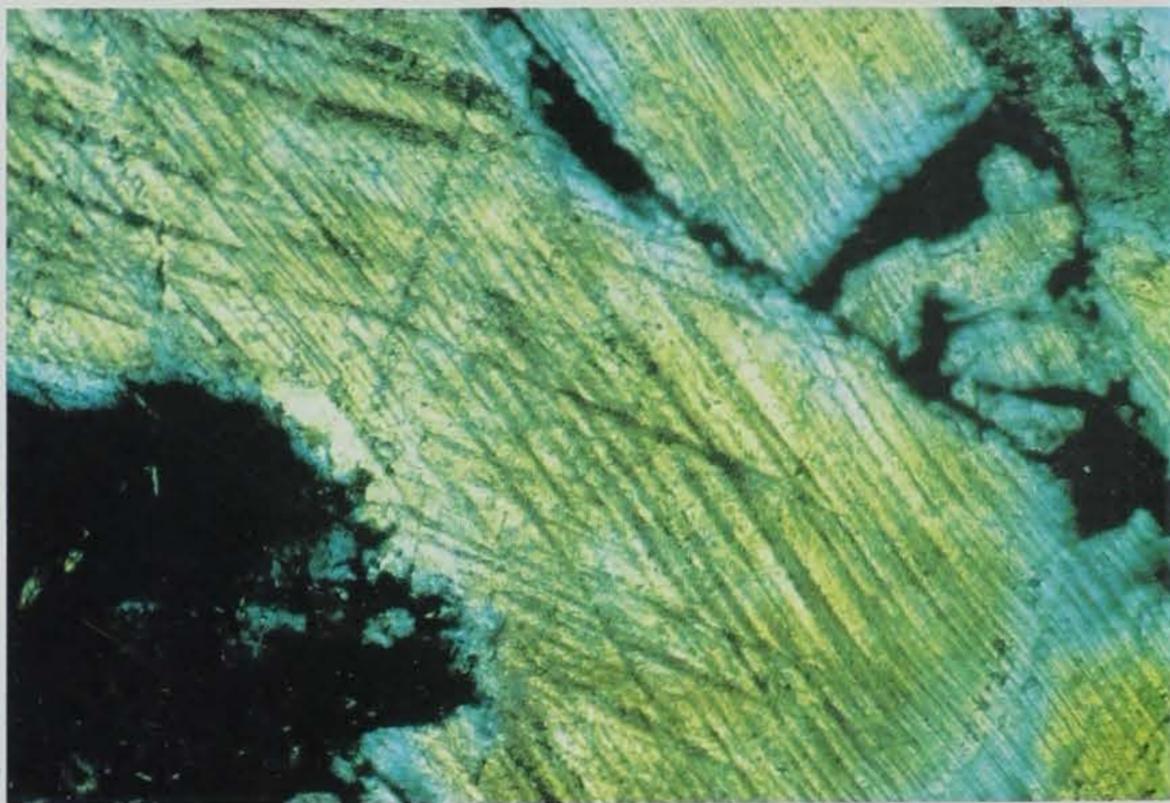
In the fraction of a second that it

took the meteorite to penetrate about one mile into the ground, the shock wave created by the initial contact with the surface reached the back side of the meteorite and its potential energy was transformed to kinetic energy, the equivalent of about 10 trillion tons of TNT. An electromagnetic pulse moved away from the point of impact at nearly the speed of light, instantly igniting anything that would burn within approximately 130 miles of the impact (most of Iowa). The shock wave toppled trees up to 300 miles away (Chicago,

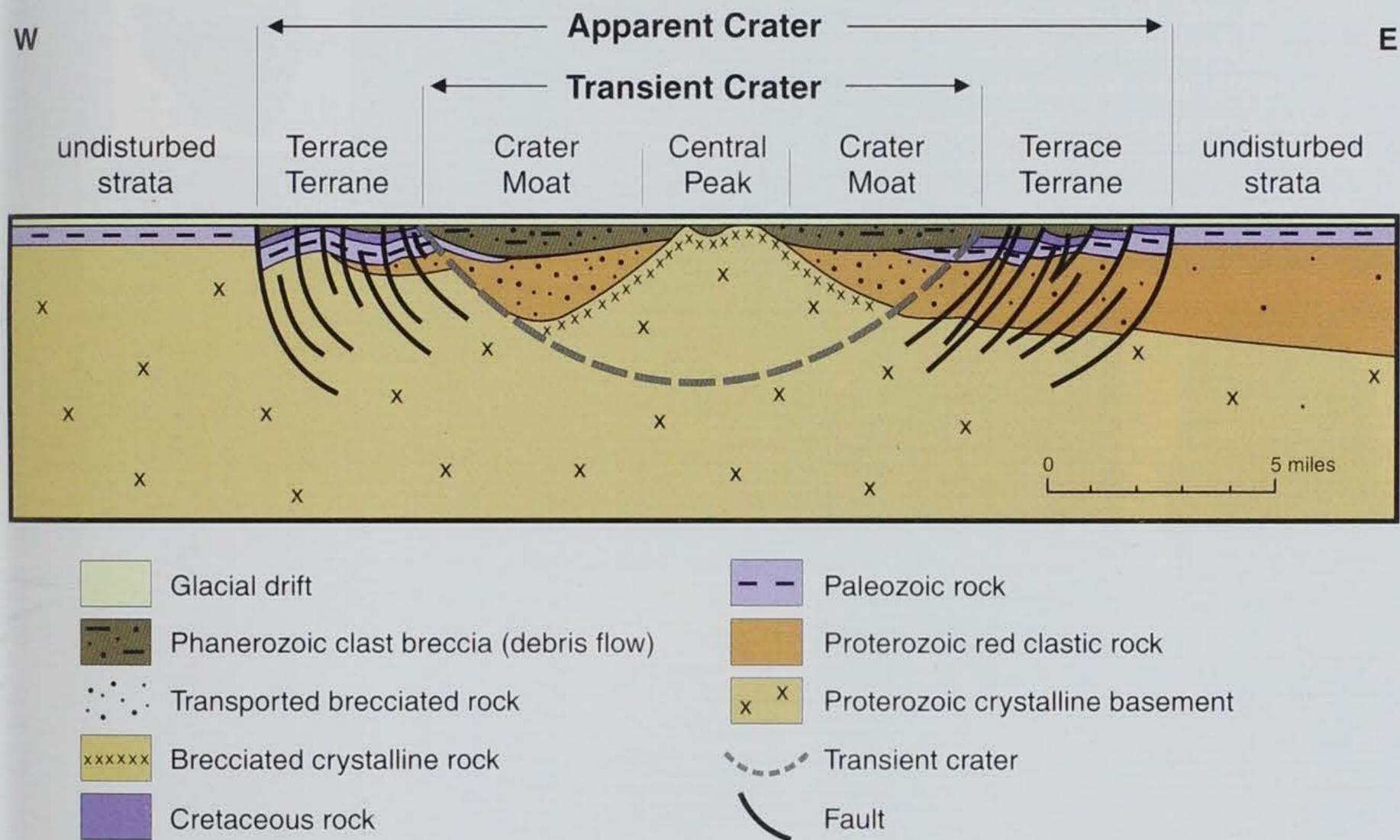
Minneapolis, St. Louis), and probably killed most animals within about 650 miles (Detroit, Denver). The blast left a crater over 24 miles in diameter centered in an area of unimaginable death and destruction.

Today there is no land surface expression of the crater that exists 100 to 300 feet below the town of Manson (Calhoun County), which lies near the center of the crater that bears its name.

The area of the Manson Impact Structure has been known as a geologic anomaly since the early 1900s. At that



A microscopic view through a thin-section of rock from the Manson Crater's Central Peak is shown. Lines in the brownish quartz grains are impact-derived "parallel deformation features." Such features are found at meteor impact sites around the world and are considered irrefutable evidence of extraterrestrial impacts. Horizontal field-of-view is 3 mm.



**Cross-section view of the geologic features of the Manson Impact Structure**

time, a new water well for the town of Manson encountered an unusual sequence of rocks that yielded the only naturally soft groundwater known in Iowa. The first investigation of the anomaly, in 1955, consisted of drilling two research cores and studying rock samples collected during water well drilling in the area. Because meteorite impact craters were almost unknown at that time, the feature was interpreted as a "cryovolcanic structure," a crater produced by a giant explosion of volcanic gases. The meteorite impact origin for the structure was first proposed by Robert Dietz in 1959 and confirmed in 1966 by Nicholas Short, who published photographs of "parallel deformation features" in quartz grains, including specimens from the Manson Structure. Short concluded that these features constituted incontrovertible evidence of a meteorite impact origin. The so-called "shocked quartz grains" (see p. 38) are produced when a high-

energy shock wave generated by an impact passes through a quartz grain, creating thin regularly spaced zones of melting along preferred crystallographic planes. Extraterrestrial impacts are the only known natural force with sufficient energy to create these features.

In 1991 and 1992 the Geological Survey Bureau and U.S. Geological Survey began to investigate the possibility that the Manson impact played a role in the extinction of the dinosaurs and other species at the end of the Cretaceous Period, 65 million years ago. During the course of this investigation 12 research cores, totaling more than 4,000 feet, were obtained from all terranes of the crater. Study of those cores and other data by scientists throughout the United States and from several other countries produced a good understanding of the processes involved in the formation of the Manson Structure. This investigation identified the Manson Structure as a "complex"

impact crater; that is, it includes an outermost "Terrace Terrane" of down-dropped blocks, an inner "Central Peak," and a "Crater Moat" in between (see diagram above).

Some of the most important data obtained from the research cores was a more accurate age for the impact, about 74 million years. Also significant was the identification of six types of impact rocks which were emplaced during actual crater formation. Four impact rock units were identified on the Central Peak. These include *Proterozoic Basement Blocks* (large blocks of granite and gneiss from below the crater floor); *Crystalline Clast Breccia with a Sandy Matrix* (smaller fragments of granite and gneiss in a matrix of sand-sized rock and mineral grains); *Crystalline Clast Breccia with a Melt Matrix* (similar to the previous unit, except most of the sandy matrix and many of the larger fragments have been melted); and the *Keeweenawan Clast Breccia*

# IOWA METEORITES

Historic accounts of meteorites striking Iowa make fascinating reading. They are but the latest of numerous asteroids that have bombarded the Earth throughout its history. This same process caused the impressive Manson Impact Structure in Pocahontas County (see p. 38).



