

SPECIAL 1999 FISHING ISSUE.



FISH & WILDLIFE NEWS

A Newsletter of the Fish and Wildlife Division, Iowa Department of Natural Resources

INSIDE

PAGE 2-8 1999 Fishing Forecast

Page 8

The Maquoketa River Alliance

Page 9

The Best of the Best for 1999

Page 10

The Upper Iowa River and Maquoketa River Smallmouth Bass Catch-and-Release Areas

Page 11

Better Water Means Better Fishing

Hunting Licenses and Fees

Page 12

Fishing Access for All

Page 13

IOWATER, DNR's Volunteer Water Quality Monitoring Program

DNR Awards Brass Bluegill

Page 14

French Creek Creel Surveys

Page 15

Hunting Seasons, Proposed Migratory Game Bird Seasons

Page 16

Fishing Clinic List

Northern Pike and Walleye Spawning Operations

by Mike Mason, Fish Culture Section Supervisor



Fisheries crews set gill nets in the late evening in Clear Lake to collect brood stock walleye such as this large female.

each year in late March or early April, northern pike and walleye spawn in many areas throughout Iowa. At this time that fisheries personnel begin their search for brood stock to produce enough eggs, and resulting fry and fingerlings, to stock Iowa lakes and streams. Generally, northern pike are the first of the two species to begin their spawning runs.

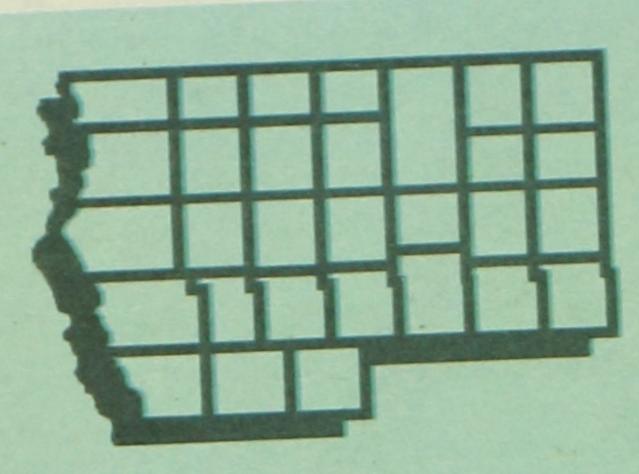
Iowa fisheries personnel have targeted the northern pike that move into the shallow backwater areas of the Mississippi River as the brood stock of choice. A three-person crew from the Guttenberg management station place up to 30 trap nets in river pools 10 and 11 to collect brood fish for spawning operations. The goal of the crew is to collect about 60 adult females and 180 adult males for every one million eggs needed for hatchery production. The usual goal is to collect up to three million eggs. Unfortunately, decreasing habitat has made the job difficult for the crews and locating enough fish can

be a challenge. All northerns collected are transported to the basement of the Guttenberg management station. Free flowing eggs are stripped from females and then sperm from 3 to 5 males is added to each liter of eggs amassed. About 65,000 northern pike eggs constitute a liter. A salt water solution is then added to the egg and sperm mixture to activate fertilization. Up to three liters of eggs will be placed into hatching jars and the eggs will incubate for about five days before they begin to "eye-up" and a total of nine days before they hatch. Females without free flowing eggs are injected with a hormone derived from carp pituitary glands. The natural hormone stimulant induces egg release speeding up the normal spawning cycle of the fish.

After hatching, some 50,000 fry are placed into water-filled plastic bags, oxygen is added and the bags are sealed for transport to rearing ponds at Fairport Hatchery or are stocked directly into selected waters. Stocked areas include segments of the Cedar, Iowa, Maquoketa, Shellrock, Wapsipinicon and Winnebago rivers. Lakes stocked include Arrowhead, Badger, Beeds, Blue, Browns, Clear, Crystal, Diamond, George Wyth, Little Wall, Macbride, North Twin, Saylorville, Silver, Snyder Bend and Sweets Marsh.

continued on page 10

9 FISHING FORCAST



by Tom Gengerke Regional Fisheries Supervisor

When anglers think of fishing in northwest and north-central Iowa the first fish that comes to mind is probably not the channel catfish. However, summer and catfish fishing go hand in hand, and rivers and streams represent your best opportunity. In fact, our large- to moderate-sized streams are particularly under-used. They support excellent self-sustaining populations. River catfish typically average 1 to 2 pounds, however, larger fish more than 10 pounds are not uncommon.

Knowledgeable anglers look for brush piles and deep pools during the summer. Because catfish eat both plant and animal materials, many different types of baits will work. Prepared baits, chicken livers and crayfish are extremely popular. Riffle areas can be productive in the evening. Fish often move from the adjoining pools to the riffles to feed at this time of day.

Where are the best areas to find riverine channel catfish in our part of the state? Try the East and West forks of the Des Moines River in Kossuth and Humboldt counties. The area from Estherville north to the Iowa-Minnesota border, the Little Sioux River from Buena Vista County to the Woodbury-Monona County line and the reach of the Little Sioux just north of Spencer are all excellent. The abundant habitat in these river reaches contribute to consecutive strong year-classes as well as providing the angler with many, easily accessible locations to fish.

As you move downstream on the Des Moines in Webster County, the river becomes wider and anglers should search out the deepest pools, particularly those on outside bends. A bonus in this section is the flathead catfish. Each year, flatheads in the 20- to 40-pound size class are caught from these locations. Anglers pursuing flatheads frequently use green sunfish, chubs and goldfish for bait.

The North Raccoon River in Sac, Calhoun and Carroll counties offers the angler a variety of habitats and plenty of catfish. Anglers should not overlook the rock rubble fishing riffles or cutbanks along this river reach. Many of the fish are 1 to 5 pounds or larger.

Specific locations on the Big Sioux River include the reach from Gitchie Manitou to the Klondike Dam in Lyon County, the area from the Rock/Sioux access to Oak Grove Park in Sioux County and the Plymouth County accesses located at Big Sioux Park and Millsite.

Channel Catfish! A good fight! Excellent table fare! Lots of them! Go with the flow. Fish our rivers and enjoy a great outdoor adventure.

WALLEYE

Storm Lake (Buena Vista) 1998 was a very good year for Storm Lake walleye. With good recruitment and survival of smaller fish, anglers have found plenty of larger fish. May and June are still the best months to fish, but trolling in late summer has also been productive. Twisters and live bait rigs are proven producers. North Twin (Calhoun) Walleye fishing was very good during 1998. Limits of fish in the 15- to 22 inch range were taken by trolling crank baits during July. We expect similar results for 1999 anglers. Don't overlook early spring (April) using twisters. Five Island (Palo Alto) The 1995 year class will continue to produce dividends for the angler in 1999. The majority of fish should be 15- to 20-inches. Ingham (Emmet) fast growing 1995 walleye year class will produce excellent opportunities during 1999. Average size should approach 18 inches. Black Hawk (Sac) This lake has been a fairly consistent producer over the past few years and should be an excellent choice for 1999. The majority of legal fish will be 15 to 18 inches. Silver (Dickinson) The strong 1995 year class will be the major contributor to the 1999 fishery. This lake consistently produces larger fish. Spirit (Dickinson) 14-inch fish will come from 1994 and 1995 year classes. The majority of fish will be sublegal, providing the opportunity for catch and release. East Okoboji (Dickinson) Some larger fish (20 inches) will be caught during 1999. These fish were recruited from the 1991 year class. The majority of fish in the creel will come from the 1994 and 1995 year classes and some catch and release will be necessary. West Okoboji (Dickinson) The fall of 1998 produced some excellent fishing, especially for larger fish. 1999 should be a good year for walleye anglers. Clear Lake (Cerro Gordo) Fall surveys highlighted good numbers of 14- to 16-inch fish as well as 20 to 24-inch fish. Spring fishing will yield lots of fish around 12 inches. Iowa River (Hardin) 2-inch fingerling stockings from Alden to the county line have survived well and are providing good opportunities for 1- to 2-pound fish. Cornelia (Wright) 1998 surveys showed good numbers of 1- to 2-pound fish. Little Spirit (Dickinson) Numbers are increasing. Dominant size range is 14 to 16 inches.

YELLOW PERCH

Cornelia (Wright) Large population. Variety of sizes. Fish up to 10 inches. Rice (Winnebago) Lots of small fish. Fair number of keepers. Typically good in fall and winter. Spirit (Dickinson) Excellent population of 4- and 5-year-old fish available. West Okoboji (Dickinson) Fishing will improve in 1999, with better numbers of 4- to 6-year-old fish. East Okoboji (Dickinson) Good for fish up to 10 inches during the early spring period. Little Swan (Dickinson) Good numbers of 9- to 11-inch fish are available. Little Spirit (Dickinson) Numbers are increasing. Average size 9 to 10 inches.

BLACK BULLHEAD

Rice (Winnebago) Excellent number of 1/2- to 3/4-pound fish. Bite begins shortly after ice-out. Cornelia (Wright) Consistently good. Most fish are over 1/2-pound. Fish the north shore and jetty near the ramp. High (Emmet) - Relatively lightly fished. Quality fishing available. Lost Island (Palo Alto) Large number of fish available.

CHANNEL CATFISH

Snyder Bend (Woodbury) Excellent population of 2- to 5-pounders, with some 10 to 15. Early ice-out anglers should try shad entrails for immediate action. Storm Lake (Buena Vista) Fishing has been tremendous and will continue that way into the next century. Keep it simple - use nightcrawlers, chicken liver and stink baits. Drifting cut bait or dead chubs in the heat of the summer is excellent. Little Sioux River (Buena Vista) Rivers are consistent producers. With over 20 public access sites in seven counties, getting to the "fishing holes" is easy. A variety of baits - cut baits, live bait, stink bait and liver - produce for river anglers. Clear Lake (Cerro Gordo) Good opportunity for shore anglers. Variety of sizes up to 10 pounds. Iowa River (Hardin) 1998 surveys showed an abundance of fish in the 1- to 3-pound range. Des Moines River (Kossuth and Humboldt) Excellent habitat. Fish snags, holes and pools below riffles. Boone River (Hamilton) Catfish are king below Webster City. An occasional flathead also available. Lake Pahoja (Lyon) Excellent numbers of 2- to 5-pound fish available. Big Sioux River (Lyon, Sioux and Plymouth) Large numbers of fish available. Flathead fishing is improving. East Okoboji (Dickinson) Excellent population of 3- to 5-pound fish. Mill Creek Lake (O'Brien) Large fish recruited from the cage program.

MUSKIE Clear Lake (Cerro Gordo) 30 to 34 inches were the dominant size observed during 1998 sampling. West Okoboji (Dickinson) This lake has been the most consistent producer over the past few years.

BLUEGILL

Little Wall Lake (Hamilton) Good numbers of quality size fish (7 to 9 inches). Fish May and June. Briggs Woods Lake (Hamilton) Lots of 6- to 8-inch bluegill are available. Willow Creek Pond (Osceola) Quality 6 to 8 inches) and larger 8-inch-plus fish. West Okoboji (Dickinson) Large population of 6- to 8-inch gills.

CRAPPIE

Crystal Lake (Hancock) Excellent numbers of 8- to 9-inch crappie. Fish the old road bed or around fallen trees near shore in May. Lake Smith (Kossuth) 7- to 8-inch fish are abundant. Fish in the rocks on the dam during the spawn.

NORTHWEST CRAPPIE CONTINUED

Beeds Lake (Franklin) Excellent. Fish the rocks on the causeway, over sunken brush and stake beds. North Twin (Calhoun) Lots of nice 8- to 10-inch fish. Try the south shore in May. Swan Lake (Carroll) Early spring and late fall are the best times and the covered fish house is the best place. Fish run 8 to 11 inches. Ingham Lake (Emmet) Fish the submerged shallow water timber in spring. Fish run 9 to 11 inches. Iowa Lake (Emmet) Good numbers of large fish. Five Island (Palo Alto) Fishing is improving. Good numbers of 8- to 10-inch fish. Silver Lake (Palo Alto) Crappies are approaching 10 inches.

NORTHERN PIKE

Crystal Lake (Hancock) Good population of 2- to 4-pound pike, with a few fish over 10 pounds. Little Swan (Dickinson) Good numbers of 3- to 5-pound fish. Tuttle Lake (Emmet) A traditional favorite.

Trumbull Lake (Clay) Excellent opportunity for fish larger than 30 inches.

SMALLMOUTH BASS

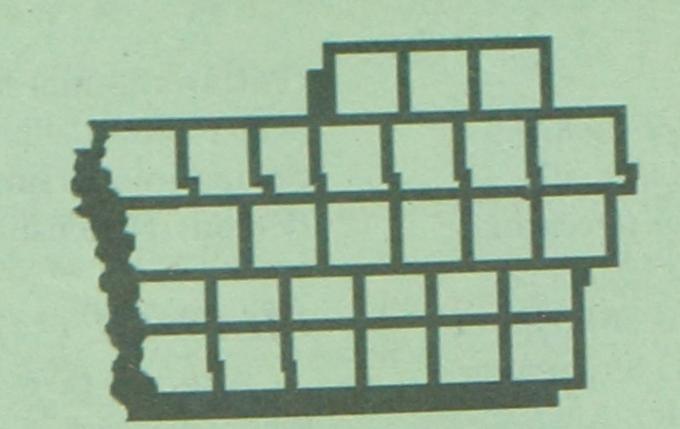
Spirit Lake (Dickinson) Excellent numbers. Stable population. Spring and early summer are the most productive periods. Fish submerged rocks and points. West Okoboji (Dickinson) Good recruitment from 1994 and 1995 year classes. Potential for state record. Iowa River (Hardin) Excellent habitat with quality fish from Alden to Eldora.

LARGEMOUTH BASS

Lake Pahoja (Lyon) Recent surveys indicate good numbers of fish larger than 15 inches. Anglers are encouraged to practice catch and release at this lake. Little Wall (Hamilton) Many 1- to 3-pound fish are available. Remember the 18-inch minimum length limit. Upper and Lower Pine Lakes (Hardin) Good population in both lakes. Surveys showed fish from 12 to 19 inches.

