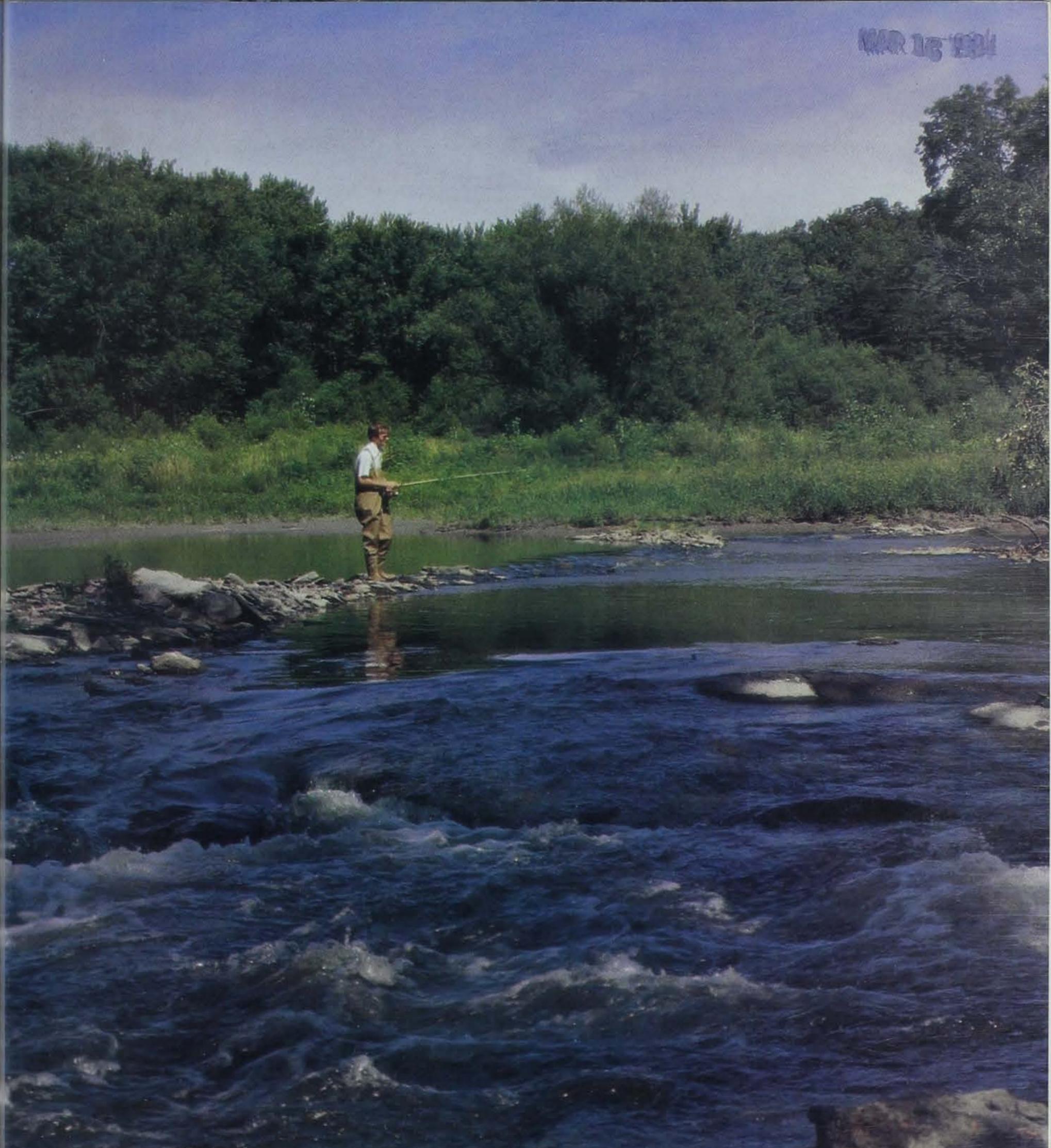


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FRONT COVER: Stream fishing for smallmouth bass along the Middle Raccoon River. Photo by Ken Formanek.

BACK COVER: Evening fishing at Big Creek. Photo by Ron Johnson.

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Fishing Forecast



Ken Formanek

Casting for perch on Spirit Lake.

Northwest

By Tom Gengerke

Tom Gengerke is the Northwest district fisheries supervisor located at Spirit Lake. He holds a B.S. degree and an M.S. degree from South Dakota State University. He has been with the commission since 1977.

Bullhead

Silver Lake (Dickinson County) and Black Hawk Lake are loaded with bullheads. Over 50,000 bullheads, averaging 8 to 10 inches were harvested during 1983 at Black Hawk Lake. May and June are especially good months for

this lake. The return of adequate water levels in the Great Lakes area has brought on the bullheads and Spirit Lake has shown steady improvement since the early 1980's. Late May and early June are the best times for popular spots like the North Grade, Buffalo Run, Templar Park and Little Spirit. These areas can be especially good after dark. Little Wall Lake represents a bullhead bonanza and should not be overlooked. Fish are running from 3/4 to 1 1/4 pounds.

Channel Catfish

Rivers and catfish go hand-in-hand, and excellent fishing will be available in virtually all Iowa rivers during 1984. The Little Sioux, Raccoon, Des Moines, Big Sioux and Iowa will offer some of the best opportunities. Fish larger than 10 pounds will be common and the action will be fast. Prepared baits will be best in these flowing systems. A number of area lakes also boast abundant catfish populations.

'84

Iowans can wet their lines in a variety of fishing waters including 19,000 miles of interior streams, 200,000 acres of border rivers, 90,000 acres of lakes and reservoirs, 50 cold water trout streams and 80,000 farm ponds. Fisheries biologists formulated this fearless fishing forecast to help anglers during the new fishing season this spring. The action's already started and prospects are exciting!

now or just a plain minnow are old standbys and always worth the effort. River fishing for walleyes has been excellent during the past two years and from all indications 1984 will also be a producer. The West Fork of the Des Moines from Rutland to the Cornbelt Dam and the Raccoon River downstream from Sac City should be especially good. Many fish in the two- to six-pound class will be taken. Jigs and Rapalas are consistently productive.

Yellow Perch

This will be a year to remember for yellow perch fishing. The return to normal water levels during the early 1980's created conditions for spectacular recruitment and excellent survival. Strong year classes established during times of high water will continue to enter the fishery and provide excellent catches of large fish. Big Spirit, West Okoboji and Clear Lake will lead the parade. The harvest from West Okoboji alone has approached 100,000 fish during each of the past two years and 1984 will be better yet! Fall and early winter are the traditional seasons but versatile anglers have caught good numbers of fish much earlier. Small jigs tipped with wigglers or waxworms are usually just the ticket. West Okoboji fishermen should remember that there is a tremendous bluegill fishery in that lake and that yellow perch have really been utilizing the forage these young bluegills provide. Success belongs to the flexible angler.

Muskellunge

It's the fish of a thousand casts — or maybe just one! Peak harvest usually occurs in June and again during August and September. The state record is lurking in West Okoboji, but Big Spirit has really come on during the past two years. A good number of 20- to 30-pound fish are caught each year from both lakes by both novice and seasoned anglers, but ultralight tackle won't handle these tackle busters.