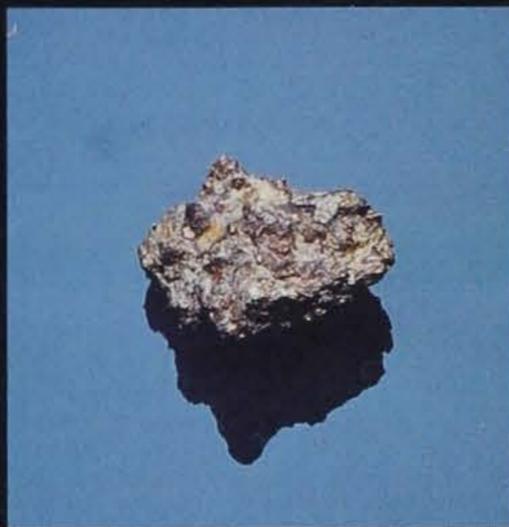
Geological Survey Bureau

**Lone Tree:** This slab was sawed from a 46-pound stony meteorite discovered during cultivation in Johnson County in May 1972.



On loan from Field Museum of Natural History

**Mapleton:** A slice sawed from a 108-pound iron meteorite found in June 1939, by a Monona County farmer shows the fine edges of large iron crystals.



On loan from Cornell College

**Estherville:** A monument in Emmet County commemorates the exploding fall of a meteorite on May 10, 1879. This is one of three large fragments recovered.



On loan from Cornell College

**Forest City:** Rock fragments from this exploding meteor showered an eight-square mile area of Winnebago County on May 2, 1890.

Photos by Paul VanDorpe



On loan from The University of Iowa

**Marion:** Iowa's first recorded meteorite arrived with a loud blast heard throughout Johnson and Linn counties on February 25, 1847, the day the Legislature (then in Iowa City) established The University of Iowa.



On loan from Amana Heritage Museum

**Amana:** This 74-pound fragment was part of a dazzling fireball that fell near Homestead, in Iowa County, the wintery evening of February 12, 1875.

(broken and partially melted billion-year-old shale). The fifth impact rock type is *Ejecta* (rocks thrown from the crater during formation), found only in the Terrace Terrane. The sixth impact rock is *Phanerozoic Clast Breccia* (material originally stripped from the land surface, mixed with ejecta in a ground surge that moved ahead of the growing crater, and then quickly transported back into the crater by returning sea waters). This material was found in all three terranes of the crater.

The shallow seaway retreated from the region of the Manson Structure within a few million years following the

impact, exposing the area to erosion. Over the next 70 million years, about 1,000 feet of rock layers were removed from the region by erosion, including all impact rocks beyond the crater. However, with its thick cover of Phanerozoic Clast Breccia for protection, only small areas on the Central Peak and Terrace Terrane were eroded. During the last 2.5 million years, continental glaciers covered the Manson area repeatedly. These glaciers further eroded the impact feature before blanketing it with glacial sediments that cover it from view today.

Although the Manson Impact

Structure is now one of the best preserved and best studied complex impact craters on Earth, many unanswered questions remain about the effects of this impact on life forms. Additional developments in crater research as well as a detailed model of the crater's formation can be obtained from the Geological Survey Bureau's web site at [www.igsb.uiowa.edu/browse/manson/manson.htm](http://www.igsb.uiowa.edu/browse/manson/manson.htm).

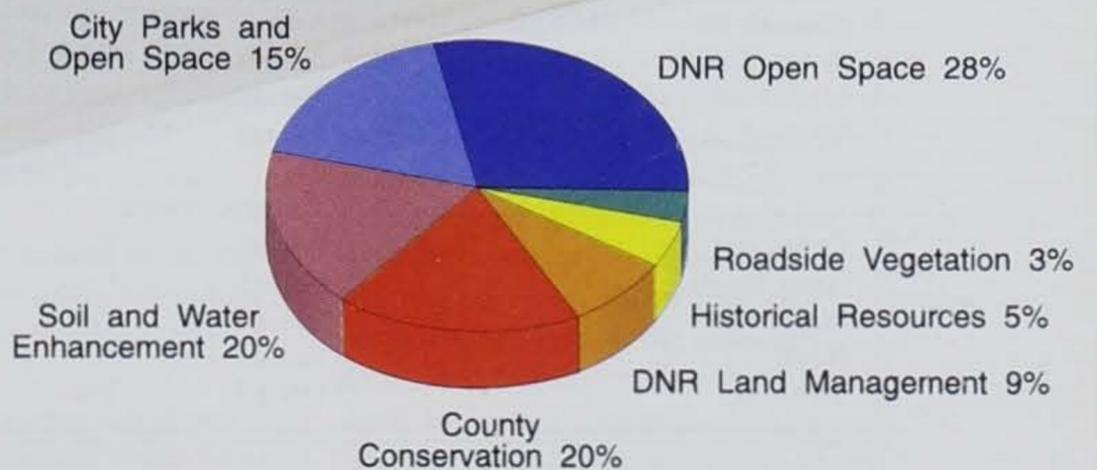
Ray R. Anderson is a geologist with the department's geological survey bureau in Iowa City.

► The money from natural resources license plates goes to the Resource Enhancement and Protection Fund—REAP. Created in 1989, REAP has received the highest national award for conservation programs. So far, it has generated \$70 million and rising. To buy a set of the \$35 plates, take your current plates and registration to your county treasurer and request the natural resource plates.

# IT'S FOR THE BIRDS



### REAP In Action





# tree planting planting planting 101

## Planting the Right Tree

### Don't reach for the shovel just yet

Before you start digging holes in your backyard, spend some time asking the right questions and finding the best tree for your purpose and planting areas. Why are you planting a tree? Do you need it to provide shade, privacy, wildlife habitat, beautiful colors or a screen for unsightly views? Where are you planting the tree? Is the planting area in the middle of a grove, in an open backyard or on the edge of a marsh? Is the site wet or dry, sunny or shady?

### Redwood trees won't grow in Iowa

Select a species and variety to best match the reasons you are planting and the conditions of the site you have chosen. Certain trees thrive in certain conditions so be sure you research carefully before you purchase and plant your tree. Choose a tree that will not outgrow the site as it becomes larger, and choose a site that is 15 to 30 feet away from buildings and powerlines, to prevent damage to the tree. Below is a list of tree species and their most favorable conditions.

<i>Species</i>	<i>Mature Size</i>	<i>Favorable Growing Conditions</i>			
		<i>Dry</i>	<i>Wet</i>	<i>Sun</i>	<i>Shade</i>
SHADE TREES					
Sugar Maple	65 feet tall	Yes	No	Yes	Yes
Bur Oak	65 feet tall	Yes	No	Yes	No
Swamp White Oak	65 feet tall	Yes	Yes	Yes	No
Red Oak	65 feet tall	Yes	No	Yes	No
White Ash	60 feet tall	Yes	No	Yes	No
Green Ash	60 feet tall	Yes	Yes	Yes	Yes
Honeylocust	50 feet tall	Yes	Yes	Yes	No
Linden	60 feet tall	Yes	No	Yes	Yes
Bald Cypress	50 feet tall	Yes	Yes	Yes	No
WINDBREAK TREES					
Black Hills Spruce	40 feet tall	Yes	No	Yes	No
Blue Spruce	60 feet tall	Yes	No	Yes	No
Norway Spruce	60 feet tall	Yes	No	Yes	No
White Spruce	40 feet tall	Yes	No	Yes	No
Concolor Fir	50 feet tall	Yes	No	Yes	No
Serbian Spruce	50 feet tall	Yes	No	Yes	No
White Pine	75 feet tall	Yes	No	Yes	No
Larch	65 feet tall	Yes	Yes	Yes	No
LOW GROWING TREES					
Flowering Crab	25 feet tall	Yes	No	Yes	No
Amur Maple	25 feet tall	Yes	Yes	Yes	Yes
Serviceberry	25 feet tall	Yes	Yes	Yes	Yes
Hawthorn	25 feet tall	Yes	No	Yes	No
Tree Lilac	25 feet tall	Yes	No	Yes	No



### Proper Planting Techniques

- Start with a healthy, well-formed nursery tree.
- Handle the new tree carefully before and during the planting stages.
- Avoid planting tree too deep or too shallow. Do not add soil amendments (i.e. moss, potting soil, etc.) to the planting hole.
- Dig a hole at least 2 to 3 times wider than the root ball, but no deeper than the root ball.
- Remove as much twine, wire and burlap as possible from the root ball.
- When putting soil in the planting hole, don't pack too tightly. Use your hands to gently settle the soil in the hole around the roots.
- Water the tree immediately after planting to settle the soil and remove air pockets.



# Proper Care and Protection

## Give trees a chance

To help them grow properly and live long, healthy lives, newly planted trees need attention and a lot of TLC. In the few years that follow planting your tree, keep a close eye on its progress and follow these steps to ensure proper care.

### Watering

- Newly planted trees must be watered a minimum of one year after planting.
- Water needs of a tree depend on rainfall and soil conditions. In general a newly planted tree requires one inch of moisture every 7-10 days during the growing season. In the fall, continue watering until the soil freezes.
- The key to watering is to allow water to move through the root area (6 to 24 inches deep), and then allow it to dry.
- Overwatering (every day) can actually kill a tree.

### Mulching

- Spread mulch material such as wood chips or bark in a 3- to 4-foot wide radius around the tree at a depth of 3 to 6 inches. This will reduce weed and turfgrass competition, and reduce the potential of mower damage to the trunk.
- Avoid having the mulch in direct contact with the trunk.
- The longer you can keep a mulched area around a tree, the better.

### Staking

- Stake or guy young trees if they are not able to stand on their own.
- Remove the stakes or guys as soon as possible; do not leave them on longer than two years.
- Use soft material that is wide (1 to 3 inches) around the trunk (not wire through a garden hose) to secure the tree to avoid girdling the trunk.
- Do not stake tightly, allow the tree to have some movement. This will allow the tree to build up trunk and root strength.

### Pruning

- Begin pruning 2 to 3 years after a tree is planted, continuing as a gradual process over many years.
- Remove competing leaders, weak and broken branches, rubbing and competing branches, and basal sprouts.
- Never remove more than one-third of the tree's living crown at any one time.
- When removing branches, take the weight of the branch off and make the final cut outside of the branch collar.