YELLOW BASS

Clear Lake (Cerro Gordo) Excellent opportunity to catch 8 to 10-inch fish from mid-May to early June. Fish over rocky substrate in shallow water.



SOUTHWEST

by Joe Schwartz Regional Fisheries Supervisor

I look for 1999 to be another excellent fishing season in southwest Iowa. May is usually the top time for fishing the small reservoirs, which provide the majority of fishing in this part of the state. For the most part, our fishing centers on four species: largemouth bass, bluegill, crappie and channel catfish. We have good fishing for other species like walleye and white bass in some lakes and reservoirs, but the big four are everywhere.

Most people think of catfish as warmweather fish, but some really good fishing occurs right after ice-out. The best baits are winter-killed fish found along the shoreline or shad purchased from a bait store.

Crappies start biting in mid-April and are going strong by May. Small jigs and minnows are the best baits.

Good bass fishing usually starts 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,

typically around Memorial Day in this part of the state. 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 crappies, fishing deeper structure for bass and bottom fishing for catfish are all effective in mid-summer. The cooler temperature of autumn make for more pleasant fishing and better catches.

Several unique fisheries have been established in southwest Iowa in recent years. They are a little different than the usual bass, bluegill and catfish fisheries.

In 1995, we stocked wipers (a white bass and striped bass hybrid) in Big Creek. One plastic bag containing 50,000 fry has been stocked each year, but these fish have survived and grown rapidly. Big Creek wipers range in size from 8 to 18 inches. The best fishing tactic seems to be trolling jigs with twister tails or jig and minnow combinations. Troll about the same speed you would for walleye, but fish the lure up in the water column.

Lake Manawa is another intensively fished body of water. Located in Council Bluffs, it's an old oxbow of the Missouri River. This shallow, fertile lake is home to many of the diverse fish species found in the river, but crappie, catfish and yellow bass make up the majority of fish caught. In 1993, the DNR started stocking saugeye fry in Manawa, and a respectable fishery has been established. Today, surveys show 15inch fish are common. Last year anglers reported catching 6- to 8-pounders at a surprising rate. Trolling typical walleye baits is the preferred method to catch saugeye. The west side of the lake and south near the canal point are the most productive.

SOUTHWEST BLUEGILL

Ahquabi (Warren) Tremendous redear sunfish population. Tough to catch. Anita (Cass)
Consistently large fish. Try the structure. Badger Creek (Madison) Good for large numbers of
7- to 8-inch fish. Beaver (Dallas) Good for 6 1/2- to 8 1/2-inch fish. Big Creek (Polk) Large
numbers of 6- to 7-inch fish. Try the tree reefs. Hickory Grove (Story) 7- to 9-inch fish.
Hooper (Warren) Redear good. Bluegill 6 1/2- to 8-inch. Icaria (Adams) Nice looking 7- to
8-inch fish. Little River (Decatur) 7- to 8-inch fish are common. Good bluegill fishing.
Meadow (Adair) Good 6- to 8-inch fish. Redear are dandies. Nine Eagles (Decatur) Try
marked fish reefs. Good redear are present. Little fishing pressure. Nodaway (Adair) Good
before vegetation becomes established. Three Mile (Union) New lake. Tremendous population
of 7- to 8-inch fish with some up to 9 inches. Redear up to 10 inches. Twelve Mile (Union)

Fish 8 to 9 inches are common. Try around flooded trees. Viking (Montgomery) 8-inchers common. Best in spring and early summer.

CRAPPIE

Ahquabi (Warren) Nice 9-inchplus fish. Anita (Cass) First crappie lake to start in the spring. Nice fish 8 1/2 to 10 1/ 2 inches. Badger Creek (Madison) Nice 8- to 9-inch fish. Big Creek (Polk) Most fish will be 7 to 10 inches. Fish the new structure or the jetties. DeSoto Bend (Harrison) 1997 was their best crappie year ever. Should be good crappie in 1998. Don Williams (Boone) Nice 8- to 10-inch fish. Easter (Polk) 7- to 9-inch common, few fish up to 11 inches. High density of crappie. Green Valley (Union) 7 1/2- to 8 1/2-inch fish common, with some up to 12 inches. Greenfield (Adair) Mostly small fish.



SOUTHWEST CRAPPIE CONTINUED

Icaria (Adams) Try fishing riprapped areas. Lots of 7 1/2- to 8 1/2inch fish. Littlefield (Audubon) Lots of 8 to 10 inchers last fall. Should be good this spring. Try face of dam. Little River (Decatur) Try around flooded trees. Lots of 8 to 9 inch fish. Some 12 inchers. Manawa (Pottawattamie) Good early fishing in lagoons. Mariposa (Jasper) Lots of 7- to 8-inch crappies. Meadow (Adair) Strong year class of 8- to 9-inch fish and few big ones. Orient (Adair) Always turbid water, but still good crappie fishing, 8 to 9 inches. Prairie Rose (Shelby) Fish are 8 to 11 inches. Good all summer but best in spring. Red Rock (Marion) Big fish. Fish when water is clear, try feeder stream embayments. Rock Creek (Jasper) 7- to 8 1/2-inch fish in bays, around points. Saylorville (Polk) 8 to 11 inch for most part, fish around Marina and Mile Long Bridge areas. Slip Bluff (Decatur) 8- to 9-inch fish. Few people fish this lake. Three Mile (Union) Tremendous numbers of 8- to 9-inchers with fair numbers of 11- to 13inch. Twelve Mile (Union) 8- to 10-inch and good numbers. Viking (Montgomery) Mostly small fish this year. West Lake Osceola (Clarke) Impressive numbers of 9- to 10 1/2-inch fish with some up to

(Pottawattamie) Nice size fish. Average 1 pound. Rock Creek (Jasper) Fish are definitely keepers but not as many as in the past. Springbrook (Guthrie) Medium-sized, but lots of them. Three Mile (Union) Nice fish. Lots of 10- to 13-inch fish.

CHANNEL CATFISH

Ahquabi (Warren) Nice fish, 19 to 23 inches. Big Creek (Polk) Really nice fish, lots of them and not many catfish anglers. Cedar (Madison) 4- to 6-pounders, but you will have to sort through abundant small ones. Easter (Polk) Excellent for fish 12 to 20 inches. Fogle (Ringgold) Great numbers of 1- to 2-pound fish. Green Valley (Union) Good numbers of 14- to 18-inch fish, with some up to 5 pounds. Icaria (Adams) All sizes up to 5 pounds. May have to sort out smaller fish. Little River (Decatur) Fish small bays in midsummer. Many 3- to 10-pounders. Littlefield (Audubon) Fish north shore on strong south wind. Manawa (Pottawattamie) Good numbers, most 2 to 6 pounds. Up to 12 pounds. Meadow (Adair) Fish are 2 to 6 pounds. Mormon Trail (Adair) Good numbers. Nine Eagles (Decatur) 1- to 4-pound cats are abundant and underutilized by

LARGEMOUTH BASS

Ahquabi (Warren) Excellent catch and release fishing. 18-inch length limit on bass. Anita (Cass) Perennial favorite. Bass up to 6 pounds. Fish the structure. Badger Creek (Dallas) Lots of 12- to 15inch bass with an occasional lunker. Beaver (Dallas) Good catch and release fishery for less than 15 inches. Big Creek (Polk) Try new structure. Face of dam, new silt dikes and jetties. Don Williams (Boone) Most fish are 13- to 17-inches, some lunker size fish. Easter (Polk) Up to 5 pounds. Mostly 10- to 14inches. Farm Ponds Many private ponds in southwest Iowa have good bass. Green Valley (Union) A 22-inch length limit here. Any keeper will be a real trophy. Hooper (Warren) Excellent catch and release fishery. 18-inch length limit on bass. Little River (Decatur) Great fishing. Fish submerged brush and trees. Good numbers of 2- to 3

1/2-pounders. Mariposa (Jasper) Good catch and release fishery. Meadow (Adair) Good bass lake for fish up to 5 pounds. Nine Eagles (Decatur) Good numbers of small fish, an occasional large fish. Prairie Rose (Shelby) Fish the stake beds and brush piles. Red Rock (Marion) Best from mid-May to mid-July. Saylorville (Polk) Lots of small bass. Fish face of dam, Big Creek outlet or any rocky area. Three Fires (Taylor) Good for bass up to 5 pounds if the water is clear. Lake tends to be muddy. Three Mile (Union) Tremendous fishing for 11- to 14-inch fish with good numbers of 15 to 19-inch fish. The new hotspot. Twelve Mile (Union) Excellent for 12- to 18-inch fish. Our most popular tournament lake. Viking (Montgomery) Good population of 12- to 15-inch fish. Fish the new structure. West Lake Osceola (Clarke) Good summer time bass fishing.

WALLEYE/SAUGEYE

Big Creek (Polk) 6- to 22-inch fish. Looking good for 1999. Des Moines River (Polk and Boone) Fish below Corps dams, low head dams and gravel riffles. DeSoto (Harrison) Best in spring. Fair numbers of 14- to 17-inch fish. Icaria (Adams) Fish are up to 10 pounds. Little River (Decatur) Average fish are 14 to 18 inches. Excellent population. Manawa (Pottawattamie) Was good in 1997, looks good for 1998. Mostly 14- to 16-inch fish. Saylorville (Polk) Fish sandy points, old river channel. Three Mile (Union) New lake. Try the flooded road beds and humps for 15- to 24-inch fish. Twelve Mile (Union) Fish man-made reefs. Fish are 13 to 18 inches and up to 6 pounds. Best walleye lake for numbers in southwest Iowa.

BULLHEADS

Beaver Lake (Dallas) 10-inch plus, numbers down. Little River (Decatur) Nice fish, big catches. 10- to 13-inchers. Manawa



Ken Formanek

anglers. Nodaway (Adair) Best early. Summer vegetation makes fishing tough. Orient (Adair) Stocked every year. Fish the camping area or on strong south wind. Red Rock (Marion) 12 to 20 inches. Best from Mile Long Bridge and towards dam. Rock Creek (Jasper) Shallow, fertile lake with good catfish of all sizes. Saylorville (Polk) Excellent channel fishing. Lots of 2- to 4-pound fish. Summit Lake (Union) 1- to 3-pounders common. New boat ramp makes for good access. Rivers in southwest Iowa Catfish are abundant in all of our rivers. Three Mile (Union) Good numbers of 1- to 3-pound fish. Twelve Mile (Union) Cats 2 to 4 pounds common, good early on cut shad. Viking (Montgomery) All sizes to 6 pounds. A few big ones. West Lake Osceola (Clarke) 2- to 4-pounders with a few 12 pounders.

YELLOW BASS

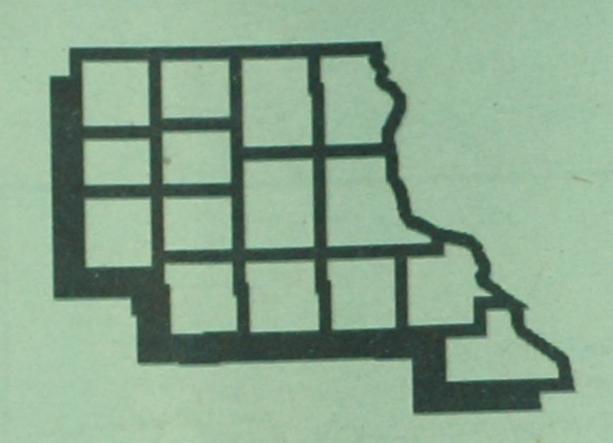
Carter Lake (Pottawattamie) Lots of small fish. Icaria (Adams) 6- to 9-inch. Hard hitters, good eating, lots of fish. Manawa (Pottawattamie) Lots of small fish, but an occasional pounder. Twelve Mile (Union) Moderate numbers of 7- to 9-inch fish. Viking (Montgomery) Moderate amount of 8- to 9-inch fish.

MUSKIE

Three Mile (Union) Newest southwest Iowa musky lake. Fish to 34 inches and growing rapidly.

WHITE BASS/WIPERS

Red Rock (Marion) Fish mid-summer, off of dam towards beach or up towards marina. Saylorville (Polk) Good in reservoir and below dam. White bass are 8 to 13 inches. Big Creek (Polk) 8- to 18-inch fish.



NORTHEAST

by Dave Moeller Regional Fisheries Supervisor

Northeast Iowans are blessed with a diversity of quality fishing waters ranging from the step-across trout streams to the 2-mile wide Mississippi River, and from small ponds and lakes to the large Mississippi backwaters.

This tremendous diversity produces a wide array of quality sport fish for anglers to pursue. Listed in the following tables are the areas where fisheries biologists expect angling for the major species to be very good this year. For most of us, the best time to go fishing is any time we can; however, if we can coincide our efforts with certain key periods and conditions, our success will be greatly enhanced.

Let's also take a look at when we should concentrate our efforts for the major species. The weeks just before and after the spawn (around 75 degrees) are the best for bluegill fishing. The males are aggressively guarding their nests and will attack small baits and lures entering their space. Mid-summer months are also productive, but in the deeper water areas with structure. During the

lowest flow conditions in summer, the Mississippi River wing dams frequently produce lots of big gills. The first few weeks after ice-up is another peak time for some of the biggest gills of the year.

As soon as the ice goes out, **catfish** go on a feeding binge, eating fish that have died over the winter. Fishing with cut-bait or dead minnows is often excellent. Catfishing is frequently excellent on a rising river. The summer and early fall period of low and stable river flows is also a favored time for cats.

Like their cousin the bluegill, male crappie become very aggressive during the pre-spawn and spawning period (58-68 degrees), normally in May. The cooler fall months can also be very good. Again, like the bluegill, the early ice fishing period is an excellent time for crappie.