Northern Pike

Good to excellent fishing can be expected at Clear Lake and Big Spirit, especially for fish in the two- to five-pound class. The Winnebago River

from Fertile to Mason City will also provide stringers of nice-sized fish. If winterkills didn't occur, the best fishing will occur at Tuttle and Five Island Lakes. Plenty of line stretchers in the 10-pound-and-larger class are found in these natural lakes. Artificial lures, notably spoons, Mepps spinners and Rapalas are good but chubs and other live baits also work.

Smallmouth Bass

Some really beautiful fish will be taken this year. Lake fishermen would do well to start early, concentrate on rock piles or rocky points and use a minnow, preferably a shiner, fished slowly. West Okoboji and Spirit Lakes both produce quality fish, however, more consistent fishing will be experienced on West Okoboji. When the weather warms, crankbaits take smallmouth. River fishing, once the rivers get back in their banks and begin to clear, usually produces more fish per trip, although they are seldom as large as the lake variety. The Iowa, the Boone and the Winnebago all have nice fish. Knowledgeable anglers concentrate downstream from riffle areas, near submerged timber and in deep holes. A 12-inch length limit applies on all interior streams, and a 14-inch limit applies on Spirit, West Okoboji, East Okoboji, Upper Gar, Lower Gar and Minnewasheta Lakes.

Largemouth Bass

Lake Smith and Lower Pine Lake will produce excellent catches of bass this year. Shoreline brush or submerged structures are best. The canal areas of West Okoboji will produce fish early but these fish move out when the water gets too warm. Surveys indicate a good number of 14- to 16-inch fish as well as a number of 4-5 pounders in Center Lake. If winter mortality is light, Five Island Lake is worth a try for fish from one to three pounds. Surveys conducted last summer indicated a number of fish just below the 14-inch length limit at Lake Pahoja. These fish will be legal during 1984. Dog Creek is another lake with plenty of 1½-pound fish just waiting for anglers in that part of the region.



County Conservation areas with cooperative cage catfish programs are often the best. Oldham near Soldier, Nelson Park near Dow City, Moorehead near Ida Grove, Pahoja near Larchwood and Dog Creek in O'Brien County are among the top contenders for catfish enthusiasts. Larger lakes are also well worth sampling. Black Hawk Lake has been yielding over 9,400 fish per year, with most fish weighing about a pound. East Okoboji may just be the largest untapped catfish reservoir in northern Iowa. Both are examples of successful management programs producing quality fisheries.

Walleye

The best fishing will be found on Big Spirit, Clear Lake and Lost Island where 12- to 16-inch fish are common and the opportunity to catch larger fish is always present. The key to spring fishing on Big Spirit and Lost Island is a late ice out followed by steadily increasing water temperatures. A jig and min-

Northwest cont.

Bluegill

Lake Cornelia has plenty of "gills" up to eight inches available and should provide some excellent fishing during 1984. Nightcrawlers or small jigs fished near the vegetation will catch the attention of these fish. Beeds Lake will provide fish from 6-7 inches as will West Okoboji and East Okoboji. West Okoboji has provided some excellent bluegill fishing during the past two years, and the catch should continue. By mid-summer, 6-inch fish will be common in Dog Creek.

Crappie

The best crappie fishing will occur on Clear Lake, Little Wall, North Twin, Crawford Creek and Storm Lake. Fish from 8-10 inches will be the norm. Some real slabs will come from Storm Lake and Clear Lake this year. The marina area is the early season hotspot for Storm Lake while at Clear Lake, the emerging rush beds on the west end will provide the best fishing. Small jigs or minnows are the best baits.

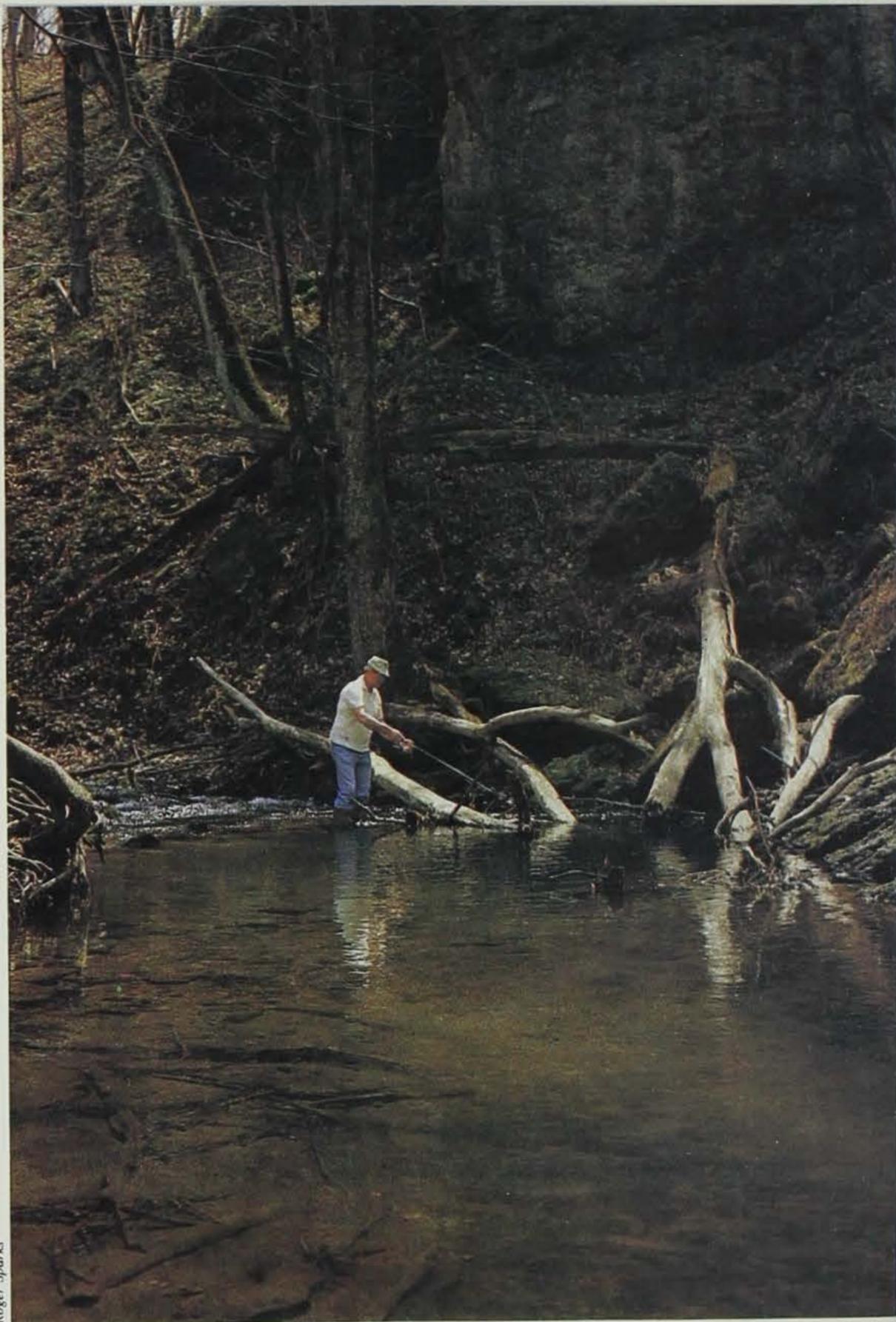
Other Species

Clear Lake will offer the best opportunity for white bass fishermen, especially during spring and fall. Many fish from 12-16 inches will be taken using a jig and minnow or a Mepps spinner. White bass are also a bonus for crappie fishermen at Storm Lake as well as providing that little something extra at East Okoboji.