### To Protect Your Tree, Avoid the Following Practices:

- Do not tie a dog chain around the tree, or lock a bike to the tree.
- Do not hit the tree with mowing equipment or weed eaters.
- Do not use weed killer in the area of a tree's root zone, unless the material is labeled for use around trees.
- Avoid heavy compaction of soil around the tree by people and equipment.
- Do not change the soil grade around a tree. This means, within the root area under a tree's branches, do not add any soil as fill and do not remove any soil from this area. Both of these practices can be very damaging to a tree's root system.
- Do not have a tree topped. This practice is the excessive removal of a tree's living branches. This practice destroys the tree's structure, and creates an unhealthy tree.



## ? Why should I plant a tree?

### The Need for Trees

Iowa has been called the "most altered state in the nation" – a phrase that refers to the loss of 99.9 percent of our prairie, 90 percent of our wetlands and more than 80 percent of our forests. Changing farming practices and increased suburban developments have resulted in the loss of many wildlife habitats. By planting trees, we not only help provide homes for wildlife, but also improve the quality of the air we breathe, prevent erosion and add beauty to the natural Iowa landscape. Help restore Iowa by planting a tree or by participating in Earth Day and Arbor Day activities.

### Earth Day – April 22

Earth Day has been celebrated each year since April 22, 1970. On the first Earth Day, more than five million people participated in cleaning up our environment, from picking up trash to planting trees. Since then, the number of participants has increased to an estimated 20 million, from countries all over the world. Be an active player in Earth Day 2000, either by planting a tree or getting involved in Iowa's EarthYear 2000. For more information, visit the EarthYear website at <http://www.earthyear2000.com>.

### Arbor Day – April 28

Arbor Day started in 1872 in the state of Nebraska in response to a state proclamation urging settlers to plant trees that would provide shelter, shade, fruit, fuel and beauty for residents. Celebrations of Arbor Day are still held all over America, with the date determined by the best planting time in each area. Iowa celebrates Arbor Day on the nationally recognized holiday, the last Friday in April. For more information, visit the National Arbor Day Foundation website at <http://www.arborday.org>.

## Parks Profile

After years of planning and building, this park holds great outdoor treasures for the entire family

# Lake Darling State Recreation Area

Article by Jeff Hildebrand  
Photos by Clay Smith



It's no great secret, state parks don't materialize overnight. Developing a state park takes considerable thought and planning, and may come in slow, calculated stages. The process may take years to complete to ensure certain criteria are met and goals reached.

A key criteria considered when creating a state park is retaining the natural beauty, unique features and protected and threatened species of an area. The Lake Darling State Recreation Area is a good example of where great efforts were taken to satisfy this goal while at the same time accommodating the needs and wants of the more than 200,000 annual visitors.

### In The Beginning

In 1947, the State of Iowa allocated money for an artificial lake along Honey Creek, located three miles west of Brighton. Construction began on the 300-acre lake in August 1949, and the lake began to fill in September 1950. Lake Darling was officially dedicated Sept. 17, 1950, and named after J.N. "Ding" Darling, a Pulitzer Prize-winning cartoonist for the *Des Moines Register* and a noted conservationist.

Darling was also a co-author of the "1933 Iowa 25-Year Conservation Plan," which recommended developing a large artificial lake in Washington County. Between 1959 and 1960 additional land was acquired, bringing the recreation area to its current size of 1,417 acres.

Lake Darling is characterized by gently rolling hills, silty and loamy soil and was formed in loess or glacial till.

**LEFT:** Lake Darling's campground is unique in that it is situated along the lake's shore.

**RIGHT:** Jetties and sunken habitat provide numerous fishing opportunities.

**UPPER RIGHT:** Because of Lake Darling's diverse ecosystem, it is not uncommon to see deer, turkey, red fox, coyotes, squirrels, weasels, wood ducks, geese, owls and raccoons.

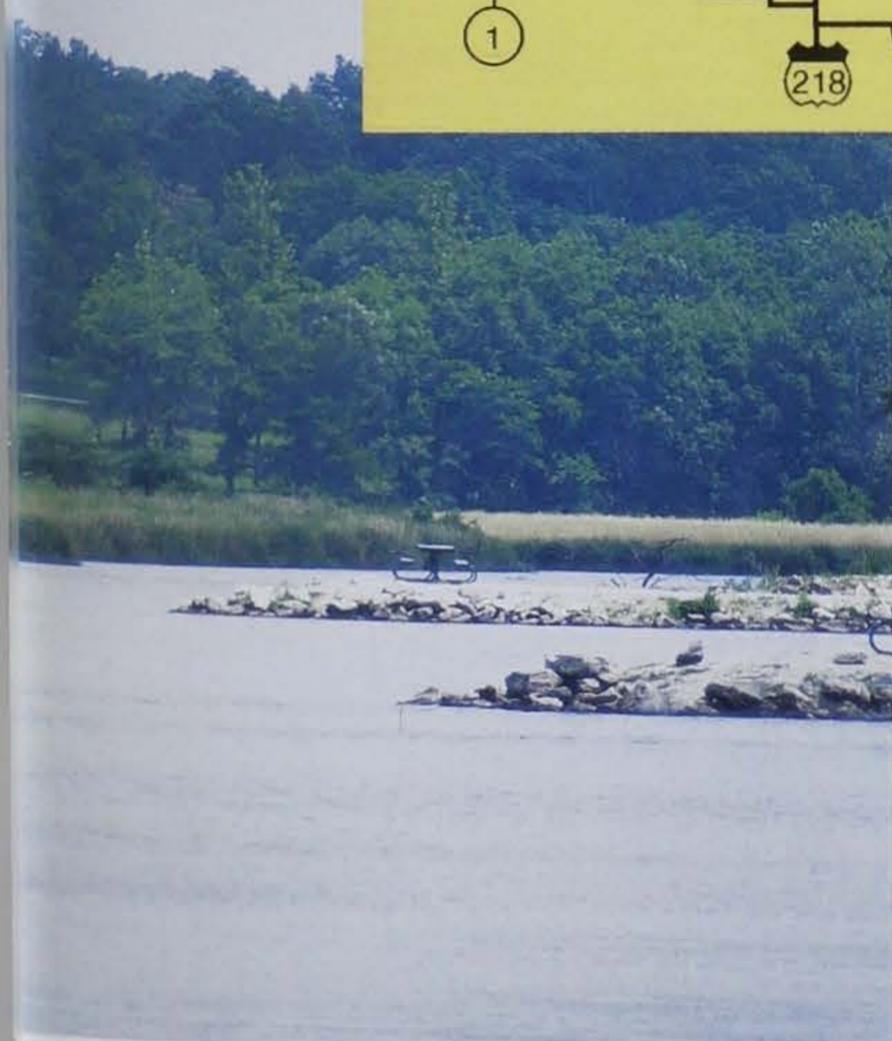
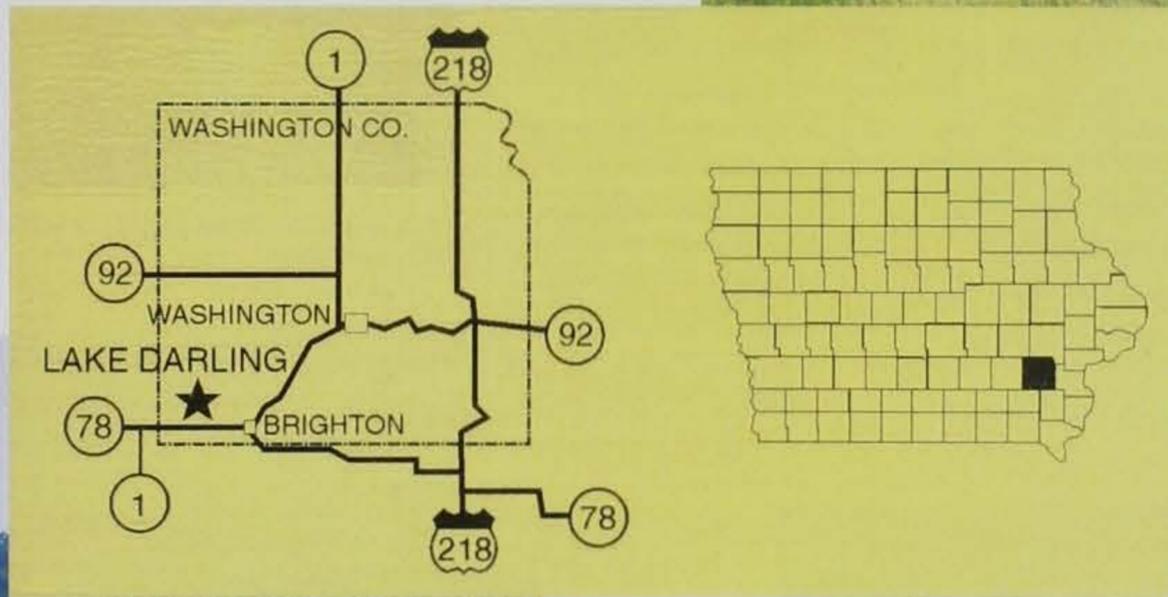
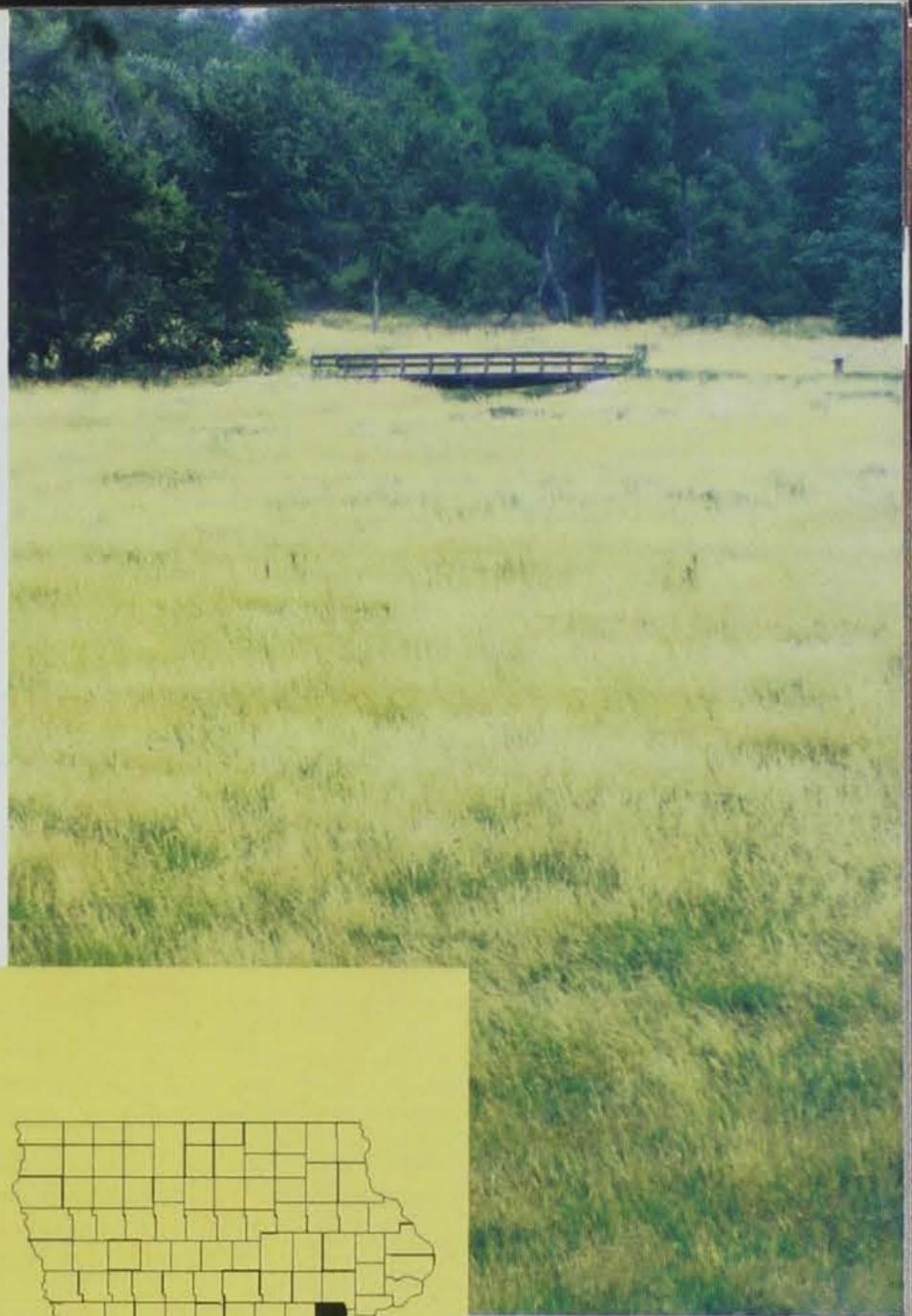
The soil is what makes Lake Darling's ecosystem so diverse. It is well-suited for woodlands as well as grasslands.