By far the most productive period for largemouth bass is the pre-spawn when the water temperature ranges from 55 to 62 degrees and the fish are actively feeding in shallow water. The fall months from mid-September to when the water cools to about 50 degrees are also good when the bass are shallow and foraging for the winter.

The hot months of July and August are often the best for northern pike. Big bobber fishing with a live chub in the deeper backwater areas is very effective. During these hot months, also seek out areas where cooler tributaries or a trout stream enters larger, pike-holding rivers. These cooler waters are a true magnet for northerns at this time.

The tailwaters of the navigation dams

are often loaded with saugers beginning in late fall (October), right through the winter months and on into the early spring (April). Fish on the bottom with jig-and-minnow, sonars or three-way rigs.

When the streams are clear enough, the pre-spawn period from 50 to 60 degrees is an excellent time for **smallmouth bass**. The clear and stable water conditions of summer and fall also result in good smallmouth angling, often with good action continuing right into November.

Trout streams are generally good throughout the April to November stocking season. The fall months are particularly good as angling pressure and streamside disturbance are reduced. An excellent time to fish the stream-reared trout populations (the put-andgrow streams and special regulation streams) is just after a moderate rain.

The pre-spawn period for walleye from just after ice-out to when the water temperature reaches about 48 degrees is an excellent time to fish below the navigation dams on the Mississippi River and the low-head dams on our larger, interior rivers. Late spring and summer often finds them on the wing dams and along riprap areas on the Mississippi when the river flow is not too strong. Late fall and winter on the "Big River" again finds walleye in the dam tailwater areas and on the interior rivers in the deepest pools.

Having been armed with the location of the best fishin' holes and the best times to pursue those species, the only thing left is the fun part -- the doing. I sincerely hope that your angling enjoyment in 1999 is surpassed only by the beauty of northeast lowa.

BLUEGILL

Casey Lake (Tama) Abundant 7- to 8-inchers. Fish shallow waters in May and June. Lake Delhi (Delaware) Fish up to 7 inches. Fish early spring and late fall to avoid heavy boat traffic. Lake Hendricks (Howard) 6- to 8-inchers common. Fish near the abundant habitat structures and around the handicap-accessible fishing pier. Mississippi River (Pools 9-15) Expect an increase of more and bigger bluegills throughout the range, but most fish are less than 7 inches. Sweet Marsh Segment B-Marten's Lake (Bremer) Abundant 6- to 7-inchers with some up to 8 inches. Concentrate along shorelines in May and June. Volga Lake (Fayette) From 6 to 8-inches and found along old creek channels and along the dam.

CHANNEL CATFISH

Cedar River (Black Hawk, Bremer, Chickasaw and Floyd) Abundant numbers from Charles City downstream and occasional flathead below Waterloo. Lake Delhi (Delaware) Good population of all sizes. Avoid mid-summer due to high boat traffic. Lake Meyer (Winneshiek) Supplemental stocking has built up good numbers of quality-size cats. Maquoketa River (Delaware, Jones and Jackson) Good populations from Manchester downstream to the Mississippi River. Abundant number of fish exceeding 5 pounds sampled in Jones County. Meyer Lake (Black Hawk) Good numbers of quality-sized catfish with occasional fish over 10 pounds. Mississippi River (Pools 9-15) Population numbers and average size continue to increase every year. Many fish in the 2- to 4-pound size group are harvested, and bigger fish in the 5-pound-plus class are becoming more numerous. Shell Rock River (Butler) Good numbers throughout county; try the shallow riffle areas in the fall. South Prairie Lake (Black Hawk) 1to 2-pounders abundant in this lake located just south of Cedar Falls. Turkey River (Clayton) Best population from Elkader to Osterdock; hit the deep water just below the riffles, around snags and along rocky banks. Upper Iowa River (Allamakee) Best accessed by canoe from the lower dam northeast of Decorah to Highway 76 north of Waukon. Medium sized fish, but plentiful.

Volga Lake (Fayette) Many years of fingerling catfish stockings have established an excellent population. Some very large cats are occasionally taken. Wapsipinicon River (Buchanan) Concentrate your effort downstream from Littleton; all sizes present.

CRAPPIE

Casey Lake (Tama) Average-size fish in deep-water structure; concentrate on shallow areas during May spawning season. Lake Delhi (Delaware) Average size fish abundant. Concentrate fishing in spring and fall around fallen trees or woody structure. George Wyth Lake (Black Hawk) Good number of 8- to 9-inchers. Handicap accessible fishing pier available. Mississippi River (Pools 9-15) Lots of fish 8 to 9 inches with quite a few from 10 to 13. Move frequently until you locate an active school. Minnows and small jigs fished under a bobber around brush and woody structure produces the best catches. Sweet Marsh Segment B-Marten's Lake (Bremer) Good numbers of 8- to 10-inchers.

FRESHWATER DRUM (Sheepshead)

• Mississippi River (Pools 9-15) Fishing for drum has been and is expected to continue to be excellent. Fish the current breaks on sandy shoals and wing dams using nightcrawlers.

LARGEMOUTH BASS

Casey Lake (Tama) 18-inch minimum size limit has produced an excellent population with numerous 5-pound-plus bass. Fish along the dam and around structure. George Wyth Lake (Black Hawk) Concentrate on the sunken tree piles, pallet-bed structures, rocky areas and around the new jetties. Greenbelt Lake (Black Hawk) Good numbers of quality-size fish. Lake Delhi (Delaware) Good population along the rocky shorelines and woody structure. Lake Meyer (Winneshiek) Good numbers of quality-size bass; 18-inch fish not uncommon.

NORTHEAST LARGEMOUTH BASS CONTINUED

Mississippi River (Pools 9-15) The "Big River" still supports the largest bass population in the state. Good numbers, but most are less than 5 pounds. Fish in the backwater lakes and running sloughs near woody structure. 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. South Prairie Lake (Black Hawk) Abundant 12- to 15-inch bass; 18-inch minimum size limit. Sweet Marsh Segment B-Marten's Lake (Bremer) High numbers of quality-size bass. Be sure to check your boat and trailer for presence of Eurasian water milfoil when leaving. Volga Lake (Fayette) Good population of medium-size bass with some over the 15-inch length limit. Try along the riprap or near deeper snags along the west shore.

NORTHERN PIKE

Cedar River (Black Hawk and Bremer) Fish the shallow backwaters. Maquoketa River (Delaware) Stocking has resulted in a quality pike fishery. Mississippi River (Pools 9-13) Most fish from 5 to 8 pounds some up to 15. Fish large, live baitfish in the backwaters in summer and fall and near the mouths of coldwater tributary streams during the hot summer periods.

Sweet Marsh Segment B-Marten's Lake (Bremer) Good population augmented with fingerling stockings. Wapsipinicon River (Buchanan, Black Hawk and Bremer) Best from Independence upstream. Fish the abundant deadfalls and connected shallow backwaters. Excellent numbers of all sizes of pike.

SAUGER

Mississippi River (Pools 9 through 15) Tremendous numbers of 12to 13-inch fish will provide excellent angling the next few years. Very good numbers of 14-to 17-inchers. Most are caught in the tailwaters of the navigation dams from late fall through the early spring months.

SMALLMOUTH BASS

Cedar River (Bremer and Black Hawk) Best habitat and bass numbers are downstream from Waverly and Waterloo. Cedar River (Mitchell and Floyd) Excellent habitat above and below the Mitchell Impoundment. Catch-and-release area from Otranto to St. Ansgar. Good below Charles City. Maquoketa River (Delaware) In the catch-and-release area below the Lake Delhi dam, the smallmouth population is at a record high level! Maquoketa River (Jones and Jackson) Great habitat and excellent numbers below Monticello and Canton. Many fish over 15 inches sampled in 1998. Mississippi River (Pools 9 through 15) Species responding to increased habitat. Fish rock structure in the current. Fair numbers in the 15- to 18-inch range. Many 10- to 12-inchers. Shell Rock River (Butler and Bremer) Good populations from Greene to the confluence with the Cedar River. Shell Rock River (Floyd) Best accessed from canoe or by wading; medium size fish. Turkey River (Clayton) Excellent habitat from above Eldorado down to Big Spring, and from Elkader to Garber. Best accessed by canoe. Upper Iowa River (Allamakee, Howard and Winneshiek) Best fishing early above Kendallville, later below Decorah. Catch-and-release area from Decorah to Upper Dam; numerous 12 to 18 inchers. Volga River (Fayette) Small, scenic river. Best from Fayette to Mederville. Best accessed by canoe. Wapsipinicon River (Buchanan) Littleton to Quasqueton has the best habitat. Good numbers of smallmouth up to 18 inches.

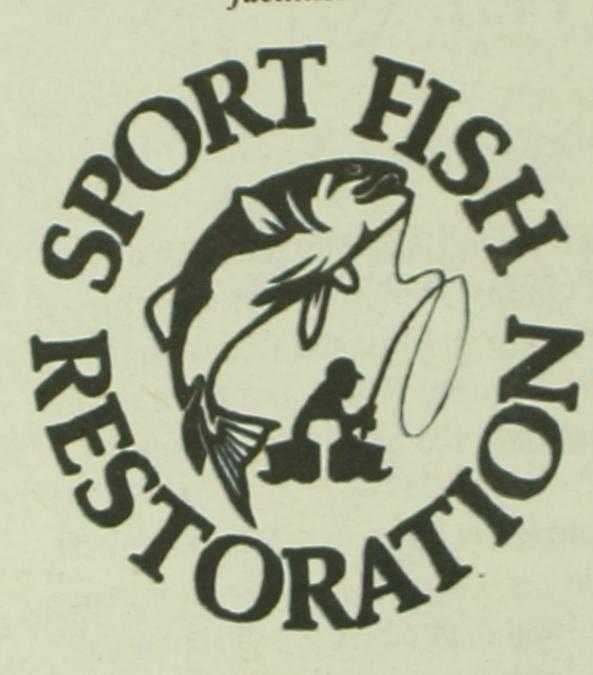
TROUT

Bankston Creek (Dubuque) Stocked twice a week with catchable rainbow, brown and brook trout. Bloody Run (Clayton) Stream stocked with browns and rainbows from April through October. Special brown trout segment on lower end with a 14-inch minimum length limit and artificial lure only restriction contains large browns. Ensign Hollow (Clayton) Abundant brown trout in the 12- to 17-inch range with some larger fish present. Rainbow population increasing due to fingerling stockings. Catch-and-release and artificial lure only.

Each year, more than 700,000 anglers contribute nearly \$400 million to Iowa's economy. Almost half of all Iowans fish, making fishing the most popular participant sport in the state.

The Sport Fish Restoration Act (SFR) of 1950, and the companion Wallop Breaux Amendment of 1984, placed a ten-percent tax on the fishing related tackle, supplies and marine fuels purchased by anglers. A state's share of this money is based upon its geographic size and the number of fishing licenses sold. Currently, Iowa's return is nearly \$7.50 for every license sold, approximately 28 percent of the fisheries budget. In the past five years, SFR funds have brought \$3 million to Iowa annually.

Your purchase of fishing equipment and motor boat fuels supports sport fish restoration and boating access facilities

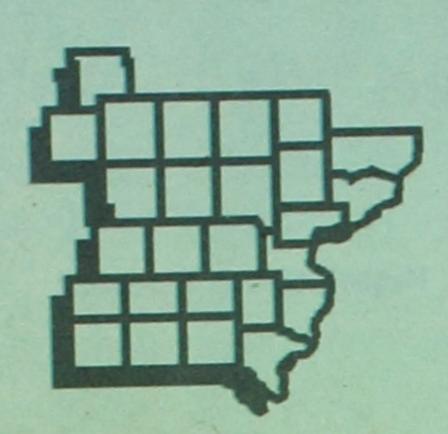


Sport Fish Restoration funds are used to build lakes and lake renovations and accesses, stream habitat improvement, fishing piers, jetties, boat ramps, fish cleaning stations and silt retention structures to protect water quality and extend a lake's life. In addition, funding is used for acquisition, education, research and development.

> Fountain Springs (Delaware) Stocked with catchable rainbow and brook trout twice per week April through August, once per week in September and October. Half-mile of additional stream purchased in late 1998. French Creek (Allamakee) Wild brown trout catch-andrelease area. High numbers with increasing numbers of large fish. All angling restricted to artificial lure only. Maquoketa River (Clayton and Delaware) Catchable brown and brook trout stocked as well as brown and rainbow trout fingerlings. Fish the abundant woody structure for large brown trout. Pine Creek (Allamakee and Winneshiek) Walk-in access to very remote and scenic stream. Stocked with browns twice monthly from April through November. Sny Magill/ North Cedar (Clayton) Excellent drive-up or walk-in access on Sny Magill which is stocked from April through November with brown and rainbow trout. North Cedar is walk-in access and is stocked with browns once per month in the lower portion and with fingerling brooks once annually in the upper end. South Pine (Winneshiek) Very strong numbers of naturally reproducing, vividly colored brook trout. Catch-and-release and artificial lure only. Three fourths of a mile walk to get to stream. Fish over 15 inches present. Spring Branch (Delaware) Watershed project has resulted in the improvement of all eroding banks on the stream. Fourteen-inch size limit on brown, rainbow and brook trout and artificial lures only. A high-quality trout stream. Trout Run (Winneshiek) Handicap parking and stream access. Stocked twice weekly with browns and rainbows from April through October.

WALLEYE

Cedar River (Bremer, Black Hawk, Chickasaw, Floyd, and Mitchell) Fingerling stockings have resulted in good populations. Fish below dams in the early spring, and deeper pools and snags in summer and fall. Maquoketa River (Delaware) Good population of 14- to 20-inch walleye below Manchester and the Lake Delhi dam. Mississippi River (Pools 9-15) 1998 walleye angling was excellent. Two strong year classes will produce lots of fish in the 12- to 14- and 18- to 22-inch ranges. Key on tailwaters in pre-spawn period in March and April and again in late fall. Work the wing dams in post-spawn and summer/early fall periods using crawlers and crankbaits. Shell Rock River (Butler) Five years of fingerling stockings have resulted in abundant numbers of 16- to 20-inch fish. Wapsipinicon River (Buchanan) Excellent numbers from Littleton downstream. Abundant 14-18 inchers. Walleyes over 10 pounds caught every year.