The freshwater drum is available in large numbers in West Okoboji. It is difficult to fish a jig and not hook one, and a piece of crawdad is a sure bet. The fish are delicious when the dark meat is cut away and the remaining is served with shrimp sauce.

Tiger Musky (hybrid cross between northern pike and muskellunge) are available and are getting bigger every year. Storm Lake or Black Hawk now hold plenty of fish from 32-38 inches in length.

When it comes to fishing, northwest Iowa has variety, quality and quantity in its glacial lakes and diverse prairie streams. Lots of friendly people are rightly proud of the resources in their part of the state. The fisheries biologists of northwest Iowa invite anglers to share with them a quality outdoor experience.



Roger Sparks

Trout fishing begins with first stocking in early April.

Northeast

By Dave Moeller

David Moeller is the Northeast district fisheries supervisor located at Manchester. He has been with the commission for 14 years and holds a B.S. degree from Iowa State University.

Bluegill and Crappie

The Mississippi River provides premier panfish angling both in terms of numbers and size of fish caught. Bluegill and crappie populations rank among the very best in the state. Bluegill provide lots of fillets from late spring

right on through the rest of the year and particularly the ice fishing season. They will be in shallow backwaters in late spring, in the brush and on wingdams in the summer and early fall, and back into the backwaters under the ice. Our surveys have shown excellent crappie populations with large numbers of fish in the nine- to eleven-inch range. Crappies take minnows in the tree tops of deeper water in the spring and summer months and in the shallow backwaters in the winter.

Walleye and Sauger

Walleye fishing in northeast Iowa means river fishing. The Mississippi, Cedar and Shellrock Rivers top the list in numbers and size of fish caught.

Sauger, smaller cousin of the walleye, are found only in the Mississippi, however, populations there are very strong. Creel surveys have shown that over 20,000 walleye and sauger are harvested annually at each of the lock and dam tailwaters from October through April. A recent study also showed that even though the combined daily catch limit of walleye and sauger is a liberal ten, these Mississippi River populations are healthy and are not being overharvested. The Cedar and Shellrock walleye populations are smaller than the Mississippi, however, the size of fish caught is excellent. Both streams produce fish exceeding 13 pounds.

The biggest fish are caught in early spring just after iceout. These fish congregate below dams prior to spawning and feed quite actively. A wide variety of baits and lures are effective, with jigs, minnows, twister tails and sonars being favorites. The important thing is to fish slowly on or just off the bottom. Late spring through early fall walleye fishing is often very good on the rock wing dams found along the main channel border of the Mississippi. When fishing these wing dams or other riprap areas, the lure must be bounced on the rocks. A few setups may be lost, but some fine walleyes will be taken.

Trout

The Iowa trout program continues to gain attention from increasing numbers of Iowa and non-resident anglers. Trout stream conditions are expected to be good to excellent in 1984 due to fall and winter precipitation recharging the underground aquifers that create the cold-water streams. Nearly 312,000 half-pound rainbow and brown trout will be stocked in 47 "catchable" trout streams, beginning in early April and extending through October. An additional 300 lunker-sized (3- to 15-pound) browns and rainbows will be scattered in these streams during May and June, adding to the excitement. Premier catchable trout streams include North Bear, South Bear, Waterloo, Trout Run, Trout River, Coldwater, French, Sny Magill, Richmond Springs and Swiss Valley. Late fall stockings have proved popular with anglers and 11 catchable streams will also be stocked through the month of November.

Special brown trout trophy fisheries developed in portions of Spring Branch, Bloody Run and French Creeks have worked out extremely well. Electro-fishing surveys have shown good numbers of browns present over the 14-inch

minimum-length limit, with occasional fish present up to seven pounds. These fish are stocked as two-inch fingerlings and have spent the majority of their lives in the stream and present a real challenge to anglers fishing with artificial lures. The South Fork Big Mill has a naturally reproducing brook trout population which will produce a few brookies over the 12-inch length limit.

New trout anglers often have difficulty catching trout. One of the problems is that Iowans rarely fish in crystal-clear waters and are unaware of the problems these conditions present. Clear water gives trout a visual advantage and they quickly get "lockjaw" when there is commotion right on the stream's edge. Moving quietly and as far back from the stream edge as possible, successful anglers cast baits and lures into pools where the trout have had no warning as to their presence. Using a variety of baits and lures also improves catch rates. What works one day often doesn't the next, so it pays to try different baits and lures.

Largemouth Bass

Mississippi River backwaters are the mainstay of largemouth bass fishing in northeast Iowa. The "Ol' Miss" is not known for its lunker bass but the number of bass caught per hour rivals any other water in the state. May and June are the best bassin' months; however, fall anglers also do well. Largemouths are very structure-oriented and the stump fields, weed beds and shoreline structure in shallow water produce best in the spring. Rip-raps and tree tops in deeper water are good in the late summer and fall months. Plastic worms, crank baits, pig-and-jig and spinner baits are all proven lures.

George Wyth Lake is a good bet for a trophy bass. This lake annually produces a few largemouths up to eight pounds as well as good numbers of smaller fish.

Channel Catfish

It's hard to bait-fish any of the northeast rivers and not catch catfish. Our surveys show populations continue to be strong with good numbers of cats in the two- to six-pound class. The Wapsipinicon River in Buchanan County, the Cedar River in Bremer and Black Hawk Counties, the Upper Iowa River below the lower dam and the Maquoketa River below Delhi are particularly good stretches. Volga Lake produced some nice stringers of cats in 1983 and will again this year.