Lake Darling has five prairie or prairie remnants consisting of big blue stem, switchgrass and various prairie flowers. The recreation area also has a few unique and rare plants including monkey flower, great plains ladies tresses, summer grape and slender ladies tresses, the latter considered threatened in Iowa. The woodlands contain trees common to southeastern Iowa, including elm, white oak, shingle oak and walnut. The extensive trail system makes all of these areas easily accessible to interested park visitors.

As one can imagine, such a diverse ecosystem provides habitat for a wide range of wildlife. It is not uncommon to see deer, turkey, red fox, coyotes, squirrels, weasels, wood ducks, geese, owls, and as

many campers know, raccoons. Spring and fall visitors can view migrating birds passing through the recreation area. Some of the more common species include great blue herons, American egrets, cormorants, ospreys, swans, ducks, belted king fishers, bald eagles and various song birds.

The list of outdoor recreational opportunities at Lake Darling is extensive. Camping is very popular in the summer. The campground location is one of the park's biggest draws. Unlike



most parks in Iowa, Lake Darling's campground is situated along the lake's shore.

There are a number of boat docks at the campground, allowing campers to park their boats near their sites. The recreation area has 118 campsites, 81 have electrical hookups. Another eight have full hookups, including electricity, water and sewer connections. The campground has two showers, one scheduled to be replaced within the next few years.

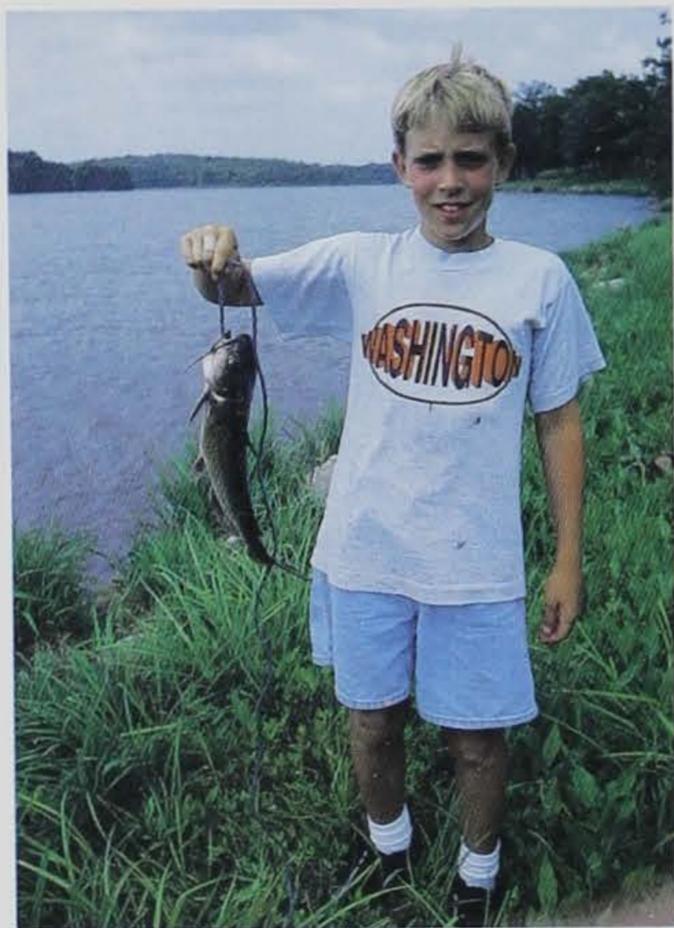
In addition to the campground, three cabins will be available to rent this spring, and possibly two more later in the year. The cabins will have bunk beds, a table with two chairs, a futon, a fire ring and a bench on the cabin's porch. Cabin reservations can be made by calling (319) 694-3413 in the

summer, or (515) 636-3140 in the fall and winter.

Fishing is another popular sport at Lake Darling. The two boat ramps provide easy access for boat launching, and cleared shore lines and jetties provide excellent opportunities for bank fishing. In the early 1990s, the lake was drained for repairs and while the water was low, jetties were added, shorelines were deepened, rip-rap protection was placed and fish habitat was spread throughout the lake. The habitat piles are marked with buoys for anglers' convenience. Channel and flathead catfish, crappies, largemouth bass, bluegills, green sunfish, bullheads, golden shiners, gizzard shad and carp are found in the lake.

On hot summer days, Lake Darling's beach overflows with visitors seeking refuge from the heat. The large beach area provides sand, grass and tree-shaded areas. Motorized fishing boats, row boats, canoes, kayaks, pontoons and paddle boats can be rented at the boat house.

The 15 miles of trails provide opportunities for hikers, bird watchers, wildflower enthusiasts, mushroom



Channel catfish is just one of the abundant fish species at Lake Darling.

hunters or wildlife viewers.

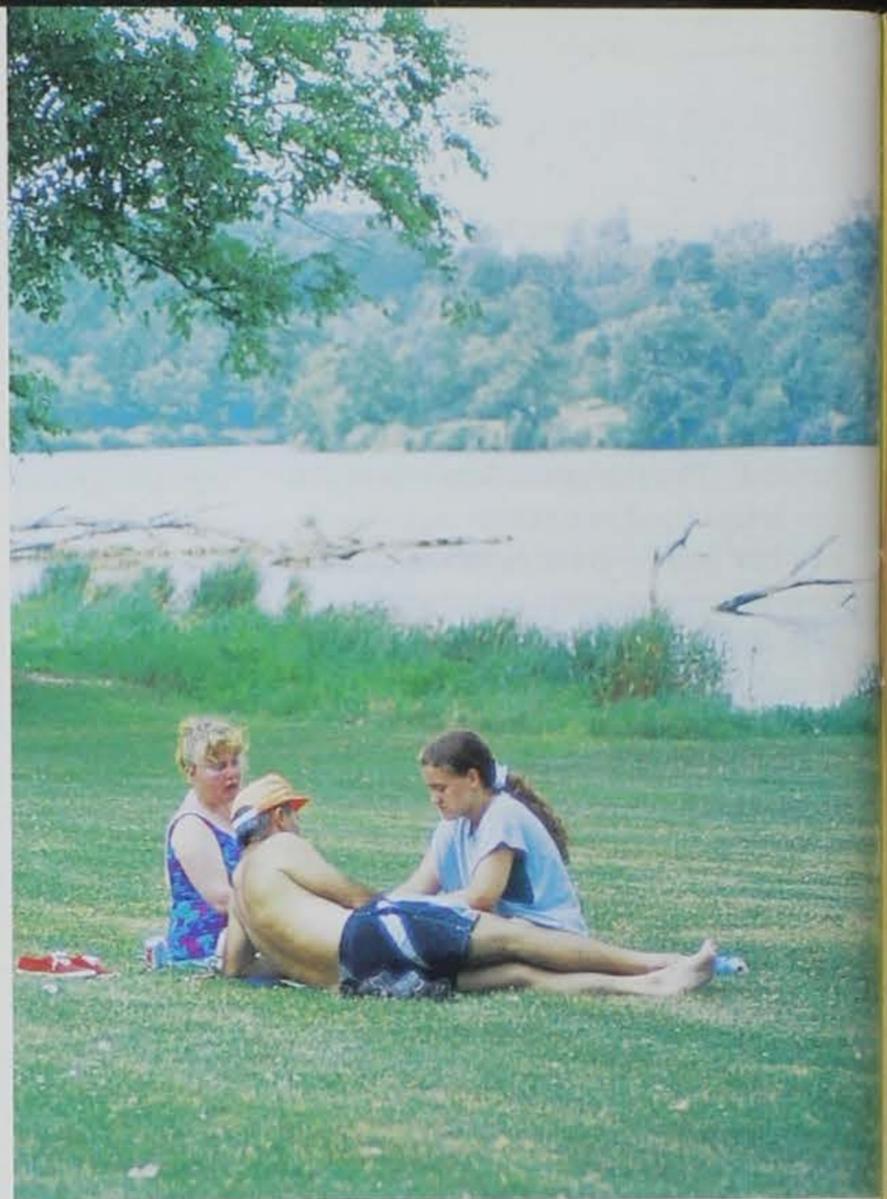
The trail system also offers unique challenges to bikers. Some areas are fairly level and provide a relaxing day's ride, while other areas have hills to challenge even the most dedicated rider. Cross country runners also face the same challenges.