SOUTHEAST

by Stephen J. Waters Regional Fisheries Supervisor

Fisheries biologists' surveys and angling reports indicate a great year of fishing for 1999. Several of the lakes with redeveloping fisheries (Hawthorn, Keomah and Wapello) are back big-time. Plus many more water bodies are ready for an Iowa time-honored tradition -- fishing.

I suggest gathering up the family and fishing equipment soon after ice-out and beginning a great fishing season by chasing Iowa's most popular game fish -- the channel catfish. Early catfishing was made for the family, because the fishing is easy and fast.

When water temperatures reach about 50 to 55 degrees, catfish go on a feeding spree — eating fish that have died during the winter. Fish your bait (cut baits are best) in the shallower (2 to 6 feet), warmer portion of a lake or river with the wind blowing across or toward you. 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 "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 night crawler rigs on the upstream side of the wingdams. Keep in mind, there is a 15-inch minimum size limit on walleye in the Mississippi River.

The Mississippi River also produces excellent catches of white bass, drum, carp, crappie, bluegill and largemouth bass. White bass frequent similar habitats of 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.

reached a new high in southeast Iowa due primarily to great fishing for these "big ones." Bank pole, or rod and reel, using green sunfish, bullheads or bluegill for bait, is the preferred technique. 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.

highly successful for bluegill and crappie, but trying new angling techniques can produce surprising results. Ice fishing flies, waxworms and small bobbers can often outproduce the traditional bluegill baits. And, what could be more fun than flyfishing for big bluegill with small surface poppers during the morning and evening hours of summer?

Try drift-fishing for bluegills and crappies during the summer when they have moved away from shore and are suspended about 8 to 12 feet below the surface. Lower your baits to this level, and let the wind or trolling motor push you around the lake.

Mark where you catch fish and return for a similar drift pattern. New techniques, bait and equipment can revitalize one's interest in angling and enhance your fishing.

Bass size limits benefit all anglers.
These important predators help manage panfish populations, ultimately increasing the average size of bass and panfish. Give size limits a chance.

Southern Iowa is blessed with several excellent bass-bluegill lakes. But perhaps the best systems are the 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 remember, these mini-lakes for the most part are located on private property and require the owners permission for angling opportunities.

SAUGEYE

Iowa River (Johnson) Exceptional fishery; lots of 2- to 4-pound fish with 10-pound fish available. Coralville (Johnson) Best in early spring and late fall around I-380 bridge; good numbers of 2- to 3-pound fish. Sugema (Van Buren) Fair numbers of 14- to 20-inch fish. Union Grove (Tama) High numbers of 14- to 18-inch fish with some up to 6 pounds

BLUEGILL

Mississippi River - Pool 16 Andalusia backwaters, Credit Island Slough, Wyoming Island Slough. Pool 17 Big Timber, Cleveland Slough, Hidden Acres, Bogus Island, Blanchard Slough, Eagle Fill. Pool 18 Huron Island, Burnt Pocket, Johnson Slough, Dasher Chute. Pool 19 Burlington Island, Turkey Chute, Blackhawk Bottoms, Lead Island Chute, Niota weedbeds, Rabbit Island riprap, Devils Creek weedbed and Gray's Bay. Farm Ponds Exceptional angling - best chance for a trophy. Pleasant Creek (Linn) Good quality, many 7- to 9-inch fish available. Geode (Henry) Average harvest size 7 to 8-• plus inches. Trophy fish available. Hannen (Benton) Good numbers, 6 to 8 inches, with 10 inch fish reported. Hawthorn (Mahaska) Good numbers of 6- to 8-inch fish. Iowa (Iowa) Good numbers of 6to 8-inch fish. Kent (Johnson) All sizes, easy shoreline access. Keomah (Mahaska) Good numbers of 6- to 8-inch fish. Wapello (Davis) Excellent numbers of 8-inch-and-larger fish, look to artificial habitat. White Oak (Mahaska) Good numbers of 7- to 8-inch fish. Diamond (Poweshiek) Average harvest size 6 to 8 inches. Red Haw (Lucas) Good numbers of 6- to 8-inch fish. New structure in lake. Union Grove (Tama) Low numbers, but quality fish over 9 inches. Sugema (Van Buren) Tremendous numbers of 7- to 8-inch fish; a bluegill anglers dream.

CRAPPIE

Rathbun (Appanoose) Superb crappie lake. Average size 9 to 12 inches, some trophies. Mississippi River Same comments as in bluegill section. Coralville (Johnson) Excellent numbers of 8- to 12-inch fish, 13 to 15 inches common.

Odessa (Louisa) Average harvest size 8 to 10 inches. Geode
(Henry) Average harvest size 8 to 10 inches. Iowa (Iowa) Good
numbers from 8 to 10 inches. Darling (Washington) Average harvest size 8 to 11 inches; trophy fish available. Hawthorn (Mahaska)
Excellent numbers of 8- to 11-inch fish available. Bob White
(Wayne) Excellent numbers of 7- to 9-inch fish available. Miami
(Monroe) Excellent numbers of 8-inch fish; 11-inch fish available.

Diamond (Poweshiek) High numbers of 9- to 11-inch fish. Macbride
(Johnson) Excellent for 8- to 10-inch fish, 11- to 13-inch fish common. Sugema (Van Buren) Fair angling; 9- to 10-inch fish most common. Pleasant Creek (Linn) Good in spring for 9- to 11-inch fish.

WHITE BASS

Mississippi River Seek locks and dams and wingdams. Rathbun (Appanoose) Excellent numbers of 10- to 15-inch fish. Coralville (Johnson) Lots of 12- to 14-inch fish. Best in late summer on shad colored crankbaits. Macbride (Johnson) Good numbers of 10- to 14-inch fish. Des Moines River (Wapello) Hot action below the Ottumwa hydropower dam. Pleasant Creek (Linn Co.) Excellent for summer topwater action.

LARGEMOUTH BASS

Mississippi River Same comments as bluegill section. Farm ponds Best chance for a trophy. Great fishing. Miami (Monroe) Excellent numbers, various sizes. Pleasant Creek (Linn) 18-inch size limit. Excellent catch-and-release with fish up to 8 pounds. Iowa (Iowa) Good numbers, various sizes. Geode (Henry) Good catch-and-release fishery. Some trophy fish. Macbride (Johnson) Good numbers of 2- to 4-pounders; fish in all size ranges. Sugema (Van Buren) 18-inch size limit. Excellent catch-and-release for 11- to 17-inch fish.

SOUTHEAST LARGEMOUTH BASS CONTINUED

Diamond (Poweshiek) Good numbers of 2-to 4-pound fish with trophy sizes present.

Wapello (Davis) No-kill regulation; lots of 10- to 15-inch fish. Hawthorn (Mahaska)

Good numbers of 12- to 16-inch for catch-and-release angling. Keomah (Mahaska) Excellent numbers of 11- to 18-inch fish available.

CHANNEL CATFISH

Mississippi All pools excellent. Inland Rivers Good to excellent. Corydon (Wayne) Good numbers with a variety of sizes. Fish up to 29 inches collected in surveys. Rathbun (Appanoose) Exceptional fishery, all sizes. Post ice-out period excellent. Coralville (Johnson) Exceptional fishery, all sizes. Post ice-out period excellent. Otter Creek (Tama) Lots of 2- to 3pounders. Kent (Johnson) Excellent fishery, 12 to 16 inches average. Miami (Monroe) Good for a variety of sizes. Macbride (Johnson) Excellent for all sizes. Darling (Washington) Good for a variety of sizes. Geode (Henry) Good for a variety of sizes. Iowa Lake (Iowa) Good numbers of 2- to 3-pound fish. Keomah (Mahaska) Good for a variety of sizes.

BULLHEAD

Wapello (Davis) 10- to 14-inch fish available. Keomah (Mahaska) 10- to 12-inch fish available. Macbride (Johnson)
Best east of causeway in May.Otter Creek (Tama) Lots of 10- to 12-inch fish.

FLATHEAD CATFISH

Mississippi Best below locks and dams, wingdams and side channels. Skunk, lower Iowa, Des Moines, Wapsipinicon and Cedar rivers Big fish in deep holes during summer and around bridge pilings. Good numbers of 10- to 30-pound fish. Coralville (Johnson) Good numbers of 10- to 30-pound fish. Rathbun (Appanoose) Fair numbers of 2- to 20-pound fish available. Concentrate on rip-rap in the Bridgeview area in late spring or early summer.

WALLEYE

Mississippi Seek locks and dams, and wingdams. Excellent for sauger, too. Rathbun (Appanoose) Excellent fishery! Large numbers of 15- to 21-inch fish available.

Macbride (Johnson) Good numbers of 13-to 15-inch fish with trophy sizes available.

Des Moines River (Wapello) Quality angling below the Ottumwa hydropower dam; trophy fish available. Coralville (Johnson) Good in spring and late fall in upper end and around I-380 bridge.

Call 1-800-ASK-FISH

1-800-275-3474

For fishing information including the Fishing Report

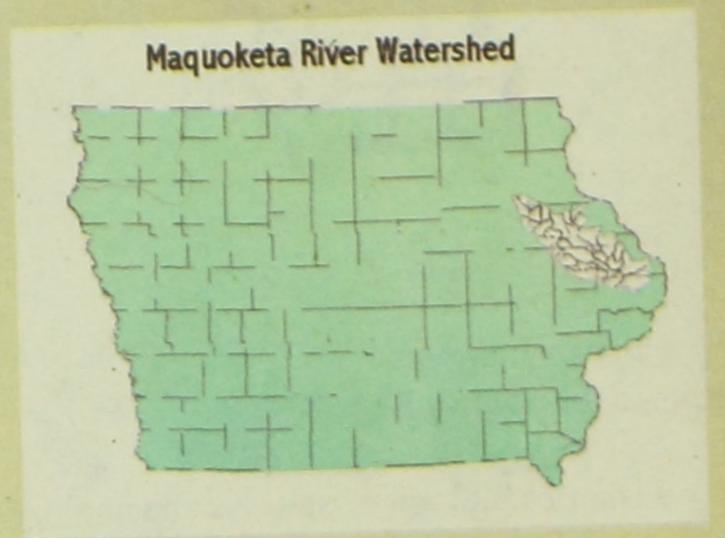
(April 1 - July 29)

Telecommunications Device for the Deaf (TTY/TDD) (515) 242-5967

The Maquoketa River Alliance

by Scott Gritters, Fisheries Biologist

"Rivers are and must forever be the common sewer and dumping ground for everybody," proclaimed an 1880s editorial in a St. Paul Minnesota newspaper. St. Paul was coming to grips with open water dumping into the Mississippi River which obstructed navigation and caused odor problems for the city. Open-water dumping is now mostly history however, concerns about our rivers' water quality still exist. New groups, such as the Maquoketa River Alliance, are attempting to address these concerns.



Probably the number one problem facing our rivers today is soil erosion. Many times as soil is deposited into streams so are pesticides, nitrates and other chemicals. Data collected by the U.S. Geological Survey shows an equivalent of 152 dump truck loads of sediment per day transported by the Maquoketa River to the Mississippi River in 1997. For Iowa's fisheries, this muddy water is more then a nuisance. Muddy water upsets the balance of an aquatic ecosystem by smothering habitat such as rocks, trees or aquatic vegetation. These areas provide fish cover as well as host aquatic insects on which fish feed. Silty water smothers fish eggs and can deny sight predatory fishes from finding prey. Sediment also decreases the volume of depth of vital backwater fish habitat in the Mississippi.

The Maquoketa Alliance consists of multiple private organizations and government agencies within the nine counties of the Maquoketa watershed. These groups have joined forces to determine actions that can improve water quality in the Maquoketa River as a whole. Through a grant from the Environmental Protection Agency, the Rural Conservation and Development Program (RC and D) has hired a coordinator to oversee the project.

The Alliance works on a voluntary basis with landowners and gives them the knowledge to make wise decisions about the river's water quality. Although good programs already exist (such as the buffer strip initiative) it was thought government regulations and agency overlap sometimes make it difficult for landowners to completely understand which programs they are qualified for and how the programs work. Landowner information packets are being developed by the Iowa Natural Heritage Foundation, outlining existing programs and contact people. These packets will be distributed to individual landowners in identified watersheds.

The Maquoketa River watershed encompasses 1.2 million acres, and approximately 25 subbasins. To narrow the scope of the problem, smaller problem tributaries were identified by water quality sampling during the spring runoff period, when most soil and chemicals enter the watershed. From this sampling and discussions with the local soil and water conservation boards, two problem tributaries were identified as the starting point. On the Maquoketa River, these watersheds include Deep Creek (Clinton and Jackson counties) and Whitewater Creek (Dubuque and Jackson counties).

For more information call Alliance Coordinator Mr. Rick Lawrence at 319-652-5104.



Flooding sweeps soil and other contaminants into streams.

Organizations involved in the Alliance:

Iowa DNR
Resource Conservation and Development
US Environmental Protection Agency
Iowa Natural Heritage Foundation
Natural Resources Conservation Service
US Fish and Wildlife Service
US Geological Survey

Other Eastern Alliances are being formed, please contact:

Upper Iowa River Alliance contact Mr. Jim Frederick 319-864-7112
Turkey River/Big Springs Alliance contact Mr. Gary Siegwarth 319-245-2446
Catfish Creek Alliance contact Mr. Tom Boland 319-872-4976
Wapsi River Alliance contact Mr. Mark Roberts 319-847-7202

The Best of the Best for 1999

by Joe Schwartz, Regional Fisheries Supervisor

owa is blessed with an abundance of good fishing lakes, but fishing at these lakes tends to vary from year-to-year. Fish populations are dynamic and constantly changing. It pays anglers to update knowledge frequently so they are able to concentrate their effort at only the very best lakes. This principle is especially true for people who fish only occasionally. With that thought in mind, let's talk about what DNR fisheries biologists consider the four best fishing lakes in southern Iowa for 1999.