Northern Pike

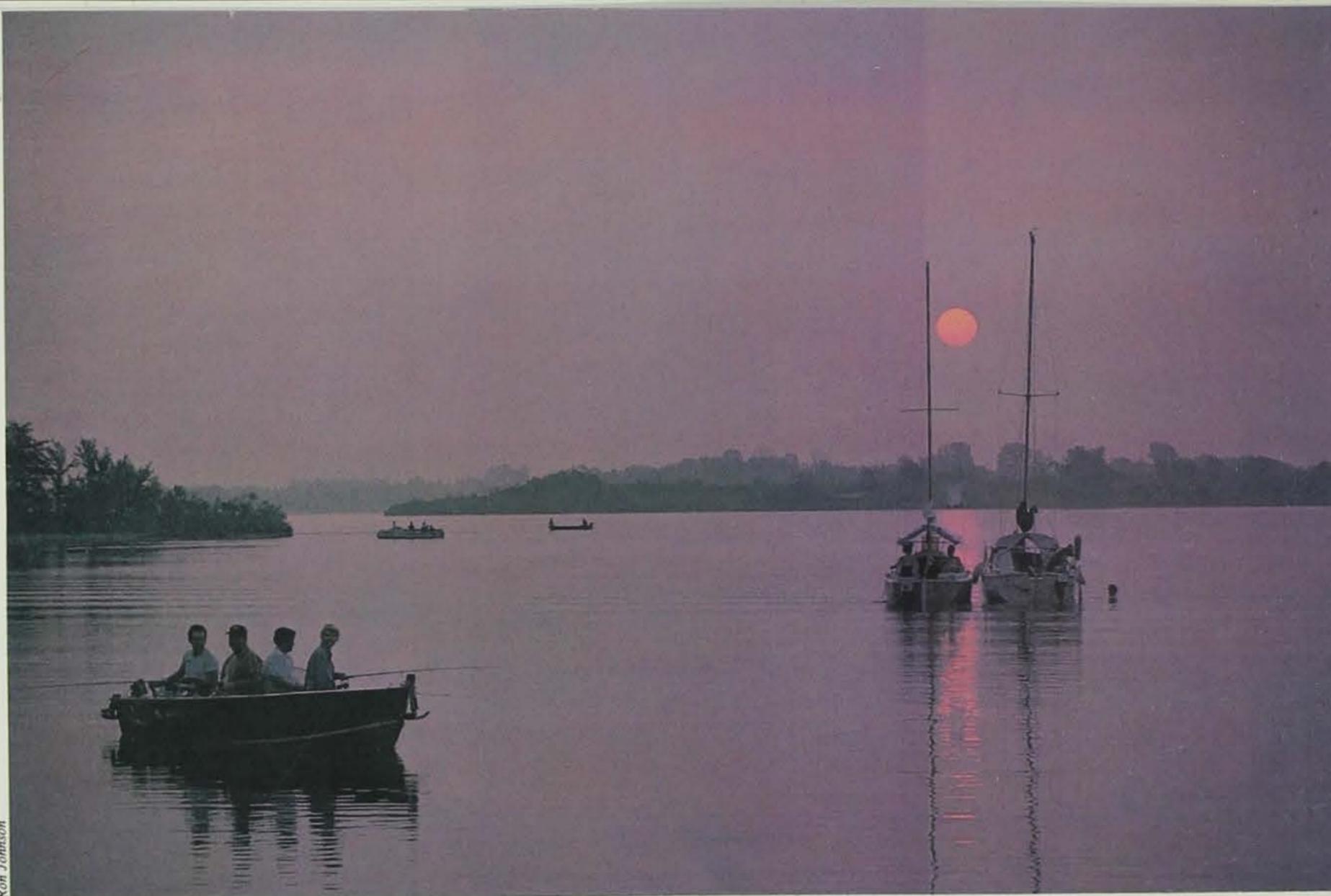
The Wapsi River contains the largest northern pike population of all the inland rivers in the state. Small north-erns are numerous and an occasional trophy-sized pike may be found. The Cedar River has an increasing population of north-erns, with individuals up to 20 pounds taken each year. The weedy backwaters of inland rivers, particularly along breaks next to current, are best. The Mississippi River, north of Dubuque, has large populations of north-erns, with many in the six- to eight-pound range and an occasional fish up to 15 pounds. Still-fishing with large chubs in the backwaters during the hottest part of July and August is particularly effective. Areas where cold-water streams feed into the Mississippi also hold concentrations of northern pike during the hot months.

Smallmouth Bass

The smallmouth bass is king in many of the inland rivers in northeast Iowa. The key to bronzeback fishing is in locating good habitat — streams with good areas of gravel, rock and boulders. Some of the best habitat is located on the Cedar River from Otranto to St. Ansgar and from Mitchell to Floyd; the Upper Iowa River from Lime Springs to Kendallville and from Decorah to Highway 76; and the Maquoketa River from Delhi to Hopkinton. A 12-inch length limit imposed in 1980 has had a beneficial affect on bass populations. These streams produce good catches of smallmouth between 1½ and 2½ pounds, with a few individuals up to 4½ pounds. Smallmouth bass are quite aggressive and really put on the feedbag in late summer and early fall, so this is the prime time to go after this superb fighter. A wide variety of baits and lures work well at this time, including Beetle-Spins, Twister Tails, small crank baits, jigs and Rapala-type plugs. The pools lined with rocks and boulders hold these fish.

White Bass

Probably no fishing is as exciting as when the "stripers" are hitting. White bass enthusiasts seek out these speedsters in the Mississippi River primarily from July through October. The majority of stripers run around a pound; however, schools of two to three pounders are not uncommon. Fishing concentrates around wingdams and swift-flowing rocky dropoffs. Jigs and spinners are very effective in taking these hard-hitting and sporty fighting fish.



Ron Johnson

Midsummer walleye fishing can be hot at Rathbun.

Southeast

By Steve Walters

Steve Walters is the Southeast district fisheries supervisor located at Lake Darling. He holds a B.S. degree from the University of Nebraska and an M.S. degree from the University of Missouri. He has been with the commission for 10 years.

Largemouth Bass

Largemouth bass fishing in Pools 17, 18 and 19 of the Mississippi River will be good. The Big Timber, Hidden Acres and Cleveland Slough areas of Pool 17 have a catch rate for bass as high as any on the river. Large islands in Pool 18 and upper Pool 19 and tributary stream mouths in lower Pool 19 are the best bets for bass angling. The common sizes of the river bass are between 11 and 15 inches. Lake Wapello is the traditional place to catch a lunker bass. Big fish are the rule at this scenic bass hole. Crystal-clear Pleasant Creek is one of the top bass lakes in the state. High growth rates have resulted in a high number of 12- to 16-inch bass. Lake Geode is back! It's only been three

years after renovation and the number of 12- to 15-inch bass is outstanding. The 14-inch size limit means a lot of catch-and-release fishing with plenty of action.

Other great bass lakes to consider for '84 are Lake Odessa, Lake Miami, Rathbun Reservoir, Lake Macbride, Coralville Reservoir and Lake Iowa.

Crappie

Fall electrofishing samples showed a large population of 9-inch and larger crappies at Lake Odessa. The angling should be excellent, perhaps even better than last year. Providing Lake Rathbun has favorable water conditions, the crappie angling should hit the high-excitement level. There are good numbers of 8- to 10-inch fish, with some lunkers available. Most Mississippi River backwaters will produce good numbers of 8- to 11-inch fish. The Big Timber, Cleveland Slough and Hidden Acres of Pool 17 are the top crappie spots. These areas have deep dredge holes and generally good water quality. Andalusia Island (Pool 16), Huron Island (Pool 18) and Burlington Island (Pool 19) backwaters are also excellent choices. The brush piles and stump fields will be the areas to fish in spring and fall. During the hot summer months

the fish should be suspended in deep water holes.