Winter doesn't put an end to trail use for the season. The wide, mowed trails provide a good base for snowmobiling and cross country skiing once snow reaches sufficient depths.

One of the challenges the DNR has in each of its state parks and recreation areas is to manage the area to protect the resources while providing a wide variety of recreational opportunities for the public. One tool to accomplish this is an ecosystem management plan.

The Lake Darling Recreation Area Ecosystem Management Plan provides principles and management recommendations to maintain the integrity of Lake Darling, preserving the unique woodlands and grasslands of the area. Several tasks will be carried out over the next few years to ensure the goals of the management plan are met, including:

- controlled prairie burns every three to five years
- thinning undesirable trees in oak forest areas to allow more sunlight for oak seedlings to grow
- burning the white oak area every three to five years to remove understory and allow white oak seedlings to grow



Park visitors relax under a shade tree on a warm summer day.

- thinning undesirable trees and planting more ash trees in the ash unit
- planting more walnut trees and removing vines from trees in the walnut unit

In the near future, improvements will be made using funds from the "Restore the Outdoors Program." Improvements include renovating of the beach facility, replacing the west campground shower building, replacing the boat house, renovating of the park shop and upgrading the wastewater system.

As you plan your summer vacations, be sure to include Lake Darling. Enjoy what the area has to offer and see the changes each season brings. For any questions about Lake Darling Recreation Area, call (319) 694-2323.

*Jeff Hildebrand is the park ranger at Lake Darling State Park.*

## Beyond the Harvest

by A. Jay Winter

Turkey hunting in Iowa has rapidly grown into a popular sport in which the gobble is pursued as much as the gobbler. It is a wonderful experience to sit out in the woods before first light and hear multiple gobblers expressing their dominance over the spring woods. These thundering gobblers are enough to rattle the most seasoned veteran of the outdoors as well as the first-timer to the spring woods. Many people have discovered this experience — 48,225 turkey hunting permits were issued for the 1999 spring season.



Wild turkeys are great game and delicious tablefare.

Roger Hill

One of the side benefits of seeing a gobbler up close is the possible harvest of one of these magnificent birds. These birds are among the finest of table fare and can be cleaned and cooked in many ways. I prefer to process the turkey into cuts of meat that can be used in a variety of recipes. Following are some of the steps I use in cleaning and preparing the bird.

**STEP 1** - Discreetly show off your newly acquired trophy, by first taking pictures in the field. Long after the turkey

is eaten, the hunt is remembered in your mind and you are kept truthful by the pictures you have taken. Pictures can be improved by wiping off any blood and including certain objects relating to the hunt such as hunters, guns, blinds and local scenery. The largest improvement you can make in pictures is taking them at the hunting site rather than taken in the garage or on the tailgate.

### STEP 2 -

After taking time to enjoy the moment, assemble the tools needed to clean your turkey. These include:

- a large clean bowl to hold the meat from the turkey
- a medium sized sharp knife for cutting
- a clean area to do the process —



DNR Photo

Photographing the animal in or near its natural environment preserves the moment.

I usually use my garage floor with a piece of cardboard laid down to keep the area clean.

- a location for all the non-edible parts of the turkey to be deposited — I usually use a box or garbage sack.

**STEP 3** - Lay the turkey on his back and pull the skin open over his breast



Clay Smith

After the breast is exposed, make two cuts downward until you feel the bone and then turn knife towards the base of the wing.

# Practical Conservationist



Clay Smith

**A clean area, a large bowl and a medium-sized knife are essential elements for cleaning the turkey.**

towards his wings. This will expose the large breast muscles of the wild turkey. After the skin is pulled off the breast, make two cuts continuing downward along the breast plate until you feel bone. Then turn your knife so you are cutting toward the base of the wing. This will allow you to cut along the ribs and ultimately remove the breast meat from the bird. Complete this process by putting the meat in the bowl and removing the opposite breast muscle.

**STEP 4** - Next, pull the skin down one leg and disjoin the leg at the point where the feathers stop. After disposing of that leg with associated feathers and skin, push the thigh (attached to the drumstick) toward the back of the bird. You will hear a pop which is the dislocation of the ball and socket joint that attaches the thigh to the main body of the bird. The thigh and drumstick can now be removed by cutting next to the bird's body, through this ball and socket joint. Put this meat in the bowl and repeat with the other side.

**STEP 5** - The last two pieces of meat that need to be retrieved are the muscles along the scapula on the back, behind the bases of the wings. To remove these pieces, lay the bird on his side and

pull the skin around his back, this will expose this piece of meat and allow you to remove it. After removing this meat, put it in the bowl and repeat with the other side.

**STEP 6** - At this point you should have two boneless breast pieces, two pieces of thigh and drumstick that can be separated or left together, and two smaller boneless pieces from the back. Take the meat into the kitchen and deposit it into a clean kitchen sink. This will allow you to wash the meat free of any feathers,

embedded shot and blood. To effectively freeze the meat, I suggest sorting it into desired portions and inserting each portion into a large resealable freezer bag, squeezing out all air, labeling the package and freezing.

Cooking is up to the cook's discretion but can be accomplished in a variety of ways. I like to have my father-in-law smoke the bird, but I also enjoy a variety of recipes from the oven. One of my favorite recipes involves baking the turkey with cream of mushroom soup. Good luck in the upcoming turkey season. Hopefully, it will be a safe and enjoyable time for everyone.

## FROM THE KITCHEN OF:

*A. Jay Winter*

### Wild Turkey

- 1 side of breast or two thighs cubed
- 1 cup of flour
- salt, pepper, seasonings
- 1 can of mushrooms
- 2 cans of cream of mushroom soup
- 1/4 cup of water

Cube the meat into bite-size chunks and roll in a mixture of flour and spices. Brown meat in a small amount of oil in a frying pan.

In a baking dish, place turkey and one can of mushroom pieces, two cans of cream of mushroom soup and 1/4 cup of water. Bake at 300 for two hours.

*A. Jay Winter is a training officer at the Sprinbrook Education Center in Guthrie Center.*

## EXPRESS SHIPPING!

by Heather Ochs

### BACKGROUND:

Since the 1700s, the Mississippi River has been used for recreation as well as transportation. The river was first navigated by French and Spanish explorers in 1718. Americans first started using the river for commerce (trade; business) in the 1790s, but another half century passed before the first steamboat chugged up the mighty Mississippi in 1850.

The Mississippi has changed a lot since that time. The current 9-foot navigation channel was built between 1930 and 1940. The 1,300-mile waterway links five states to the Gulf of Mexico. The Upper Mississippi River System contains 29 locks and dams, which replaced rapids and falls with a stairway of water for commercial and recreational traffic. A lock is an enclosed part of the river with gates at each end for raising or lowering vessels from one level to another. The lock and dam system is operated by the U.S. Army Corps of Engineers. Barges, unpowered vessels, are used to transport such things as corn, coal, soybeans, oil and fertilizer up and down the river. Barges transport more than 120 million tons each year.

The river system is widely used for recreation. Recreational use involves direct and indirect spending of more than \$1.2 billion annually.

The river system is also home to a large diversity of fish and wildlife. More than 20 percent of North America's ducks feed and rest on the river during migration. A total of 156 species of fish and 40 species of mussels call the river home as well. However, there is a decreasing number of these fish, plant and animal species in the Mississippi River habitats due to increased erosion, sedimentation and decreasing water quality. Islands disappear due to erosion, spawning beds are blanketed by silt and backwaters are filling with silt.

Current plans call for even more change in the river's structure. The U.S. Army Corps of Engineers is proposing expansion or replacement of the current locks. The Corps would like to expand the 600-foot locks to 1,200 feet. The longer lock would eliminate the need for the double lock process. In this process, modern barges that are approximately 1,200 feet in length have to break into two pieces to fit through the lock and reconnect on the other side. This process takes about two hours compared to 25 to 40 minutes for a single lockage. This decrease in time would allow more barges and recreational vessels through in the same amount of time. This proposal has generated a lot of debate.

### EFFECTS

Expanding the lock system would have many effects, including:

1. Loss of bottomland timber due to flooding.
2. Increase in jobs due to increased traffic.
3. Increased traffic will increase shore erosion by passing tows.
4. Decrease in lock time to 25 to 40 minutes.
5. Eliminate need for double lockage process.
6. Many homes and public landings would have to be relocated due to flooding.
7. Reproductive potential of mussels, a type of freshwater clam, is not impacted in high traffic areas, so numbers should not decrease.