Lake Wapello, located in Davis county, not far from Drakesville, is a 289-acre State Park Lake. Bluegill is king in this lake, with 8- to 9-inch fish making up most of the catch. These are quality fish and anytime you can consistently catch 9-inch bluegill it is worth trying. Best fishing occurs when big males can be taken from spawning beds in mid-to late May. Try any shallow area along the south side for spawning fish--with Boy Scout Bay being a perennial top producer. Later in summer

drop-offs adjacent to the north shore, where artificial structure has been placed, are good spots to try. You may also take an occasional dandy crappie or redear sunfish at Wapello. A huge number of bass are found in the lake and are very easy to catch. Most are 12 to 14 inches. Wapello has a "no-kill" regulation on bass so all bass must be returned unharmed.

Lake Ahquabi, located 5 miles south of Indianola, has turned into a top-notch fishing lake following a three-year renovation project. The lake was drained, dredged, repairs made to the dam, and extensive fish habitat added to the lake between 1993 and 1996. Following restocking, fish have grown well and an excellent fishery has developed.

A super catch-and-release fishery for 12- to 14-inch bass can be found at Ahquabi. Bass are very common and can be caught about anywhere. Seven-inch bluegill are found in all of the bays in the spring, but deeper structure and the new reefs are the best places to try in summer. Nice 10-inch crappie and dandy 20-inch catfish round out the fish population at Ahquabi.

Ahquabi has a unique fishing shelter that's a perfect place to fish for anyone without a boat or who has difficulty walking the shoreline. It's



An aerial view of Lake Wapello, Davis County.

essentially a small house built on pilings over the lake and easily accessible by sidewalk. Lots of habitat has been placed around and under the shelter to attract fish. Last year over 25 percent of the fish caught at Ahquabi were taken by anglers using this facility.

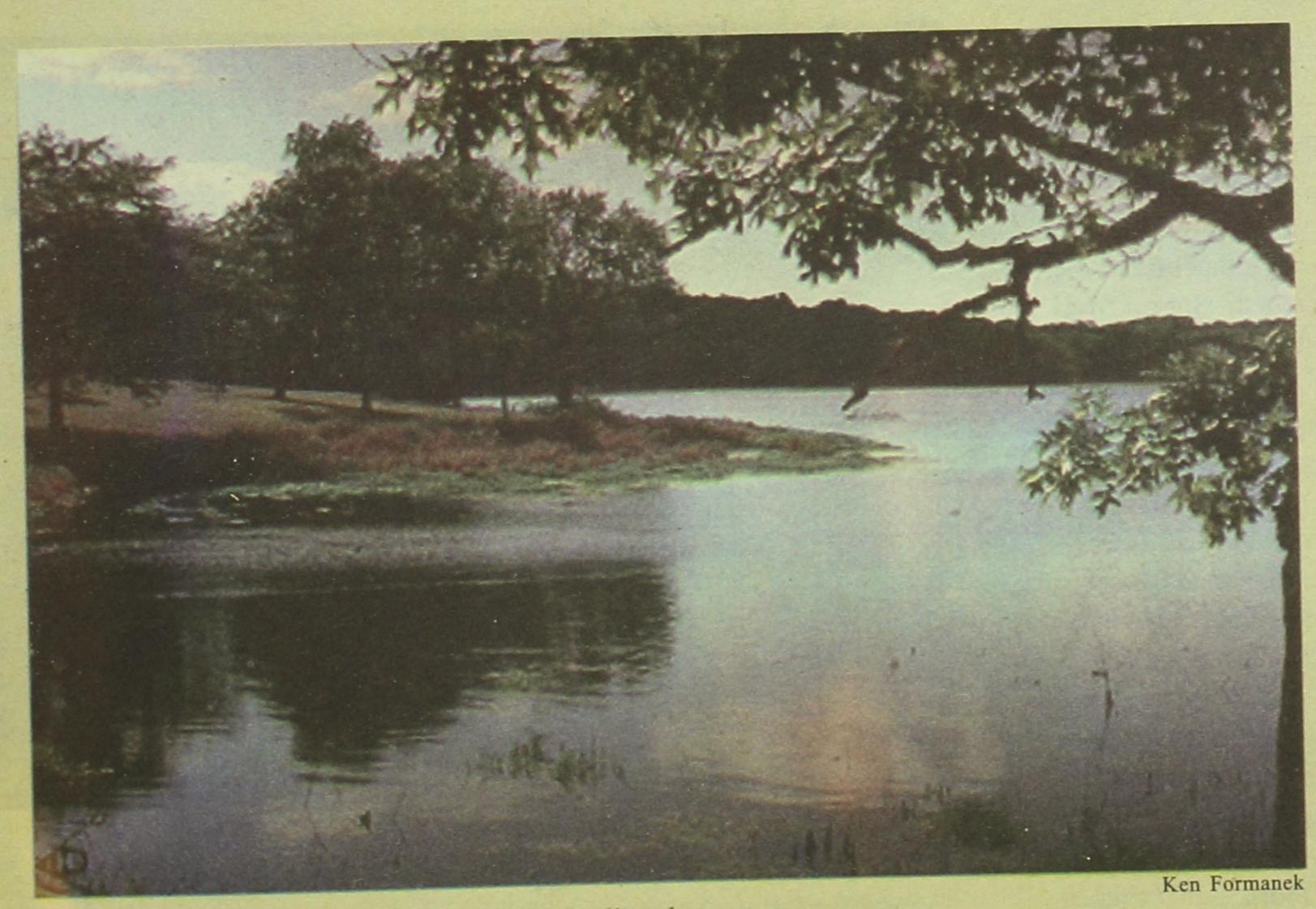
Three Mile Lake, near Afton, is a brand new lake that filled in 1998. An impressive sport fishery has already developed there. The lake is wall-to-wall fish and catching a stringer-full is easy. Facilities are new, modern and top notch. Numerous reefs, jetties and flooded timber provide super places to catch fish. Last year, mid-summer drift fishing was phenomenal.

A grab bag of species was stocked into Three Mile. Bluegill, crappie, bass, catfish, redear sunfish, walleye and musky are all growing at above-average rates. Most of the bass fishing is catch and release, but some are above the 15-inch length limit. Bluegill, crappie, walleye and catfish are easily caught, but sorting out smaller fish will be necessary. A free contour map showing locations of reefs and other facilities is available from the DNR.

Little River began filling 15 years ago this summer and developed into one of our premier fisheries. At 788 acres it provides plenty of prime fishable water. Panfish make up the majority of fish caught with

bluegills averaging 7-1/2 inches and crappies 8- to 9-inch. Abundant flooded timber is the best place to fish at Little River in mid-summer. The shoreline and shallow bays are better earlier. The lake is a good bass lake with many fish 2 to 3 pounds. Walleye fishing is also good with 16 inches the usual size. Rocky or sandy points, the face of the dam and reefs are the best places to catch walleye. Recreation facilities, developed by the Decatur County Conservation Board, and its out-of-theway location in southern Iowa make fishing at Little River an enjoyable experience.

There they are -- the best of the best for 1999. Fish one of these lakes and you will be richly rewarded for your efforts.



Visit Lake Ahquabi located 5 miles south of Indianola

Smallmouth Catch-and-Release Areas on the Upper Iowa and Maquoketa River

by Bill Kalishek, Fisheries Biologist

Rivers and streams are fished by more Iowa anglers than any other type of water. And when it comes to fishing northeast Iowa's rivers the small-mouth bass is king. Experienced anglers traveled from river to creek, searching out those secluded stretches of rock-strewn water that might hold a trophy smallmouth. These fishers knew that to catch an 18-inch small-mouth you had to walk far from the crowds.

But today the playing field for smallmouth bass anglers is no longer level. There are a few streams that offer a much better than

average chance for catching trophy smallmouth bass. These are streams where a catch-and-release (C/R) regulation has been put into effect. In these stream segments, all bass caught must be immediately released. The use of live bait is allowed in these river sections.

There are segments of four rivers in Iowa with a C/R regulation in place.
Two of these rivers, the Maquoketa and Upper Iowa, have been studied to determine the impact C/R regulation has had on the small mouth bass populations.

The Maquoketa River C/R area was initiated in 1988. It is a 4.5-mile river section, located in Delaware County, beginning at the Lake Delhi dam and extending downstream to the first county road bridge (Quarter Rd.).

By 1991, four years after the C/R regulation was put into effect, the number of smallmouth more than 12 inches had increased four-fold. In 1998, 11 years into the C/R regulation, smallmouth bass greater than 12 inches had increased almost seven times the pre-regulation number.

Increases have also occurred in the numbers of smallmouth bass more than six inches. However, it took a little longer for this increase to occur. After 11 years of the C/R regulation, these total numbers were three times higher than the pre-regulation numbers. Even though there are many more smallmouth bass in the Maquoketa River, the health of the bass has not changed. The weight of the bass for any given length of fish indicate robust, healthy fish. The growth rate of the bass has also remained unchanged.

Number of small mouth bass in the Maquoketa River C/R area.



Ken Formanek

Catch and release zones produce nice smallmouth bass like this one being released back into the Maquoketa River.

Anglers are experiencing the benefits of this increase in bass numbers. The catch of bass more than 12 inches has increased 12 fold since the C/R regulation went into effect. It is estimated every bass greater than 6 inches is caught and released an average of 6.4 times in the course of one year. Of those anglers fishing the Maquoketa River C/R area, 93 percent were satisfied with the regulations, and 81 percent wanted no change in the regulation.

>12 inches

128

65

522

506

740

>6 inches

711

933

671

899

1534

2375

Year

1980

1981

1982

1991

1994

1998

The Upper Iowa River C/R area has only been in place since 1996.
This river segment starts at the Fifth
Street Bridge in Decorah and extends downstream for ten miles to the Upper Dam. After only three years, small increases are already detected in this smallmouth population.

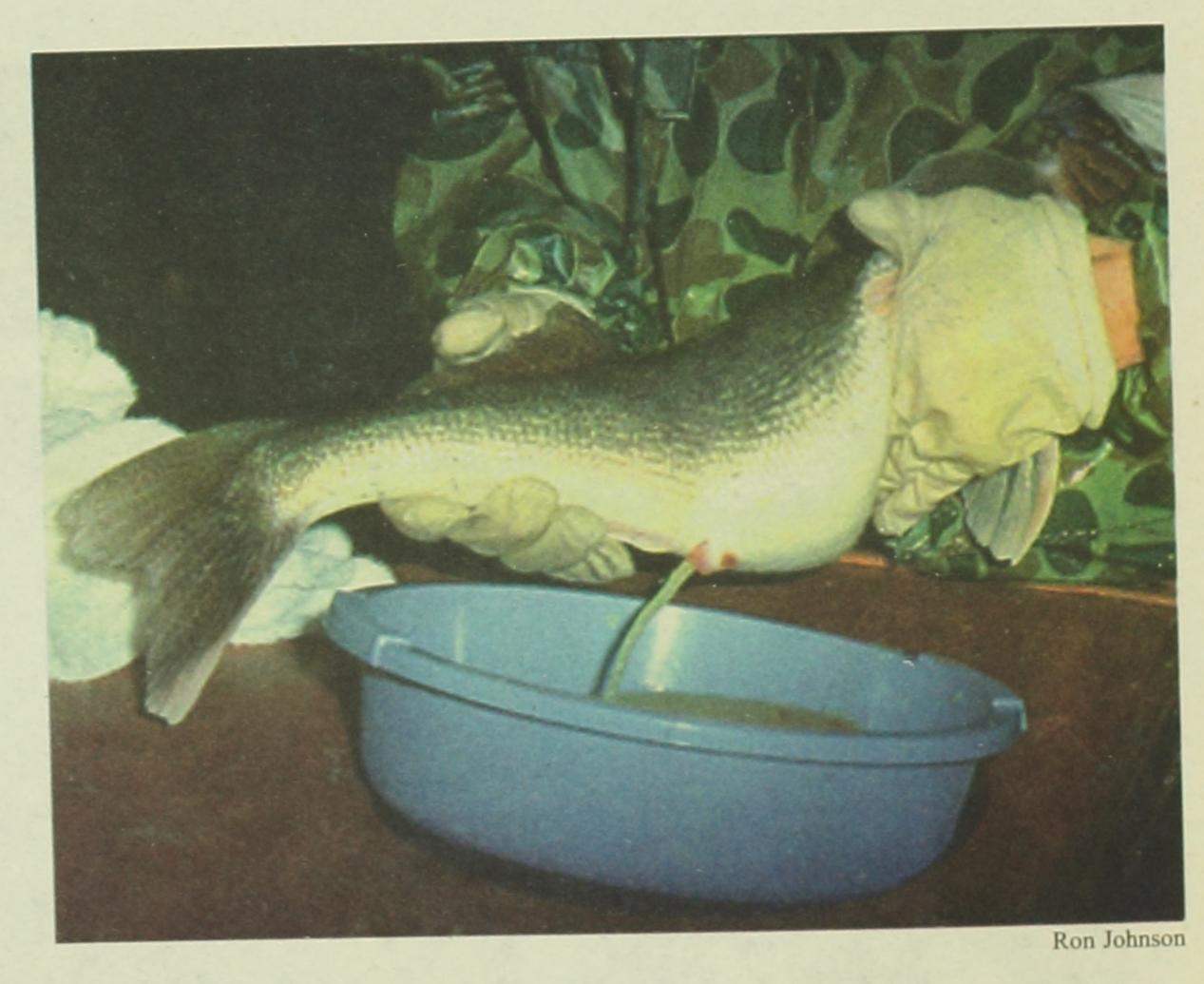
The number of smallmouth bass more than 12 inches has began to increase, but this is only occurring for fish up to 14 inches. Remember the regulation on the Upper Iowa River has only been in place for three years. It takes four years for a smallmouth bass to reach 11 inches, and 10 years to reach 20 inches. Taking these growth rates into account, it may take several more years before any increase is seen in the numbers of trophy bass.