Lakes Iowa, Miami and Wapello will also be good bets for 1983. Lake Darling will produce some 15-inch individuals along with the average 8-inch crappie.

Bluegill

Angling for spring bluegill means hot and heavy action. Look in shallow areas for nesting fish. Drift-fishing in open water is an effective summer bluegill angling technique. The quality of bluegill in Red Haw Lake is astounding. Large "gills" are common, with an occasional 10-incher ready to make life interesting. Fish the Mississippi River backwaters in the same areas as you would for crappie for 6- to 8-inch fish. Lakes Odessa, Hawthorn, Miami, Iowa and Geode will produce great bluegill fishing this year.

Channel Catfish

Our cage-catfish and maintenance-stocking programs have established excellent catfish populations in all lakes managed by the Iowa Conservation Commission. Rathbun Reservoir has an outstanding population with 10- to 12-pound fish common. The following lakes are guaranteed catfish getters:

Southwest

By Joe Schwartz

Joe Schwartz is the Southwest district fisheries supervisor located at Cold Springs. He holds a B.S. degree from Ohio State University and an M.S. degree from Iowa State. He has been with the commission since 1971.

Lakes Wapello, Miami, Lake of the Hills, Iowa, Macbride, Otter Creek, Rodgers, Darling, Odessa, Pollmiller, Pleasant Creek and Coralville. Most of our inland rivers are top producers as is the Mississippi. Excellent numbers of catfish are ready to be taken in Pools 18 and 19 of the Great River. Pools 16 and 17 should be rated as good. Wing dams, closing dams and riprap shorelines are excellent all season for cats.

Walleye

Some of the best walleye and sauger angling in the Midwest exists on the Mississippi River. Lock and dam tailwaters and wing dams are the normal hot spots for fish up to three pounds. Big fish are also present and are taken seriously by the river angler. Rathbun Reservoir and Lake Macbride will produce good catches of walleye this year. Trophy walleye are common at Rathbun but catch rates will be greater at Macbride for fish up to three pounds.

Tiger Muskie

Trophy-size tigers are beginning to enter the angling scene in southeast Iowa. Several 20-pound fish have been taken at Hawthorn Lake. Legal fish can be caught at Pleasant Creek, Macbride, Rathbun and Darling. Creel studies indicate that May, June and July are the best fishing months. Crankbaits and spinner baits are good choices.

Other Species

Bullhead enthusiasts will want to include fishing trips to Hawthorn, Keomah, Union Grove, Odessa, Darling and the Skunk River. A worm rig with a light weight is as good as any.

White bass anglers will want to fish the Mississippi River (tailwaters and wing dams), Rathbun and Coralville. Sizes caught will normally range up to 14 inches and white bass can usually be found in large numbers.

Flathead catfish can be found in the Skunk and Iowa Rivers. Large live chubs fished in deeper holes in summer and fall often produce tackle busters.

Farm Ponds

Ponds are plentiful in southeast Iowa and produce some of the state's best angling for largemouth bass, bluegill and catfish. These mini-lakes produce more trophy catches than any other water type, and because they warm up quickly in the spring, make great places to begin the new fishing season. Farm ponds are on private property, which require owner's permission and the utmost respect of property.

Channel Catfish

Several past angler surveys by the Conservation Commission have shown that Iowa fishermen like to catch channel catfish, especially in the southwestern part of the state. This is not surprising, considering that just about every water there, from state lakes, rivers, small creeks, and even farm ponds, have abundant populations of catfish. In the last five years alone, almost 800,000 channel catfish have been stocked into state and county fishing lakes in that region.

Many people think of catfishing as a warm weather sport, but good fishing can be had right after ice out. The best baits are winter-killed fish found along the shoreline, or sour shad purchased from a bait store. Traditional summer fishing will be good, but a change in bait is usually necessary. Prepared baits, chicken liver, and nightcrawlers are commonly used during warm water periods. Major rivers in the southwestern part of the state provide good catfishing if water levels are normal or rising slightly. The holes and brush piles of the Nishnabotna, Raccoon, and Grand Rivers are top choices for a stringer of excellent eating "cats." The Des Moines River should be especially good this year. Excellent places to fish are between Runnels and Red Rock Reservoir at the Bennington Bridge and boxcar areas. North of Saylorville Reservoir around the Highway 17 bridge is also a good spot. Further north, the Ledges Park area, Fraser Dam, and the Boone waterworks are also good places to try.

Good catfish lakes include Green Valley, Icaria, Viking, and Nine Eagles for fish up to 20 pounds. Parts of Lake Icaria provide fishing 24 hours a day. Other lakes which should produce fish up to 10 pounds include Big Creek, Don Williams, Morman Trail, Littlefield, Gray's, Easter, and Slip Bluff. Surveys in 1983 showed that there are so many catfish in Don Williams and Slip Bluff that they won't be stocked in 1984.

Crappie

May is the month for crappie fishing. The weather is nice, the fishing is good and what better excuse is there for heading to a favorite lake than to catch a mess of crappies? For the most fun, ultralite gear with small white jigs or minnows is best. Brushy or rocky areas near shore are tops in the spring. Crappies move to deeper water as the season progresses where drift-fishing from a boat is productive. Green Valley should have a banner year in 1984. Fisheries surveys in 1983 showed this lake has one of the largest crappie populations in the state. Most fish are eight inches. Big Creek, a perennial favorite, will have excellent crappie fishing in 1984. Average size is 9½ inches with fish up to 11 inches being taken. Saylorville Reservoir, a neighbor to Big Creek, should be good if the lake has stable water levels. Riprap along the face of the dam and the Highway 17 bridge are good choices at normal pool. Coves with flooded trees are the best bet if the water is high. Fish up to 14 inches will be taken. Icaria, Don Williams, Viking, and Nine Eagles should also be good crappie producers in 1984.

Largemouth Bass

All lakes and most farm ponds in southwest Iowa have bass in them, but several will be in the limelight in 1984. Lake Anita should be good. A 1983 bass tournament at Anita was reported to be the best of the year for one active bass club. Good numbers of large fish are present. Icaria and Green Valley will both be good again this year. At Icaria

May crappie fishing at Big Creek.



Southwest cont.

the points and underwater structure are consistent producers, while at Green Valley the marked stake beds and brush shelters are good. Fish up to 6 pounds will be taken from these two popular lakes. Robert's Creek Lake will also be good. Forty percent of the bass in this lake are larger than the 14-inch length limit. Saylorville will have good bass fishing if the water conditions are good.

Walleye

Three district lakes will produce walleyes this year. Big Creek and Icaria consistently produce catches of two-pounders, but walleye up to 8 pounds live in these lakes and a few lunkers will be taken. Saylorville Reservoir contains lots of walleye, but again good fishing depends on water conditions. Fall surveys produced many six-pounders in the nets and these fish are still in the lake. The face of the dam and sandy points will hold these fish. Rapalas, jigs, and minnows will take them. Fall walleye fishing in the Des Moines River above Saylorville can be very good at times. Best fishing occurs when the river is clear and at low flows.