### Age

Grades 5-12

### Subjects

Social Studies, Science

### Skills

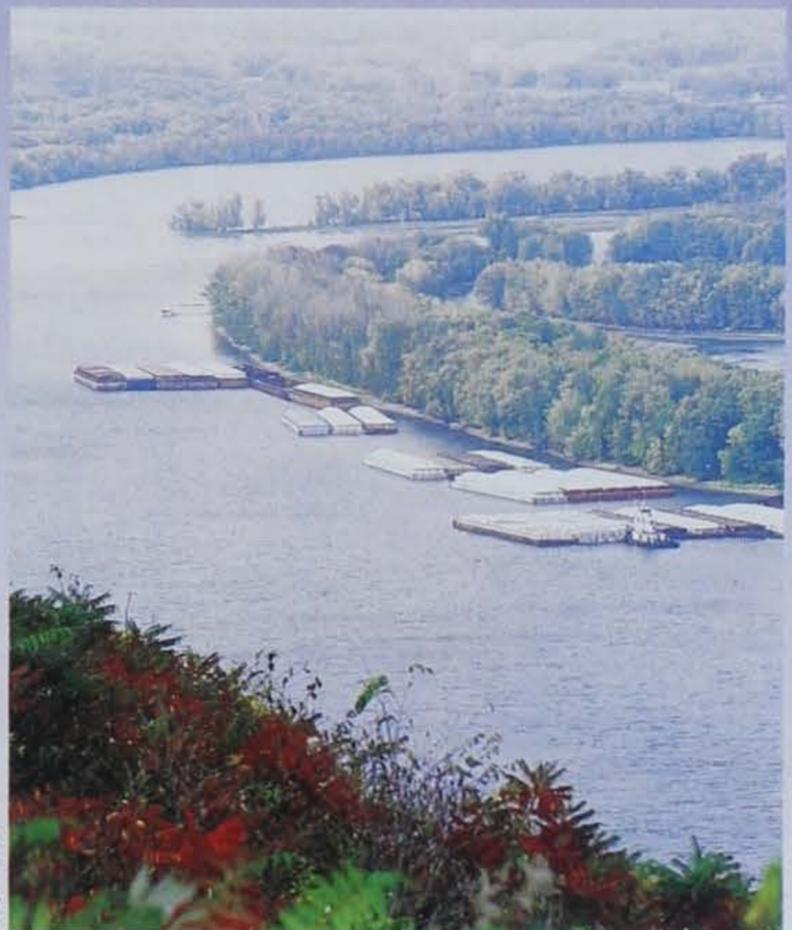
Communication, discussion, evaluation, interpretation, listening, writing

### Objectives

Students will be able to evaluate the effects of expanding the current locks system on the Mississippi River.

### Method

Students role-play individuals representing differing perspectives and concerns related to expanding the locks on the Mississippi River.



Clay Smith

Barge traffic on the river can be heavy at times.

# Classroom Corner

## Materials

Notecards  
Writing utensils

## Duration

Two 45-minute periods

## Group Size:

20-30 students

## Setting:

Classroom

## Evaluation

Students should be able to present and support their position on the issue of whether to expand the locks on the Mississippi River or not.

## Resource Materials

- Rock Island District, U.S.A.C.E. website: [www.mvr.usace.army.mil/](http://www.mvr.usace.army.mil/)
- "The Mighty Mississippi: A Balance of Integrity," half-inch VHS, available for loan from Aquatic Education, 2473 160<sup>th</sup> Rd. Guthrie Center, Iowa 50115
- Upper Mississippi River Conservation Committee website: [www.mississippi-river.com/umrcc/](http://www.mississippi-river.com/umrcc/)

8. Increased shipping, which decreases the amount of commodities shipped by rail or truck (Shipping by rail and truck causes more air pollution and less fuel efficiency).

9. Commercial and recreational vessels stir up sediment that interrupts the feeding of mussels, slowing their growth (These mussels are an important food source for fish, muskrats, minks, otters and some birds. Mussels are also harvested and exported for the cultured pearl industry).

10. The cost to expand five locks on the Upper Mississippi is approximately \$1.2 billion.

11. Gain in pool size due to increased lock size.

12. Increased traffic and turbidity slow plant growth, which could result in lower oxygen levels in the backwater areas (This leads to fish kills and decrease in other aquatic organisms).

13. Increase in recreational spending.

14. The current locks are eligible for listing on the National Register of Historic Places.

## PROCEDURES:

1. Copy the list of effects of expanding the current locks and distribute it to students.
2. Provide students with background information. Generate an initial discussion about the possible effects of expanding the old locks, considering a variety of perspectives. Use the list provided as a reference to start the discussion.

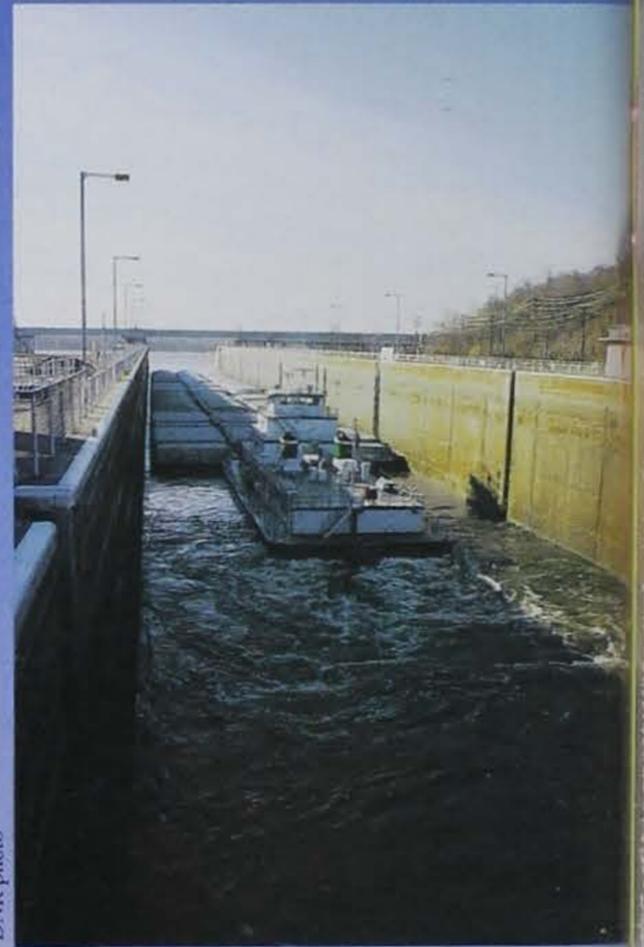
3. Establish a variety of roles with people who have conflicting values and concerns relating to the potential impacts of the lock expansion. Assign each student (or pair of students) a role. (e.g. lock operator, shipping company representative, DNR fisheries biologist, local historic society, local land owner, barge operator, etc.) Ask students to prepare for their role by developing a short position paper for use as background for the dramatization of their role.

4. Have the students present their position to the entire group or a panel of students or adults.

5. After all students have made their presentations, ask the panel to render a decision about whether or not to expand the current locks.

6. Have a brief discussion to summarize the "pros" and "cons" of expanding the locks that emerged from the students' presentations.

7. After the role-play and class discussion, ask each student to write a brief essay describing his or her own personal recommendation for a lock expansion plan.



DNR photo

**Boats and barges navigate impassable stretches of river through lock and dam systems.**



Clay Smith

**Some want to see lock-and-dam systems, like the one at Bellevue, expanded to accommodate more barge traffic. Others say existing systems already cause too many problems.**

## Call 1-800-ASK-FISH For The Latest Fishing Information In Iowa And Across The Nation

Anglers are just a phone call away from the latest information about their favorite fishing spots in Iowa and across the nation.

The 1-800-Ask-Fish (275-3474) line is a complete source for anyone wanting information



about fishing in Iowa and other states. The toll-free number offers current information on license fees

and sellers, the location of camping areas and boat ramps, and how to order fishing catalogs and brochures. Beginning in April, callers can access the weekly Iowa fishing report to find out where the fishing hotspots are.

The 1-800-ASK-FISH program is supported by the Wallop-Breaux/Sport Fish Restoration Fund.

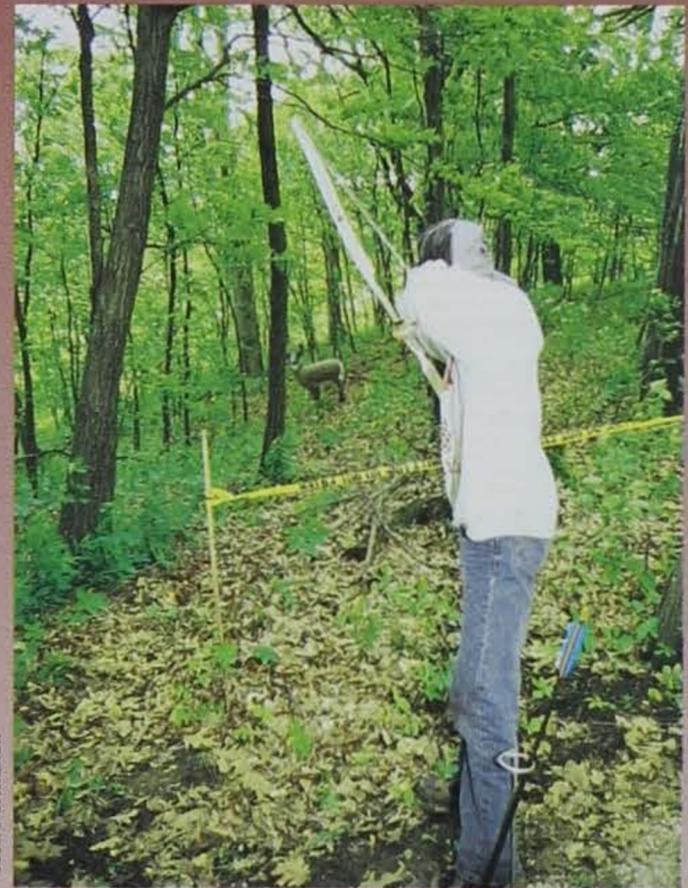
## 2000 Youth Hunter Education Challenge Set For June 9-11

The 2000 Iowa Youth Hunter Education Challenge will be held June 9-11 at the Iowa 4-H Education and Natural Resources Center in Madrid.

The youth hunter education challenge is designed to teach shooting safety, responsibility and woodsmanship, and provide an opportunity for youths to test their skills in those areas. Contestants compete in eight events: hunter responsibility exam, hunter safety trail challenge, wildlife identification, orienteering and four shooting accuracy tests.

Contestants may enter as a member of a team or as an individual. Individuals will be assigned to a team whenever possible. All teams must be accompanied by an instructor and all individual contestants must be accompanied by a parent, legal guardian or instructor. All participants must be hunter education graduates.

The challenge is open to those ages 12-19. For more information, contact Sonny



Ken Formanek

Archery accuracy is just one skill tested at the Youth Hunter Education Challenge.

Satre, DNR recreational safety officer, at (515) 281-8652; or Jim Pease, ISU Extension wildlife specialist, at (515) 294-7429.