So far, these two bass fisheries have developed nicely. The Maquoketa River has exceeded expectations. Through 1998 we were still seeing increases in the smallmouth numbers. At some point, this population will stabilize, but we are not sure when that will occur. The Upper Iowa River fishery is very new and still developing. Continued monitoring of both of these populations will answer many questions concerning the impact of catch-and-release regulations on smallmouth bass populations.

Northern Pike and Walleye Spawning Operations continued from page 1

Fisheries personnel collect walleye brood stock from several Iowa lakes. Crews set gill nets in the late evening in Clear Lake, Rathbun Lake, East and West Okoboji, Spirit Lake and Storm Lake. The nets are checked after a few hours and adult walleyes are returned to stripping stations either at the lake or nearby hatcheries. Eggs from free-flowing females are stripped into a pan. Sperm from several males is placed into the pan and water added. After a few minutes of stirring, the mixture is added to a clay solution to prevent the eggs from sticking to each other. The eggs are then placed into fine-meshed "keeps" or trays to allow the eggs to absorb water during their most fragile stage of development. After a few hours, the eggs are placed into incubation jars. There are about 150,000 walleye eggs to the quart and up to 350,000 eggs are placed into each hatching jar. Several thousand adult walleyes are collected every year from six lakes producing more than 120 million walleye fry at Rathbun and Spirit Lake hatcheries.

As with the northern pike, the newly hatched walleye fry are shipped around the state or to other hatcheries in plastic bags. Fairport, Mt. Ayr and Spirit Lake hatcheries place the small fry into rearing ponds to achieve a 2- to 3-inch fingerling. Hatcheries at Spirit Lake and Rathbun further rear these fish to more than 7 inches by fall, where they are stocked into selected waters around the state.



A fisheries worker strips the eggs from a female walleye. Several thousand adult walleyes are used for brood stock every year to produce more than 120 million fry at Rathbun and Spirit Lake hatcheries.

Better Water Means Better Fishing

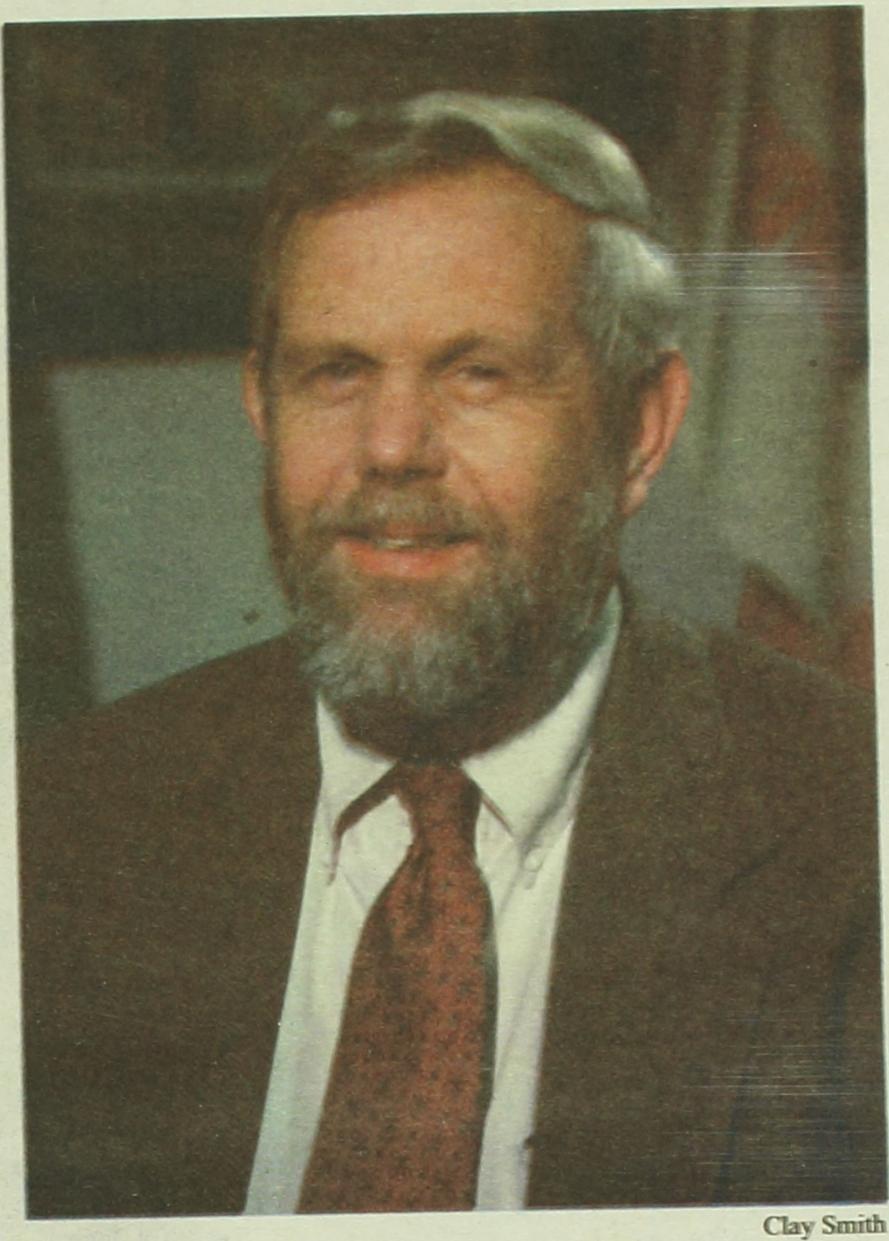
by Paul Johnson, DNR Director

s the new director of the DNR, I would like to discuss a major challenge we face in improving the quality of fish communities and the fishing they support. The challenge is to control erosion and the loss of our valuable soils. On the land, Iowa soils combine with other factors to produce some of the finest agricultural production areas in the world but if left unprotected then lost through erosion, these same soils choke our lakes and streams and reduce the quality of fish habitat, endanger your drinking water and spoil your recreation.

This challenge requires us to work together to solve the problems of soil loss and provide the care our lakes and streams need to meet your demand for clean water and high quality fishing. We have had some successes in meeting these challenges, but many lakes and streams need our help. With your support, soil erosion will continue to be reduced and many more of our more than 235 lakes and more than 10,000 miles of streams will support the aquatic life you expect and deserve. Here are some current efforts to reduce sedimentation, improve water quality and increase the quality of recreation in our lakes and streams:

- A new and extensive, statewide, lake and stream water quality monitoring program designed to identify water quality problems
- Continue to identify lakes with excessive rates of sedimentation and determine the feasibility of improvements
- Continue to identify, protect and improve critical habitats for stream fishes
- Work with the agriculture community to establish more grass buffers and filter strips to reduce soil erosion and to catch nutrients and pesticides before they reach streams and lakes *
- Encourage more use of conservation tillage as a method of reducing soil erosion
- Improve livestock waste management and fertilizer application practices
- Strengthen and support environmental education programs and increase awareness of important environmental issues

Water quality is a major concern of mine and will continue to be a top priority for the DNR. With your help, our water will be safe to drink, attractive to swimmers and support high quality fishing. Stay tuned, we'll be talking more about how you can help.



DNR Director Paul Johnson

1999 Licenses and Fees

FISHING LICENSES AND STAMPS

RESIDENT	
Resident Fishing (16 years of age and older)	\$10.50
Lifetime Fishing (65 years of age and older)	\$50.50
Lifetime Combination \$30.00	
(disabled military veteran or P.O.W.)	
7-Day Resident	\$8.50
Boundary Water Sport Trotline	\$10.50
	\$10.50
Tout Fee	

Annual free fishing or combined hunting and fishing license are available for low-income 65 or older or low income permanently disabled. For information/qualifications call (515)281-8688.

Nonresident Fishing (14 years of age and older)	\$22.50 \$8.50
7-Day Nonresident Trout Fee	\$10.50
Boundary Water Sport Trotline	\$20.50



HUNTING LICENSES AND FEES

RESIDENT	
Resident Hunting	\$12.50
Lifetime Combination	\$30.00
(disabled military veteran or P.O.W.)	
Lifetime Hunting License	\$50.50*
(65 years of age or older)	
Deer License	\$25.50
Turkey License	\$22.50
Fur Harvester License	
Resident age 16 and older	\$20.50
Resident under age 16	\$5.50
Wildlife Habitat Fee	\$5.50
Migratory Game Bird Fee	\$5.50

Annual free fishing or combined hunting and fishing license are available for low-income 65 or older or low income permanently disabled. For information/qualifications call (515)281-8688.

NONRESIDENT

TOTAL DID ETT.	
Nonresident Hunting Preserve	\$5.00
Nonresident Hunting (18-years-old or older))	\$60.50
Nonresident Hunting (under 18)	\$25.50*
Nonresident Fur Harvester	\$180.50
	\$5.50
Wildlife Habitat Fee	\$5.50
Migratory Game Bird Fee	\$150.50
Nonresident Deer License	\$75.50
Nonresident Turkey License	\$15.50

* New licenses for 1999-2000

Fishing Access for All

by Martin Konrad, Fisheries Biologist

Fishing is one of the most enjoyed outdoor recreational activities in Iowa. It ranks as the highest activity people participate in while visiting a state park. Fishing is definitely a family sport and one enjoyed by all, regardless of age or physical ability.

Almost 65 percent of all fishing trips taken each year are done from the shoreline. To enhance these fishing experiences the DNR actively develops parking areas, pathways, jetties and piers on lakes and trout streams. These developments are designed and strategically located to provide angler safety, easy water access and a greater chance to catch fish.

Parking and pathways enable families with small children and people unable to walk or who find walking difficult easy access to water. Often the path will be surfaced with a fine chipped rock or have a hard surface. On lake shores a pathway will lead either to a fishing jetty or pier. For trout streams, the pathway will skirt the stream and in areas be at stream's edge.

Lake shores are often difficult to fish due to tall grass, brush, shallow area and aquatic vegetation. The jetty or pier is designed and located to get anglers away from an unpleasant shoreline and to deeper water where the chances of catching fish are greater. The rock armoring around the jetty and placement of fish habitat within casting distance are habitats that attract fish. The deep water surrounding them is



Martin Konrad



Ron Johnson

A family enjoys the convenience of an easily accesable pier at Big Creak State Park.

often free of hook collecting vegetation.

Fishing piers make for the easiest access especially for those confined to wheelchairs and for families with small children. The decking material is either of plastic or wood. A railing skirts the perimeter of the pier deck and has open slots at regular intervals. The open slots allow people to land fish without hoisting fish over the rail. The ultimate pier is found at Lake Ahquabi. This pier has an enclosed shelter; the angler is able to fish the outside perimeter of

the pier or to fish the interior.

You, the angler, have made the lake and stream access program possible. You have done this through the purchase of your fishing license and fishing equipment. Each time you purchase equipment a portion of the money is collected by the federal government through the Sport Fish Restoration Act. The federal government then apportions money back to the states for the purpose of fish restoration activities. For Iowa this means approximately 3 million each year. Improved shore development is one of the many ways the Iowa DNR puts your angling dollars to use.

The following tables list the lakes where the DNR has constructed piers and jetties and trout streams where pathways make easy access to the stream. Many of the lakes have more than one jetty. Give them a try for a more enjoyable fishing experience.

	Lake	County	Jetty	Pier
	Ahquabi	Warren	X	X
	Anita	Cass	X	
	Big Creek	Polk	X	X
	Beaver	Dallas	X	X
	Beeds •	Franklin	X	
	Black Hawk	Sac		X
	Bussey	Clayton		X
	Comelia	Wright	X	
	Clear	Çerro Gordo	X	
I	Darling	Washington	X	
	Fogle	Ringgold	X	
	Geworge Wyth	Black Hawk		X
-	Green Valley	Union	X	X
1	Icaria	Adams	X	X
t	Keomah	Mahaska	X	
İ	Little river	Decatur	X	
t	MacBride	Johnson		
I	Manawa	Pottawattamie		X
I	Meadow	Adair	X	
I	Morman Tai	Adair	X	
	Prairie Rose	Shelby	X	
1	Rock Creek	Jasper	X	
	Spirit Lake	Dickinson		X
	Springbrook	Guthrie	X	
	Storm	Buena Vista	X	X
	Sugema Van Buren X		X	
	Swan	Carooll		X
	Three Mile	Union	X	X
	Union Grov	e Tama	X	
	Upper Pine	Hardin	X	
	Volga	Fayette	X	X
	Wapello	Wapello Davis		X
			X	7

Trout Stream	County	Pathway
Bankston Creek	Dubuque	X
Clear Creek	Allamakee	X
Richmond Springs	Delaware	X
Sny Magill Creek	Clayton	X
Trout Run	Winneshiek	X

A paved path along Richmond Springs trout stream at Backbone State Park ensures good fishing for all.

IOWATER, DNR's Volunteer Water Quality Monitoring Program

by Todd Campbell, Program Coordinator

n May 1998, the Iowa DNR launched a statewide volunteer water quality monitoring initiative, IOWATER.

Over the past few months, information has been gathered on the needs of citizen monitors, the status of current volunteer monitoring efforts throughout Iowa and the role volunteers might play in water quality monitoring.

IOWATER has been designed to meet the goals and objectives derived from this information.

A draft program manual, containing proposed sampling procedures, is being piloted in the Raccoon River watershed by 22 monitoring groups. These volunteers range from classroom teachers and students to local landowners. The pilot project has been a collaborative effort involving the DNR, Dallas County Conservation Board, Des Moines Water Works and the Raccoon River Watershed Project. Volunteers test different methods of collecting and analyzing water quality information ranging from dissolved oxygen and

turbidity to instream fish habitat and watershed land use.