Bluegill

Lake Anita has been the best lake in the region for bluegills up to 10 inches year after year, and it will be so again in 1984. These big bluegills can give quite a battle on ultralite tackle and are also excellent eating. Other good lakes to fish are Icaria, Morman Trail, Big Creek, Hickory Grove, and Green Valley. All produce many fish in the 6- to 8-inch size. Bluegill can be caught with worms, small spinners, jigs, or flies. Late May is the best time to catch bluegills because the fish are concentrated on their spawning beds and are very aggressive. They can be located by following the shoreline and looking for the telltale swirls bluegills make while protecting their nest. Later in the year, the edges of weedbeds produce in the mornings and evenings. Drift-fishing in deep water will take them during mid-day.

Bullhead

Three lakes with new fish populations will provide spectacular bullhead fishing this year. Lakes Ahquabi, Prairie Rose, and Badger Creek will provide lots of action. One of the easier fish species to catch, a hook baited with a gob of worms and tossed on the bottom, will take them.

Other Fish

Most of the larger lakes in the region have been stocked with tiger musky since 1978 and produce a few keepers each year. The older fish are now 38 inches and would make a respectable trophy for any angler. Tiger muskies have been stocked in Anita, Viking, Manawa, Don Williams, Hickory Grove, Big Creek, Easter, Gray's, Nine Eagles, Green Valley, Icaria and Lake of Three Fires. Muskies were first stocked in Big Creek in 1972, and there are a few lunkers present, maybe even a new state record. Smallmouth bass are back in the Raccoon River. The riffles at Hyde Park and Squirrel Hollow support them.

Wipers, a hybrid between white bass and ocean-stripped bass, have been successfully established in Saylorville and should be caught in greater numbers in 1984 than ever before. Stocked each year in Saylorville, they can be caught in the Des Moines River system from Des Moines to Fort Dodge. Best fishing will be below Saylorville, at the Cottonwood Access to the river. Jigs, spoons, or Mepps spinners will produce around sand bars. Fish run 3½ to 5 pounds.

All in all if weather and water conditions cooperate, it should be another good fishing year in southwest Iowa.

Summer drift-fishing produces crappies from many southwest Iowa lakes.



Ross Harrison

HOW TO / WHERE TO / WHEN TO CATCH 'EM EARLY WALLEYES

By Jim Wahl

Jim Wahl is a fisheries management biologist located at Clear Lake. He holds a B.S. degree from Iowa State University and an M.S. degree from South Dakota State University. He joined the commission in 1982.

Those who believe the only way to catch walleyes is to travel to northern Canada haven't looked very hard. Although natural reproduction of the walleye is limited in Iowa, many lakes and rivers are stocked annually with fry or fingerling fish. In fact, Iowa stocks more walleyes than any state in the nation! Most of these waters support good walleye populations and offer fine angling opportunities close to home.

Walleye angling in Iowa can be a year-round sport; however, there are time periods when fish are most vulnerable. One of these is the pre-spawn, a peak activity period.

Time of Year

Walleyes maintain a "biological clock" which is activated by two key factors — water temperature and photoperiod. As late winter days lengthen and water temperatures begin to climb, walleyes move from their deep water wintering haunts to shallower spawning areas. In lakes, this will normally occur shortly after ice-out, during late March or early April. During a late winter these movements may actually occur under the ice. Movement, resulting from the onset of spawning behavior, generally occurs earlier in river populations than in lake populations. River anglers should concentrate their efforts in early March.

Typically, males are the first fish to move to spawning areas. As conditions for spawning improve, larger numbers of fish exhibit aggregate behavior patterns and "stage" or congregate near prospective spawning grounds. As water temperatures reach the mid-40's, male fish move into shallow water during periods of darkness and cruise up and down the shoreline looking for females. This activity may occur for two to three weeks before conditions are just right and actual spawning takes place. Not all walleyes spawn at the



Wayne Lonning

River anglers, like this one below Rathbun, concentrate their efforts in March.

same time; however, the bulk of the eggs are released within a week to ten-day period.

Location

Walleyes in both lakes and rivers usually spawn in shallow water (1 to 5 feet) over rock reefs, sandbars, or gravel areas. Occasionally, vegetation may be used. Because spawning is triggered by water temperature, rocky areas that warm up first will attract the

first pre-spawn fish. In a lake, locations such as an inlet or a narrows are likely locations. As water temperatures rise, fish may be found on rocky, shoreline points or rocky, windswept stretches of shoreline.

In rivers, movement to spawning sites is generally upstream. Many rivers in Iowa have lowhead dams or barrier structures on them which impede fish movement. Walleyes will stack up below these dams, so these areas become

excellent concentration points for pre-spawn fish. Fish location is not static and downstream movements do occur.

Techniques

In lakes, pre-spawn walleyes are drawn to the shallower, warmer areas of the lake where they cruise the shoreline in search of females. They are also in search of baitfish. Because natural food is limited at this time of year and fish are relatively concentrated, excellent catches often result. Walleyes can be caught during the day, particularly in shallow lakes that are highly productive. However, if the water is clear, best results are usually at night. Walleyes can be startled easily in shallow water, so wading or anchoring and casting work better than trolling.

A large variety of baits will catch pre-spawn fish, but probably the most successful is the leadhead jig. Jigs tipped with some sort of live bait generally catch more walleyes than those without. Walleyes have seasonal preferences for live baits, and during the pre-spawn period, the best bet is a minnow.

The color of leadhead should imitate the natural forage found in that lake. For example, if walleyes are feeding on yellow perch, a yellow or chartreuse

color may work best, while if spottail shiners are the predominate forage, white or silver may be preferred.

Because of cold water temperatures during the pre-spawn period, walleye metabolism is slow. The jig should be fished slowly, especially if it's tipped with a minnow. A minnow fished on a slip-sinker or a slip-bobber rig is often effective as are the minnow-imitating lures such as Rapalas, Rebels or Red Fins.

The same baits which are successful in catching lake walleyes also work well in rivers; however, fish location and lure presentation is quite different. When fishing small- to medium-sized rivers during the daytime, pre-spawn walleyes position themselves in areas of reduced current. Prime spots include eddies and the edges of river holes. Walleyes will move onto shallow gravel bars at night, but normally do not use them for daytime feeding.

Rivers can be successfully fished from either shore or boat. A jig and minnow combination generally produce good results in current breaks. In pools, walleyes tend to concentrate toward the upstream end. Again, trolling can spook the fish. Anchoring and casting thin, wobbling minnow-imitation lures or live bait rigs downstream works well.

Depending upon weather conditions, the pre-spawn period normally lasts from two to four weeks. Typically, male fish are more aggressive during this period, so a typical catch is dominated by "bucks." If a female takes the lure, however, it may be a trophy. At no other time during the year do females carry this much weight.

Top pre-spawn walleye lakes in Iowa include Clear Lake (Cerro Gordo Co.), Lost Island Lake (Palo Alto Co.), Storm Lake (Buena Vista Co.), Icaria (Adams Co.) and Big Creek Lake (Polk Co.). Saylorville and Rathbun reservoirs may also produce pre-spawn walleyes from both the tailwaters and the faces of the dams. Top rivers include the Mississippi, the Cedar, Shell Rock, Des Moines, Wapsipinicon and the Middle Raccoon. Fishermen should remember that in order to prevent angler interference with brood stock collection, West and East Okoboji Lakes and Spirit Lake are closed to walleye fishing each year from mid-February to the first weekend in May.