## Fewer Turn in Poachers Calls Processed In 1999

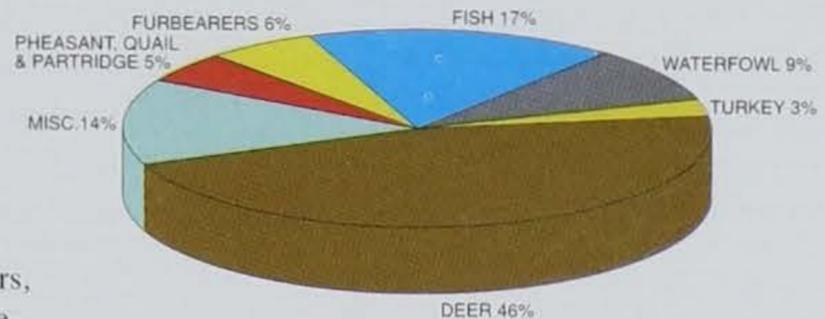
The Iowa Department of Natural Resources' Turn In Poachers (TIP) program processed fewer calls in 1999 compared to 1998, but the number of successfully investigated cases remained relatively unchanged from past years.

The TIP Annual Activity Report for 1999 showed 291 cases were investigated, approximately 7.5 percent (22) fewer cases than last year. However, of those calls, 28 resulted in 67 citations issued. The near 10-percent success rate is comparable to past years, when success rates varied from 9 to 12 percent. Approximately \$8,500 in rewards were issued last year to informants in

successfully investigated cases.

State radio dispatchers recorded 25 percent of the calls on weekends, holidays and after hours, while DNR law enforcement and administrative support staff recorded the remaining 75 percent.

The DNR Law Enforcement Bureau also successfully initiated a TIP public service announcement (PSA) campaign. Through various local media, 134 TIP PSA appeared in 53 newspapers last year, reaching more than 102,000 households. The cash value of the PSAs, if purchased as an



advertisement, was estimated at more than \$12,000.

The TIP program is jointly administered by the Iowa DNR's Law Enforcement Bureau and the TIP of Iowa organization. Since its beginning in 1985, 7,181 TIP calls have been processed resulting in 1,656 citations issued and \$100,875 paid out in rewards.

# Conservation Update

## Fishing Rod and Reel Combo, Life Jacket To Be Given Away **Sport Fish Restoration Act Celebrating 50th Anniversary**

Anglers and boaters have one more reason to celebrate the start of the new season. This year marks the 50th anniversary of the landmark Federal Aid in Sport Fish Restoration Act (SFR).

In 1950, Congress passed the SFR Act, commonly referred to as Dingell-Johnson Act or Wallop-Breaux, to provide funds for the management, restoration and conservation of the nation's fisheries. SFR was initially funded through an excise tax placed on most fishing equipment.

Since that time, the SFR program has expanded several times. Possibly the greatest change came in 1984, when Congress adopted the Wallop-Breaux Amendment. That legislation increased funding of the SFR program by extending the excise tax to include previously untaxed sporting equipment, pleasure crafts and motorboat fuels.

The excise taxes is collected from the manufacturer, who passes it on to the con-

sumer. Hence, for 50 years, anglers and boaters have supported improved fishing and boating opportunities across the nation.

That support has meant approximately \$44 million from Iowa anglers and boaters over the past 50 years. Iowa currently receives approximately \$2.5 million per year, which has helped implement an aquatic education program reaching more than 500,000 students annually; construct three lakes and restore four more; increase shore fishing opportunities at 27 lakes; maintain boat ramps; improve and restore two fish hatcheries and acquire 3,743 acres along 14 trout streams, among other programs.

To celebrate the anniversary, the Iowa DNR is giving away a rod and reel combo and a life vest. To enter the contest, answer all five questions correctly on the form below, fill in the name and address area and mail to the Iowa DNR. Prizes will be drawn on National Fishing Day, Sept. 16.

## **Art Show, Sale To Benefit Endangered Iowa Wetlands**

Iowa endangered wetlands will get a helping hand from the Iowa Nature and Wildlife Art Show and Sale March 25-26 in Cedar Rapids.

The event is being held to increase awareness of the natural resources and heritage of the Midwest as portrayed by the region's artists. Proceeds from the event support the acquisition of targeted and endangered wetlands in Iowa.

The art show and sale will be held at the Collins Plaza Hotel and Convention Center, located at 1200 Collins Road NE in Cedar Rapids. Event hours are 10 a.m. to 7 p.m. March 25 and 10 a.m. to 5 p.m. March 26. Admission is \$3 for those ages 13 to adult and \$1 for children ages 5 to 12. Children under 5 are free.

The event is sponsored by the Kirkwood Community College Student Wetlands Group and Steering Committee.

## **Answer Correctly To Win A Rod And Reel Or A Life Vest**

1. Your purchase of fishing equipment and motor boat fuels support sport fish restoration and boating access facilities. True or False
2. The National SFR logo is a boat angler and fish. True or False
3. The SFR program is also known as DJ and Wallop/Breaux? True or False
4. Since 1950 Iowa anglers have contributed more than \$44 million to the SFR program? True or False
5. Have you heard of the SFR program before now? Yes or No

NAME: \_\_\_\_\_

STREET: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP CODE: \_\_\_\_\_

PHONE: \_\_\_\_\_

**Mail to Iowa DNR, SFR Contest, Wallace Building, Des Moines, Iowa 50319**

Prizes donated by the Iowa Chapter of the Americian Fisheries Society.



Tami Pavlicek

## Toxic Cleanup Days Planned In Three Iowa Counties

Residents of several Iowa communities can dispose of certain hazardous materials during three Toxic Cleanup Days (TCD) scheduled this spring.

Toxic Cleanup Days are scheduled April 15 in Clayton County, April 22 in Page County and May 6 in Pocahontas County. Residents of those counties can dispose of hazardous materials such as oil-based paints, flammable liquids, pesticides and household cleaners at the designated cleanup site in their area. Other materials may be accepted.

Those planning to dispose of hazardous materials should contact the coordinator in their county for a complete list of accepted materials and to schedule an appointment. Following is a list of TCDs, contact person, sponsoring agency, contact phone number and location of the TCD.

### ■ CLAYTON COUNTY

Tim Engelhardt, Clayton County Conservation Board, (319) 245-1516, Clayton County Fairgrounds in Garnavillo.

### ■ PAGE COUNTY

Ron Sanson, Page County Extension Education Director, (712) 542-5171; or Jerry Abma, executive director Page County Conservation Board, (712) 542-3864; Page County Fairgrounds in Clarinda.

### ■ POCAHONTAS COUNTY

Bradley H. Freidhof, Pocahontas County Conservation Board, (712) 335-4395, Pockyccb@ncn.net; or Tim McKirnan, Pocahontas County Emergency Management Agency, (712) 335-3188; Pocahontas Fairgrounds in Pocahontas.



**I o w a  
P h e a s a n t s  
F o r e v e r** chapters are working with farmers and landowners to establish wildlife habitat.

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

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

For help planting wildlife habitat or more information about **Pheasants Forever**, contact Jim Wooley (S. Iowa) at 515/774-2238, Matt O'Connor (N. Iowa) at 319/926-2357, Mark Heckenlaible (Missouri Valley) at 402/687-2004, or write PF at 1205 Ilion Ave, Chariton, Iowa 50049.

## National Fishing Week

### Free Fishing Days June 2-4

In an effort to promote fishing in Iowa, the DNR will be joining other agencies and organizations across the country in promoting National Fishing Week June 3-11.

As part of the week-long celebration, the DNR has designated June 2-4 as Free Fishing Days in Iowa. During those days only, Iowa residents may fish and possess fish without a license. Payment of the trout fee, normally required when possessing trout, has also been waived. All other fishing regulations, including size and possession limits, apply.



Lowell Washburn

# Conservation Update

## Lacey Day Celebrates Iowa Conservationist, Historic Legislation

On April 30, 1900, Iowa Congressman John F. Lacey rose in the U.S. House of Representatives urging the passing of his twice-revised "bird" bill.

"We have given an awful exhibition of slaughter and destruction, which may serve as a warning to all mankind. Let us now give an example to wise conservation of what remains of the gifts of nature."

A century later, the Lacey Act is regarded as the first national legislation for wildlife protection. On May 25, 100 years to the day after the bill was signed into law, Lacey Day will celebrate the legislation, and the man who authored it, for their significant contribution to wildlife protection.

The nationwide celebration will recognize Lacey for the landmark conservation legislation he helped passed during his seven terms as U.S. Representative. It will also celebrate the Lacey Act, which continues to protect wildlife species today. Without the Lacey Act, many conservationists feel even more previously unprotected species would be extinct.

The Lacey Act authorized federal aid in the restoration of game birds and "other wild birds" and established controls over the introduction of non-native wildlife species. The most controversial — and possibly most important — provision in the bill called for restrictions on the marketing of wild animals. The law called for stiff fines for interstate shipment of illegally taken game or their body parts. The law was instrumental in eliminating the vast, illegal side of wild game marketing.

Through the Lacey Act, Congress re-



Photos by Roger A. Hill

The Lacey Act benefitted game birds, such as mallard ducks (left), and nongame birds, like the great blue heron.

sponded to the two most sensitive wildlife issues of the 19th century — the rapid depletion of game birds and mammals caused by overharvesting by "market hunters" and the destruction of many non-game species for millinery decoration.

Lacey was born May 30, 1842 in West Virginia and moved to Iowa with his family in 1855. They made their home in what is now Oskaloosa before settling on a farm in Mahaska County. He fought in the Civil War for the Union Army and achieved the rank of major before his discharge in 1865. He served as U.S. Representative for Iowa's Sixth District from 1889 to 1891 and again from 1893 to 1907.

Lacey has been referred to as the "Father of American Conservation," "Father of Federal Conservation Legislation," "First Congressional Champion for Birds and Wildlife," and "Father of Federal Game Protection."

For more information about Lacey Day, contact Anita O'Gara with the Iowa Natural Heritage Foundation at (515) 288-1846, or visit the Lacey Day website through the Foundation's website at [www.inhf.org](http://www.inhf.org).

## Air Pollution Experts Learn To Track Air Contaminants

Air pollution experts from the DNR and four other Midwestern states completed hi-tech computer model training to predict how air contaminants form and travel across the country.

"This technology gives DNR the tools to predict how and where air pollution forms in the Upper Midwest, taking into account emissions as far away as Atlantic Coastal states," said Brian Button, DNR air quality information specialist.

"Just as weathercasters show storms tracking across the nation, air pollution models also show where pollution originates and track winds that move it across the nation," he said.