The program is headquartered

at the DNR's Springbrook Conservation Education Center, and is directed by an interim advisory committee consisting of representatives from the DNR, U.S. Natural Resources Conservation Service, Iowa Chapter of the Izaak Walton League of America, Iowa Farm Bureau Federation, Iowa Environmental Council and University of Iowa Hygienic Laboratory.

water quality monitoring

Volunteers for a Raccoon River pilot project gather at

Springbrook Consevation Education Center to learn about

The initial statewide IOWATER training session will be Aug. 6-7 at the Springbrook Conservation Education Center. Interested groups and individuals can learn more about the program by calling the IOWATER coordinator at (515) 747-2051, fax (515) 747-2200, writing the IOWATER Program at DNR, 2473 160th Rd., Guthrie Center, Iowa 50115, or e-mailing watrshed@pionet.net.



Volunteers sort through samples of invertebrates to detect water quality in the Raccoon River.

DNR Awards Brass Bluegill to Moulton Teacher

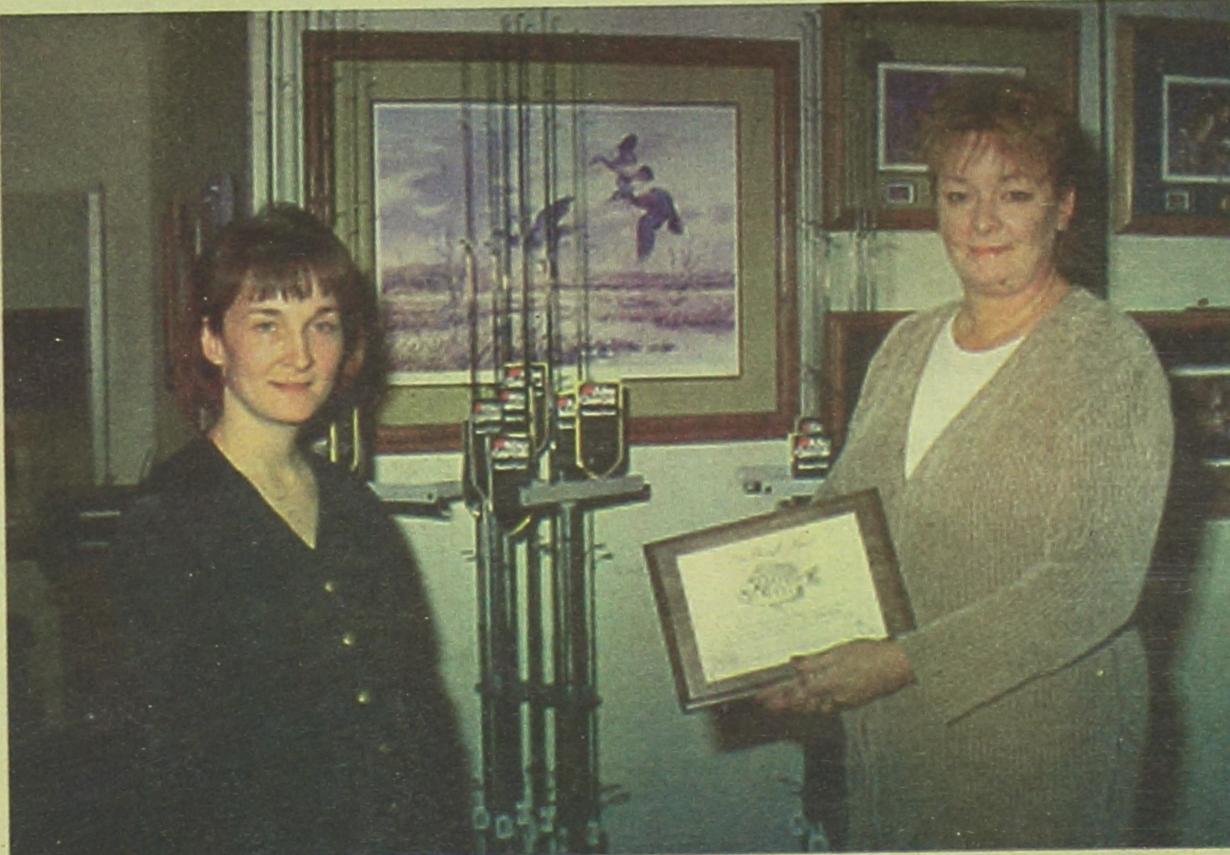
by Barb Gigar, DNR Aquatic Education Coordinator

The recipient of the 1999 Brass Bluegill award is Jean Ward, a teacher at Moulton Elementary School in Des Moines. The Moulton Fish Iowa! program is an excellent example of a comprehensive fishing unit which truly involves students in the sport and extends into the community.

Jean's commitment to her students and to the sport of fishing are amazing. She has been involved in the Fish Iowa! program for the past four years and has incorporated the Hooked on Fishing - Not on Drugs materials since the program's introduction in Iowa in the fall of 1996. Moulton is a year-round school located in an inner city environment. Fish Iowa! is taught as part of Moulton's optional "Great Outdoor" unit which occurs during the three-week breaks in the spring and fall. Jean has shared the joy of fishing with more than 300 students and parents.

The fourth and fifth graders learn fishing facts, proper usage of a rod and reel, how to tie on bobbers and hooks, and how to identify fish. They practice casting before going on a series of field trips to Big Creek State Park, Riverview Park and Prospect Park so they can experience fishing near where they live. The students also travel to the Des Moines YMCA camp where they swim and learn water safety before fishing the river. Interwoven in the course are several related lessons including making Japanese fish prints and paper mache' models, creating a fish rap song, and learning to tie flies as well as a general environmental education unit.

Jean has been extremely resourceful in obtaining supplies to augment the program. She obtained rods and reels by approaching vendors at the Des Moines SportShow and getting them to sell equipment at cost. She also contacted several bait and tackle shops for terminal tackle - Beaver Bait and Tackle in Johnston donated this, along with help during some of the field trips. She has even convinced the Waterfront Seafood Market to provide a



Clay Smith

Barb Gigar, DNR Aquatic Education Coordinator (left) presents the Brass Bluegill award to Jean Ward, a teacher at Moulton Elementary School in Des Moines

fish lunch to students following a tour of the restaurant. Jean also donates to the cause - when a sit down meal isn't possible during field trips she often provides lunch supplies.

Jean has extended the influence of the program by involving parents and family members, inviting them to assist during fishing events. Jean and a school mentor also take a group of at-risk boys fishing in the spring and early summer. She and her husband have even taken parents and students on weekend fishing outings!

French Creek Creel Surveys

by Dave Moeller Regional Fisheries Supervisor

The Fisheries Bureau has conducted identical, 7-month creel surveys on Lower French Creek (from French Creek Road downstream to the lower parking lot) from April through Oct. in both 1996 and 1997. There were no special angling regulations on French Creek during 1996, however, beginning on Jan. 1, 1997 all angling was restricted to artificial lures and all brown trout had to be immediately released.

The purpose of the 1996 creel survey was to document various aspects of the French Creek sport fishery prior to the change in regulations which will allow for comparisons in future years.

The purpose of the 1997 creel survey was two-fold. One purpose was documenting what changes occurred in the fishery during the first year of special regulations. The second was to provide a level of education and enforcement of the new regulations by the presence of the creel clerk.

Rainbow trout catchables were stocked both years (9,375 in 1996 and 7,285 in 1997) and were legal to keep in both years. There were also 418 catchable brook trout stocked in 1996 but none were stocked in 1997. No brown trout have been stocked in any of French Creek since August 1995.

Following is a brief comparison of various angling parameters for the April-Oct. period for each of the two years:

Angling Pressure - The number of anglers fishing Lower French decreased nearly 35 percent from 5,026 anglers in 1996 to 3,270 in 1997. Total angling hours also decreased from 13,758 in 1996 to 8,600 in 1997 - a 37.5 percent decrease. The average length of each fishing trip stayed about the same both years at just over 2.6 hours per trip.

Trout Kept - There were 6,387 rainbow trout kept in 1996, but only 2,441 in 1997, a 65 percent decrease. This equals 68 percent of all rainbows stocked in 1996 and only 34 percent of rainbows stocked in 1997. Anglers reported catching 536 catchable brook trout in 1996. No brook trout were stocked or reported caught in 1997. Anglers caught and kept 927 wild brown trout in 1996 (legal that year) but no browns were observed in the creel in 1997. Overall, the total number of trout kept decreased from 7,850 in 1996 to 2,221 in 1997 equalling a 69 percent decrease.



Rainbow Trout

Trout Released - In addition to the trout kept by anglers, anglers also reported releasing 4,263 catchable rainbows in 1996 and 5,586 in 1997, an increase of 31 percent. Anglers released 319 brook trout catchables in 1996 but none in 1997. Anglers released 1,285 wild brown trout in 1996 and 2,137 in 1997, an increase of 66 percent. Overall, the total number of trout caught and released was 5,867 in 1996 and 7,723 in 1997, a 32 percent increase.



Anglers enjoy great fishing because of the effective management of Iowa trout streams.

Catch Success -

Biologists often measure angling success in number of fish caught per hour. Catch success rates of 1 fish per hour or greater are generally considered to be quite good. The overall catch success on Lower French was .99 fish per hour in 1996 and 1.18 in 1997. The wild brown trout were definitively more difficult to catch both years compared to rainbows. Rainbow catch rates (kept and released) were .77 and .93 fish per hour for 1996 and 1997, respectively while brown trout catch rates were only .16 and .25 fish per hour in 1996 and 1997. Even though they were legal to be kept both years, catchable rainbows were caught and released at a rate of .31 fish per hour in 1996 and .65 in 1997.

Stocking Adjustments - Catchable-trout stocking in Lower French Creek in 1996 (pre-regulation) was at a rate of 325 fish per week. We started the 1997 stocking season (post-regulation) at a similar level-315 rainbows stocked per week. By July 1997, the creel survey showed the harvest of stocked rainbows was only about 20 percent, so we decided to reduce the stocking rate for the rest of the year to about 160 per week. By the end of 1997 the harvest of stocked rainbows for the year rose slightly to 34 percent, still an unacceptably low return to the creel. Thus, in 1998, the stocking rate of catchable rainbows was again reduced to 125 rainbows per week, or a total of 4,375 for the year.

Angler Characteristics - During 1996 when natural bait was legal, 41 percent of anglers reported primarily using bait. This, of course dropped to near 0 in 1997. Anglers fly fishing increased from 11 percent in 1996 to 40 percent in 1997. Use of all other artificial lures increased from 34 percent in 1996 to 58 percent in 1997.

There was an increase in the percent of non-Iowa residents, from 12 percent in 1996 to 21 percent in 1997. The percent of Iowa residents who reside in either Allamakee or Winneshiek counties increased slightly from 14 percent in 1996 to 17 percent in 1997. The percent of Iowa residents who reside in all other Iowa counties decreased from 74 percent in 1996 to 62 percent in 1997.

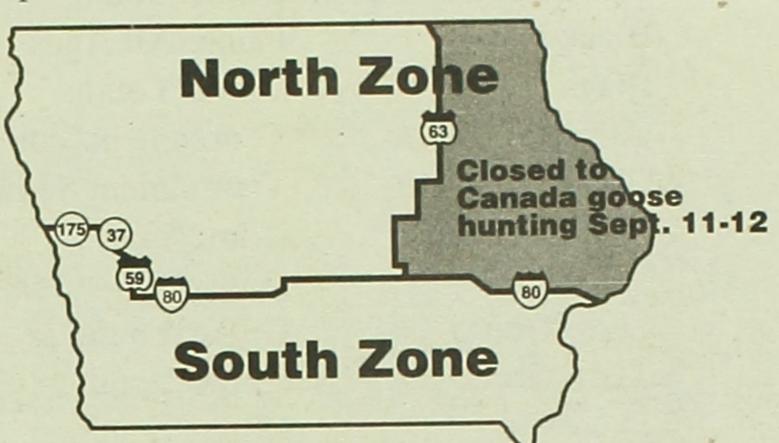
Future Plans - We do not plan on conducting another creel survey for at least 4 or 5 years until the brown trout population has had an opportunity to respond to the catch-and-release regulations. Of course we hope that response is a population containing a significantly larger number of trophy-sized browns. We have and will continue to monitor the size structure of the wild brown trout population by annual population surveys.

1999-2000 PROPOSED MIGRATORY GAME BIRD SEASONS AND BAG LIMITS

	STATEWIDE	
Ducks, Mergansers and Coots	Sept. 18-22 Oct. 16 - Dec. 9	
Youth Waterfowl Hunting Day	Oct. 9	
Snow Geese	Oct. 2 - Dec. 27 Feb. 19 - March 10, 2000	
Woodcock	Oct. 2 - Nov. 15	
Snipe	Sept. 4 - Nov. 30	
Rail (Sora and Virginia)	Sept. 4 - Nov. 12	
	NORTH ZONE	SOUTH ZONE
Special Canada Goose Season	Sept. 11-12 ¹	NO SEASON
Canada, White-fronted and Brant geese	Oct. 2 - Dec. 10	Oct. 2 - Oct. 10 Oct. 16 - Dec. 15

WATERFOWL ZONE DESCRIPTION. The

state will be divided by a line beginning on the Nebraska-Iowa border at State Highway 175, east to State Highway 37, south-east to U.S. Highway 59, south to I-80 and along I-80 east to the Iowa-Illinois border. A portion of the north zone east of Iowa Highway 63 will be closed to Canada goose hunting Sept. 11-12.



¹ In that portion of the north zone west of Iowa Highway 63, excluding the Big Marsh Wildlife Area (see map below).

Shooting Hours: One-half hour before sunrise to sunset for all species except woodcock, which is sunrise to sunset.

Daily Bag and Possession Limits:

Ducks: Daily limit is 6, including no more than 4 mallards (of which no more than 2 may be female), 2 wood ducks, 2 redheads, 1 black duck, 1 pintail, and 1 canvasback. Possession limit is twice the daily bag limit.

Mergansers: Daily limit is 5, including no more than 1 hooded merganser. Possession limit is twice the daily bag limit.