During the pre-spawn period, walleyes actively feed and are particularly accessible to the angler. Anglers who understand walleye behavior and fish for them during this calendar period will be rewarded with nice stringers of fish.

Wayne Lonning





Netting walleye broodstock along Rathbun dam (above).



Large female walleye ripe with eggs and ready for stripping. After the process, she will be returned to the lake unharmed (above).

Ron Johnson

the evening hours, as this is when the walleyes are most active. Almost all the netting takes place along the rocky face of the dam. The nets are checked twice during the night, and on the second run the nets are pulled out until the next day.

Fish entangled in the nets are carefully removed and placed in a tank of water aboard each boat. When a crew is done checking its nets, it transports the adult walleye to a waiting hatchery truck. Upon arrival at the hatchery, the fish are sorted by sex and ripeness. Females which release eggs when pressed gently in their abdominal area are ripe and will be stripped of their eggs. Those females whose eggs are not free-flowing are placed in tanks to be checked daily. After being used, all the fish captured are returned to the lake.

Eggs from each female are stripped into a plastic pan. Each female will yield from 100,000 to 200,000 gold-colored eggs. Sperm is then added from at least two male walleyes to ensure the eggs will be fertilized. Sperm is removed in a similar manner as the eggs, by manually putting pressure on the abdominal region of the fish.

Walleye eggs are extremely adhesive. To prevent the eggs from sticking together after being fertilized, the eggs are placed in a clay-water solution for several minutes. Eggs are then rinsed thoroughly and placed in cloth trays to water-harden. About four hours later the eggs are measured into incubating jars, each jar holding approximately 325,000 eggs. Rathbun Hatchery can incubate over 70,000,000 eggs.

As the embryo in the egg develops, it acquires pigmentation and eye spots while losing its gold color. Hatching takes about 14 days in 50° water. Eggs hatch faster in warmer water and slower in colder water. After emerging from the eggs, the fry swim up out of the jar and are collected in a catch tank.

Because walleye fry are very cannibalistic they must be stocked out before they begin to feed, usually two to three days after hatching. Two gallons of water and 200,000 fry are placed in a plastic bag which is then filled with compressed oxygen and sealed for delivery to stocking areas.

Walleye are stocked because natural reproduction is inadequate to sustain a fishable walleye population in most of Iowa's waters. While less than 3% of the walleye fry stocked each year survive to adulthood, this means that some 1½ million walleyes reach adulthood in Iowa, as a result of efforts at the Rathbun Fish Hatchery.

COLLECTING WALLEYE BROODSTOCK

By Mike Mason

Mike Mason is a fisheries biologist at the Rathbun hatchery. He holds a B.S. degree from Virginia Polytechnic Institute and State University. He has been with the Commission since 1981.

Soon after Rathbun Lake was impounded in 1969, walleye produced at Spirit Lake Hatchery were stocked into the lake. Annual stockings have been made since to provide anglers the opportunity to catch this highly-prized game fish. In addition, the stockings have also provided the Iowa Conservation Commission with a reliable source of adult walleye for fish culture purposes. Since Rathbun Hatchery began walleye culture operations in 1977, over 300 million fry have hatched from nearly 500 million eggs taken from Rathbun Lake walleye.

Preparation for the collection of walleyes begins in late winter when hatchery personnel fabricate and repair the gill nets used to capture the adult walleye. The 150-foot gill nets used are made of nylon, and fish swimming into the net become entangled in its meshes. Because the walleye must be removed

gently from the nets to avoid injury to the fish, it is sometimes necessary to cut the net while disentangling them.

As February ends and the last net is worked on, hatchery talk turns to guessing when the ice cover will leave Rathbun Lake. The hatchery workers know that soon they will be setting the nets, and the bright warm room they have worked in will soon be replaced by dark, cool air and chilling water.

Walleyes begin to move inshore to spawn as water temperatures approach 45°. At Lake Rathbun this occurs from mid-March to mid-April. Hatchery crews monitor water temperatures and set nets to check on the walleye movement. Male walleye tend to arrive at the rocky spawning areas first and make up a large percentage of initial collections.

When it appears walleyes are moving to the spawning areas, the netting operation is put into full gear. Fisheries personnel from Chariton, Fairport and Elkader are called in to assist in the netting. Four two-man crews are used to work the nets, with each crew being responsible for four nets. The nets are set perpendicular to the shoreline during

Catch and Release FISHING

By Steve Waters

Photos by author

The man set the hook as his young son watched with excitement the classic confrontation between man and bass. The 12-inch bass leaped from the water, darted for the brushy cover and headed for deep water in an effort to escape his captor. However, no amount of struggle was going to be enough this day. The man won.

The exhausted bass was dragged over the moss bed and bounced along the rock and dirt bank before the man picked up the fish and yanked the lure from its mouth.

"David," said the man to his young son, "this is too small to keep. Let's throw him back so he can grow bigger and you can catch him next year." The boy agreed and the small bass was hurled back toward the water from which he had come.

The chance that David will catch the bass at some time in the future is poor, because the fish will probably die. If the bass had been handled with greater care, David would have the opportunity to catch this bass on a later fishing trip.

Of course, not all fish should be returned to the water. However, there are times when keeping a fish is unlawful and unnecessary and there are times when reeling a fish is not wise. Many predator species such as largemouth and smallmouth bass, muskies and tiger muskies are relatively few in number and are protected by law with length limits and possession limits. According to the law these protected fish must be returned to the water immediately, regardless of their condition. Mother nature is not wasteful and any mortally injured fish will be well used in her scheme.

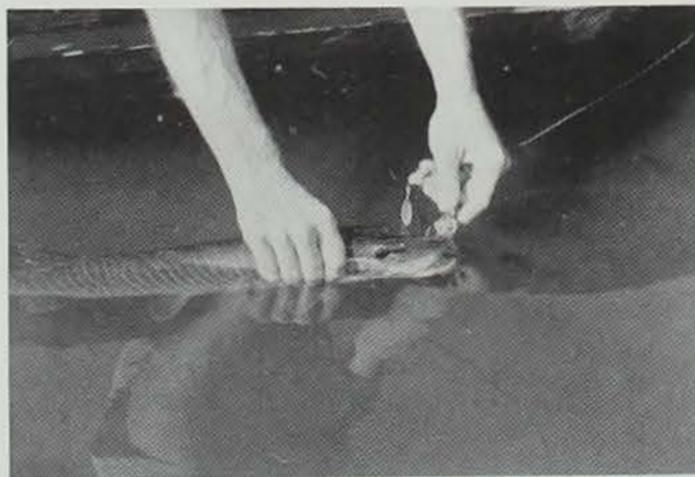
There is a choice when it comes to keeping or releasing lawful fish. I believe a wise philosophy in dealing with these fish is to keep what can be used and the rest be returned. Also, by returning larger fish to the water catch rates and the chance of catching a lunker fish are improved. Fish that are thrown out of the freezer six months later or are allowed to rot before they are cleaned reduces us to meat hunters and not sportsmen. Because of greatly increased fishing pressure we can no longer afford to waste this precious renewable resource. The time is now to



The lip-hold technique. Fish should remain in the water if possible.