The technology is extremely important as many air pollution issues no longer can be solved within a state boundary due to transport of pollutants.

Air pollution models even help address water quality concerns. The Chesapeake Bay and other eastern estuaries are investigating nitrogen water pollution. Perhaps half the nitrogen in the water comes from the air, not runoff, as airborne nitrogen particles fall into the water much like airborne acids are carried with rainfall. Researchers in eastern states are using models to determine how much airborne nitrogen comes from Midwest states.

"Beginning with acid rain in the 1980s and smog during the 1990s, the next decade will likely see a focus on airborne mercury, visibility loss from haze, toxins and fine soot particles," Button said.

"These are emerging national issues that force the DNR to use new tools and gain new expertise to keep up — that's what the training is about," said Button.

"Discovering where emissions go once they are in the air and how they react with other chemicals is a new realm of technology the DNR will soon use," he said.

"These tools will give a better understanding of Iowa's air and what affects it. Better air quality is the end result — that's what it is all about," said Button.

## Volunteering Today For A Better Iowa Tomorrow

### Fairchilds Make Volunteering A Family Project

A 1993 New Years resolution has turned into a seven-year dedication of time, energy and resources for the Fairchild family of Decorah.

Trout Run, a cold-water stream meandering two miles from Siewers Spring to the Upper Iowa River, was "adopted" by Ron, Patty and David Fairchild through the Adopt-A-Stream Program.

Adopting a stream usually involves simple stream cleanup, but for the Fairchilds, what started out as a family project has evolved into an education and community service endeavor that has enhanced and preserved Trout Run and involved those residents who live near it. Individuals and groups of volunteers, students of all ages, the Iowa DNR and the Winneshiek County Conservation Board have all joined forces with this family to expand monitoring of the stream. Trout Run is tested for pH (acidity/alkalinity), ammonia, phosphorous, biological oxygen demand (BOD), nitrates, pesticides and bacteria. The macroinvertebrates (tiny larvae, worms and other organisms living in streambeds) are also sampled to help indicate the health of Trout Run.

The Fairchilds and volunteers have cleaned up trash (especially styrofoam bait containers), completed successful streambank stabilization projects, constructed bankhides to enhance trout habitat and built a handicap-accessible trail and fishing pier at Trout Run. In 1996 Trout Run became a part of a federal Clean Water Act Watershed Protection project, coordinated by Ron Fairchild.

Trout Run is a better natural resource today because of the dedication of the Fairchilds. They have donated many hours to present educational programs, to recruit and train volunteers, and to inform the public about the opportunities to make a difference in Iowa's environment.



The Fairchilds today after a recent cleanup project at Trout Run.



The Fairchilds in 1993 at Trout Run Park.

If you are ever up in the Decorah area be sure to visit Trout Run. If you happen to see the Fairchilds, be sure to thank them and ask if there is anything you can do to help.

*Volunteering Today For A Better Iowa Tomorrow is a new feature recognizing those individuals and organizations making a difference in Iowa through volunteers efforts.*

### Upcoming NRC and EPC Meetings

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

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

#### Natural Resource Commission:

- April 6  
Des Moines
- May 11  
Anamosa
- June 8  
Ottumwa
- July  
No meeting
- August 10  
Storm Lake

#### Environmental Protection Commission:

- April 17  
Des Moines
- May 15  
Des Moines
- June 19  
Des Moines
- July 17  
Des Moines
- August 21  
Des Moines

#### State Preserves Advisory Board:

- April 25  
Brushy Creek State  
Recreational Area

## eFishing.com

It never fails. Just when I think I've seen everything, something comes along to jolt me back to reality.

I've written before about my aversion to electronic things. The worst thing that happened over New Year's is my computer survived. I look at electronic gadgets in much the same way as Bob Moats looks at life in general. "If it doesn't have fur, fins or feathers, it can't be trusted," he often said.

I've been taken to task by letter writers for my dislike of cell phones, laptops, beepers and other electronic umbilical cords people can't seem to live without these days. I still put forth the theory the outdoors cannot be fully experienced and fully enjoyed until people are willing to leave these gizmos behind. But I know they are fun for some, and in an emergency they have a place, so I accept that. That was, however, until I encountered the electronic ice angler.

I was training a new officer one cold, winter day when I decided to show "Eric" the finer points of checking ice anglers. Approaching the first portable shack we came across, we could hear a commotion inside. The sound was all too familiar, like that of an ice angler hauling in an illegal fishing line. Moving as quickly as I could, while being careful not to show Eric the pitfalls of walking on ice, I pulled down the zipper to the shelter and opened the door.

The lone occupant was sitting on a bucket, with three holes drilled in the ice. Two of the holes each contained a fishing line, as permitted by law. But from the third hole, a wire stretched across the ice to a device the likes of my eyes had never seen before. At the end of the wire, next to the angler, sat a cone-shaped device with a screen monitor. The angler mentioned something about his camera, but I was too busy looking for water dripping from an illegal third line. Not finding one, I asked to see his license. He had left it at home, so after taking care of that matter, Eric and I left for the warmth of the truck.

Driving down the road, discussing the stop, I asked Eric what he had noticed. His answer proved one should never assume rookie officers don't know what they are doing.

"Well, I saw the light for his camera down the third hole," he said.

"His what?" I asked.

Eric explained the light was lowered into the hole to provide illumination for a camera. The cone-shaped device was actually a video screen for watching fish.

"Watch fish?" I queried, wondering why anyone would want to do that.

Eric explained this new device enabled the angler to see the

fish. Because fish are often missed because the strikes are so soft, seeing the strike allows the angler to hook more fish.

Eric probably wondered if he was in the presence of a man whose boat was no longer tied tightly to the dock.

"What?" I yelled. "You've got to be kidding me! Are you serious!" I honestly think the poor guy feared for his safety. I was waving my arms. My blood pressure was redlining.

"You mean to tell me that thing is for watching fish striking the lure?" I went on and on. Where is the sport I wondered?

My dad passed on to me what he learned from his dad, that being that fishing is comprised of two immovable truths. Truth A is fish bite when they are hungry. Truth B is you have to be smarter than the fish. I can handle A. It's B that messes me up.

Fishing is touch and speed. Surveying the water and picturing the likely submerged structure. Pitting you against the fish by serving up something to entice its taste buds whether it is a fly, a lure or bait. Becoming so in tune with the line, the outdoors and the task at hand that you are ready to set the hook at the slightest nudge or wait out the finned opponent and call its bluff only when the time is right. But now, we can insert electronic gizmos to eliminate the need to think and concentrate and to feel, smell, hear and taste the clues the outdoors gives us.

Think of what electronics can mean to the sport of fishing. You can go out on the lake and take your cell phone and stay connected with the rest of the world instead of really being alone. Now, you can even go on-line with the phone and surf the web or download and send mail. Can't find your way off the lake? No problem if you remembered the GPS. No longer is there a need to know which side of the world the sun rises and sets or where the north star is usually found. In fact, you don't have to go out at all. Just stay home with some "virtual fishing" software.

On and on I went. I was on a roll, but I was winding down. Finally I paused to take a breath. "What's next?" I asked. "A built-in VCR so you can go home and watch what you thought you did?"

"Well," Eric answered. "The new generation cameras are heat sensing, so if the water is murky and the camera can't see the fish, it will still project a heat sensing image...."

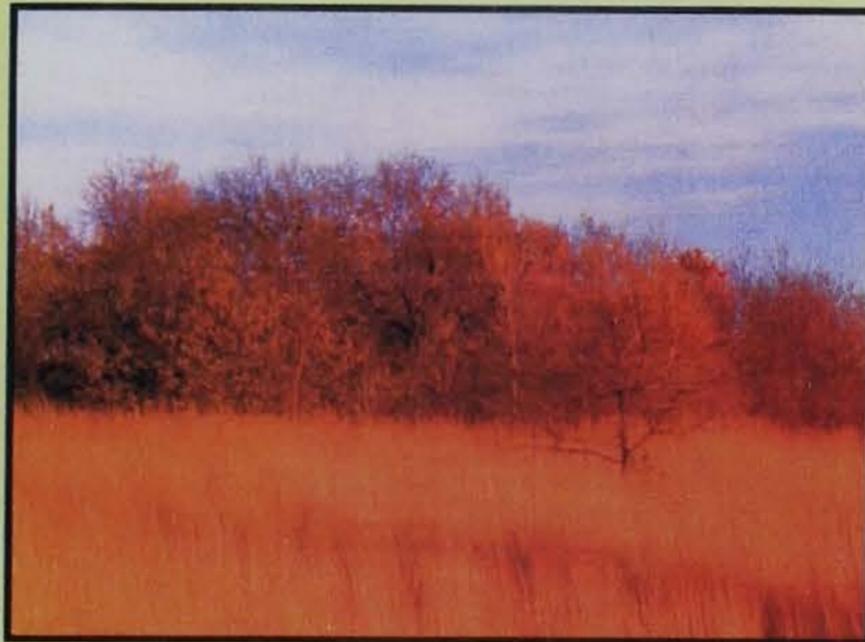
"What? Are you kidding me?" I was off again. Oh well, guess I'll have to get with the times. But I won't do it without a lot of kicking and screaming.

---

by Chuck Humeston

# Watch for SPECIAL MAY/JUNE ISSUE

## IOWA-Portrait of the Land



## Iowa -- Portrait of the Land

In celebration of Earth Day's 30th anniversary, *Iowa Conservationist* subscribers will receive, free, a first-edition copy of *Iowa — Portrait of the Land* in lieu of the standard May/June issue. This 92-page book provides a look at Iowa's natural resource history, the status and trends of those resources and a challenge for all Iowans to pass a healthy land ethic on to those who follow.

In his forward, Paul Johnson, DNR director, says "*Iowa — Portrait of the Land* is a story about this land we call Iowa and our place in it. It is now our turn to help paint our portrait on the land. We will add color everyday as we make personal and community decisions on how we live. Let's paint a landscape in which our children and all of creation can thrive."

*Portrait of the Land* offers a combination of enlightening reading and a beautiful array of color illustrations, in a format designed to make it both a quality keepsake and valuable reference tool. We hope you enjoy this publication and we welcome your comments. Additional copies can be purchased for \$5 by writing the Iowa DNR, Wallace State Office Building, Des Moines, Iowa 50319-0034.