Coots: Daily limit is 15; possession limit is 30.

Geese: Daily limit for Canada geese is 2 through Oct. 31 and one thereafter, except in the south zone where it is 2 from Dec. 1-15. For other geese, the daily limit is 2 white-fronted, 2 brant, and 20 snow geese. Possession limit is twice the daily bag limit, except for snow geese for which there is no possession limit.

Woodcock: Daily limit is 3; possession limit is 6. Snipe: Daily limit is 8; possession limit is 16.

Rail (Sora and Virginia): Daily limit is 12; possession limit is 24.

Youth Waterfowl Hunting Day: Shooting hours and daily bag limits will conform to those set for the regular waterfowl seasons.

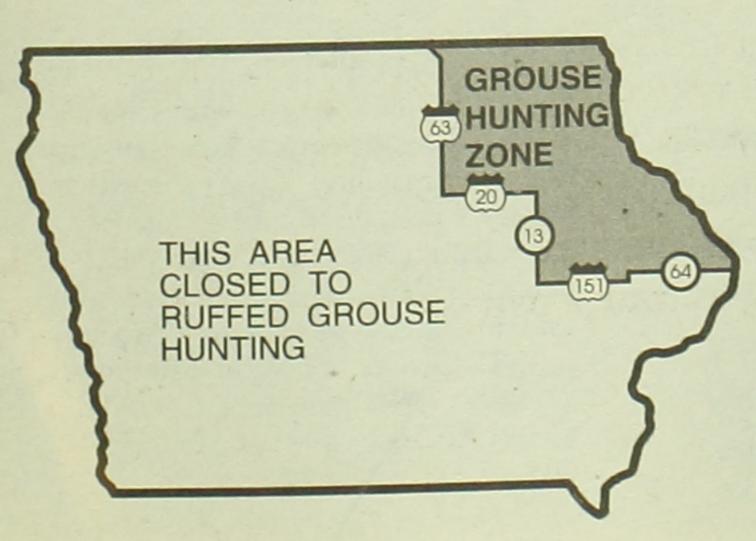
IOWA 1999-2000 HUNTING SEASONS AND BAG LIMITS

SPECIES	SEASON	SHOOTING HOURS	BAG L DAILY	POSSESSION
Youth Rooster Pheasant (age 15 or younger)*+	Oct. 23-24		1	2
Rooster Pheasant	Oct. 30 - Jan. 10, 2000	8:00 a.m. to 4:30 p.m.	3	12
Bobwhite Quail	Oct. 30 - Jan. 31, 2000		8	16
Gray Partridge	Oct. 9 - Jan. 31, 2000		8	16
Turkey (Gun)*	Oct. 11 - Nov. 30	One-half Hour Before Sunrise to Sunset One Turkey Per License		One Turkey
Turkey (Bow Only)*	Oct. 1 - Dec. 3 and Dec. 20 - Jan. 10, 2000			Per License
Deer (Bow)	Oct. 1 - Dec. 3 and Dec. 20 - Jan. 10, 2000			
Deer (Muzzleloader)	Oct. 16 - Oct. 24* (early) or Dec. 20 - Jan. 10, 2000 (late)		One Deer	One Deer
Deer Youth (age 12-15) and Severely Disabled	Sept. 18 - Oct. 3		Per License	Per License
Deer (Special Bonus Late Season)	Jan. 11 - Jan. 17, 2000			
Deer (Shotgun)	Dec. 4 - Dec. 8 (first) or Dec. 11 - Dec. 19 (second)	Sunrise		
Ruffed Grouse	Oct. 2 - Jan. 31, 2000	to	3	6
Rabbit (Cottontail)	Sept. 1 - Feb. 28, 2000	Sunset	10	20
Rabbit (Jack)	Oct. 30 - Dec. 1		2	4
Squirrel (Fox and Gray)	Sept. 1 - Jan. 31, 2000		6 .	12
Groundhog	June. 15 - Oct. 31		· · · · · · · · · · · · · · · · · · ·	
Crow	Oct. 15 - Nov. 30 and Jan. 14 - March 31, 2000	None	None	
Pigeon**	Oct. 1 - March 31, 2000			
Raccoon and Opossum	Nov. 6 - Jan. 31, 2000	None		
Fox (Red and Gray)	Nov. 6 - Jan. 31, 2000	(Open 8 a.m. First Day Only)		
Coyote	Continuous Open Season	None		complete requiremen

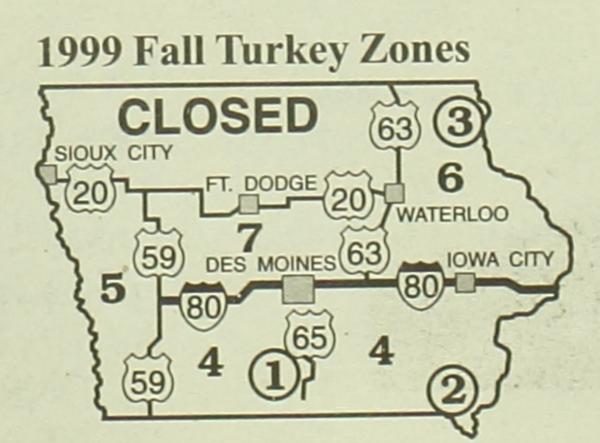
* Residents Only.

** Within 100 yards of buildings and bridges, pigeons may be taken year round.

+ See regulations for complete requirements



The ruffed grouse hunting zone is that portion of northeast Iowa bordered by US Highway 60, 20 and 151, and Iowa Highways 13 and 64.



ZONE 1 is all units of Stephens State Forest west of U.S. Highway 65 in Lucas and Clarke counties.

ZONE 2 is all units of Shimek State Forest in Lee and van Buren counties.

ZONE 3 is units of Yellow River in Allamakee County.

BOW-ONLY fall turkey licenses are valid statewide.

Fall turkey season is closed to nonresidents in 1999.

1999 Fishing Clinic List

1999 Fishing Clinic List				
Country	Type of Event	Date	Location	Contact
County	Clinic/Youth	5/22	Lake Icaria, Corning	515/322-3442
Adams Black Hawk	Clinic/Youth	4/18	Lake Manatt, Count I and	319/277-2187
Black Hawk	Clinic/Youth	6/21	Lake Manatt, Codar 1 ans	319/277-2187 319/277-2187
Black Hawk	Clinic/Youth	6/24	Lake Mallatt, Codai 1 ans	319/277-2187
Black Hawk	Clinic/Youth	7/14	Lake Manatt, Cedar Fans	319/277-2187
Black Hawk	Clinic/Youth	7/15	Lake Mallatt, Cedai I alis	319/277-2187
Black Hawk	Clinic/Youth	7/19	Lake Manatt, Cedar Fans	319/277-2187
Black Hawk	Clinic/Youth	7/28	Lake Mallatt, Cedai 1 ans	319/277-2187
Black Hawk	Clinic/All Ages	8/14	Lake Manatt, Cedar 1 ans	319/342-3350
Black Hawk	Clinic/Youth	8/21	HICKORY HILLS CO Fairk, La Forte City	712/792-4614
Carroll	Tournament/Youth	6/5	Swall Lake State I aik, Curron	712/792-4614
Carroll	Tournament/Seniors (+55)	6/4	Swall Lake State I ark, Curron	712/243-3542
Cass	Clinic/Youth	6/5	Cold Springs I ark, Lewis	319/886/6930
Cedar	Clinic/All Ages	7/31	Deliliett I olid, Deliliett	515/357-3517
Cerro Gordo	Clinic/Youth	6/5	Wichitosh woods State I am, Crem	515/357-7010
Cerro Gordo	Clinic/Youth	6/7	Cicai Lake	712/225-6709
Cherokee	Clinic/Youth	7/23	Waltin Laik Alca, Darrace	515/394-4714
Chickasaw	Clinic/Youth	6/4	Spill Rock Faik, Fredericksom	515/394-4714
Chickasaw	Clinic/Youth *	6/5	All Folt Lake, New Hampton	515/394-4714
Chickasaw	Clinic/Youth	6/6	Clear Lake I ark, I dollar	712/993-5532
Clay	Clinic/All Ages	5/12	Stolleys Lark, Spelicer	319/245-1516
Clayton	Clinic/Youth	6/5	Osborne Pond, Elkader	712/263-3409
Crawford	Clinic/Youth	5/22	Yellow Smoke Park, Denison	712/263-3740
Crawford	Clinic/Youth	5/31	Nelsons Park, Dow City	712/263-3740
Crawford	Clinic/Youth	7/4	Yellow Smoke Park, Denison	515/664-2572
Davis	Clinic/Youth	6/5	McGowen Recreation Area, Bloomfield	712/933-5532
Dickinson	Tournament	6/5	Sawmill Park, Arnolds Park	319/556-6745
Dubuque	Clinic/Youth	6/5	Swiss Valley Park, Dubuque	319/422-3883
Fayette	Tournament/Youth	6/5/	Volga Lake, Fayette	515/257-6214
Floyd	Clinic/Youth	6/26	Elks Pond, Charles City Beeds Lake State Park, Hampton	515/456-4375
Franklin	Clinic/Youth	6/5	Spring Lake State Park, Jefferson	515/386/5674
Greene	Clinic/Youth	6/13	Conservation Ed Center, Guthrie Center	515/747-8383
Guthrie	Girls Camp	6/10	Conservation Ed Center, Guthrie Center Conservation Ed Center, Guthrie Center	515/747-8383
Guthrie	Girls Camp	7/29	Conservation Ed Center, Guthrie Center Conservation Ed Center, Guthrie Center	515/747-8383
Guthrie	Women's Camp	9/10	Briggs Woods Lake, Webster City	515/832-4504
Hamilton	Tournament/ Family	6/6	Meier Wildlife Refuge, Hubbard	515/648-9878
Hardin	Clinic/Youth	6/5	IA River, IA Falls	515/648-4775
Hardin	Tournament/Youth	7/4	Veron Springs Park Mill Pond, Cresco	319/547-3634
Howard	Clinic/Youth	4/27	Moorehead Park, Ida Grove	712/364-3300
Ida	Clinic/Youth	7/15	Lake Iowa Park, Williamsburg	319/655-8466
Iowa	Clinic/All Ages	5/22	Andrew Jackson Demo.Farm, Andrew	319/652-3783
Jackson	Clinic/All Ages	6/5	Waterworks Park, Fairfield	515/472-8460
Jefferson	Clinic/Youth	6/5	Wapsipinicon State Park, Anamosa	319/462-2761
Jones	Clinic/Youth	6/5	Marion Co. Park, Knoxville	515/627-5935
Marion	Clinic/Youth	6/6	Pleasantville City Park Pond, Pleasantville	515/848-5649
Marion	Clinic/All Ages	6/6	Miami Lake, Albia	515/946-8112
Monroe	Tournament/ All Ages	6/5	Chicken Creek Saulsbury Rec., Muscatine	319/264-5922
Muscatine	Clinic/Youth	6/5	Pioneer Lake, Shenandoah	712/246-5/15
Page	Clinic/Youth Clinic/Youth	6/6	Lost Island Huston Park, Ruthven	712/837-4866
Palo Alto	Clinic/All Ages	6/12	Hillview Recreation Area, Hinton	712/947-4270
Plymouth	Clinic/All Ages Clinic/All Ages	5/27	Easter Lake Park, SE Des Moines	515/323-5300
Polk	Clinic/Seniors	6/4	Fort Des Moines Park, Des Moines	515/323-5300
Polk	Clinic/All Ages	6/12	Big Creek, Polk City	515/285-0959
Polk	Clinic/Youth	6/5	West Lake Park, Davenport	319/328-3281 ext. 24
Scott	Clinic/Youth	6/25	Winterfield Area, Rock Valley	712/552-3057
Sioux	Clinic - special needs	8/20	Winterfield Area, Rock Valley	712/552-3057
Sioux	Tournament	5/8	Hickory Grove Park, Colo	515/232-2516
Story	Clinic/Youth	5/15	Izaak Walton League, Ames	515/232-2516
Story	Tournament/Youth	6/5	Hickory Grove Park, Colo	515/232-2516
Story	Clinic/All Ages	6/5	Ottumwa Park Lagoon, Ottumwa	515/682-3091 515/061 6160 evt 14
Wapello Warren	Clinic/Youth	6/5	Annett Nature Center, Indianola	515/961-6169 ext. 14
	Clinic/Youth	6/5	Marr Park, Ainsworth	319/653-7765
Washington	Clinic - special needs	6/9	Marr Park, Ainsworth	319/653-7765
Washington	Clinic - special needs	6/9	Marr Park, Ainsworth	319/694-2430 515/873-4242
Washington	Tournament/Youth	9/11	Bob White State Park, Allerton	712/233-1513
Woodbury	Clinic/Youth	6/6	Browns Lake, Salix	112/233-1313
			POLIAL	OPPORTUNITY

STAFF

EDITOR, Kristen Goldsmith

DNR DIRECTOR, Paul W. Johnson

FISH AND WILDLIFE DIVISION Allen Farris, Administrator

Bureau Cheifs: Marion Conover, Fisheries Richard Bishop, Wildlife LowellJoslin, Law Enforcement Iowa Fish and Wildlife News is published in January, April, May and September by

Fish and Wildlife Division, Iowa Department of Natural Resources, Wallace State Office Building, 900 E. Grand, Des Moines, IA 50319-0034

For those who cannot read the size of print in this publication, a larger size version of the text is available by calling the DNR at 515/281-5145 (TDD number 515/242-5967) or writing the DNR at 900 East Grand, Des Moines, IA 50319-0034.

EQUAL OPPORTUNITY Federal regulations prohibit discrimination on the basis of race, color, national origin, or disability. If you believe that you have been discriminated against in any program, activity, or facility as described above, or if you desire further information, please write to: Director, Iowa Department of Natural Resources, Wallace State Office Building, 900 E. Grand Ave., Des Moines, IA 50319-

0034.