The lip-lock hold is a handy release for toothy critters.



The head grip technique.



The fish is released gently.

include catch and release fishing as part of our fishing practices.

Merely releasing fish is not good enough. If we want our Davids to have an opportunity to catch our released fish, we must release them properly. Several angling factors cause fish mortality.

The hooking, catching, handling and releasing processes cause stress in fish and can cause a fish to go into shock. Shock occurs when the blood circulating system shuts down and the end result can be death. If a fish loses its equilibrium and floats belly up, the fish is in shock and in need of help.

Lactic acid is a body waste product that builds up in the muscles and bloodstream during vigorous exercise. Lactic acid buildup can cause shock and death in fish. Therefore, a fish to be released should not be over-played.

Low levels of oxygen can cause a fish to go into shock and can reduce a fish's chance of recuperating. The obvious solution is to keep a release candidate in the water as much as possible. Warm water doesn't hold as much oxygen as cooler water. Because fish are more active in the warm water, there is less oxygen available for a fighting fish that is demanding extra oxygen. Thus, in order to keep the stress to a minimum, playing a fish should be kept to a minimum and release should occur quickly.

The greatest cause of fish mortality is hooking injury. Fish hooked in the gills (if bleeding) and throat are usually poor survival candidates. However, if the hook can be removed from the throat the fish has a fair chance of surviving. Heavy bleeding often causes fish to go into shock, but if returned to the water blood coagulation will occur and the fish may live. Fish hooked in the gills (not bleeding), stomach (the line can be clipped near the hook), tongue, lips and mouth have a good chance of survival and should be considered for release. If one eye is damaged and the fish is not bleeding profusely, it has a good chance for survival. Damage to both eyes usually produces a dead fish.

Infections or fungus are a result of lost scales, hook wounds, or develop from areas where protective slime has been removed. Also, a fish's sensitive internal organs can be damaged if a fish is allowed to thrash about and smash into things. A fish's internal organs are not well supported out of the water and can be damaged by continually lifting

the fish in and out of the water. Again, keeping the fish in the water and under control will greatly enhance a successful release.

A responsible angler should carry some tools with him that will enable him to properly handle and release caught fish. A long hook-out and long nose pliers are helpful when dislodging a deeply hooked fish. Jaw spreaders assist hook removal with toothy critters by opening and immobilizing the mouth area. Knotless and rubber-mesh dip nets remove less slime and cause less external damage than dip nets with knots. Side cutters are good if a hook must be cut. Nail clippers are handy when the fishing line must be cut in deeply hooked fish.

Speed is the essential ingredient in releasing a fish. This lessens the chance for stress to affect the fish. Whenever possible, the hook should be removed while the fish is still in the water by using the long hook-out or pliers. The hook should be removed by backing the hook out of the entry hole. The fish should be released gently into the water. Wet hands will remove less of the fish's protective slime than will dry hands. Avoid contact with the gills and eyes.

A fish having a difficult time gaining equilibrium or swimming ability is in need of artificial respiration. This is accomplished by moving the fish gently through the water, making sure the gills are not pinned to the fish's side. Oxygen passing through the gills from front to back will help to revive the fish. For large fish, moving the boat slowly forward creates the same effect of forcing water through the gills.

There are several handling techniques that help release fish successfully. The *lip-hold* technique is helpful with toothless fish. The thumb is placed inside the lower jaw of the fish and the forefinger against the outside of the lower lip. This commonly-used hold immobilizes the fish and allows for easy hook removal.

The *lip-lock hold* works on fish that have teeth. All four fingers are placed just under the fish's gill flap as far forward as possible. The thumb remains outside, resting on and pinching the lower jaw above where the triangular section of the throat skin meets the lower jaw. The hook is removed with pliers or long hook-out tools, while the fish is in the water or landed. Care must be used to avoid injuring the fish's gill filaments.

The *head grip* technique is handy for all fish species, especially when it may be dangerous to use a lip-hold release. The fish is grasped over and behind the head and toward the back of the gill cover. By squeezing firmly but not excessively, the fish can be landed or worked on in the water.

The *belly lift* is used in place of a landing net. While the fish is in the water, fingers are eased under the belly of the fish, and without gripping, it is slowly lifted. This handling technique seems to quiet a fish, plus it gives support to the internal organs. A lip-hold can be used when removing the hook. The belly lift coupled with a hand around the narrow area forward of the tail is a good immobilizing hold for pike species.

Many northern pike and musky anglers use a rectangular-shaped net to bag their fish. The fish is led into the knotless nylon net, immobilizing the fish. Hooks are removed, and the fish can be easily weighed and measured prior to release.

Bank anglers can utilize all the above-mentioned releases, plus large fish can be led out of the water by placing a wet sack or jacket under the fish to keep it from thrashing about and banging into things. The wet side of a boat or waders are handy places to trap and immobilize a fish.

The fish kept for a tasty meal must also be treated with care. Fish that are stringered or placed in a basket usually will not keep well in warm weather, especially if they must be transported some distance prior to refrigeration. The easiest solution to keeping fish fresh is to place them on ice as soon as they are caught. Stream anglers should remove the gill and viscera from a creeled fish in order to keep the fish from spoiling. The body cavity can be stuffed with cool grass in order to keep the fish temporarily cool. The end result is no waste and a better-tasting fish.

Fishing today is truly in the hands of the anglers. Catch-and-release fishing can improve catch rates and the chance for a big fish, while developing a special satisfaction by letting a fish live to fight another day.

However, this means that the fish must be released properly. If not, the fish we watch swim away may die a short time later. Proper release techniques develop with practice as an important new concept is pursued: *The fishing you save may be your own.*

Go Where The Fish Are

Man-Made Fish Shelters are Providing a Meeting Place for Fish and Anglers

By Larry Mitzner



Ron Johnson

Larry Mitzner is a fisheries biologist located at Red Haw State Park. He holds a B.S. degree from the University of Minnesota. He has been with the commission since 1966.

So, where do I start fishing? Good anglers repeatedly ask themselves this question during the fishing season. Another often asked question is — where will I move now that they've quit biting? Finding fish is an important knack which separates the worm drowner from the successful angler. The worm drowner's attitude is, "Why bother moving? The fish will eventually find my bait."

Many people make this big mistake. They assume fish are evenly distributed throughout a lake or stream. They're not. All organisms, including fish, have

a tendency to congregate. Animals group together for a variety of reasons including safety, comfort, hunting and feeding. Fish are no exception. Thus, finding the concentrations of fish is of vital interest to you, the angler.

Fisheries managers, likewise, take advantage of fish behavior to help make that fish basket a bit heavier by the end of the day. They simply make searching for fish a whole lot easier. How? By building fish attractors or shelters. There's nothing new about the idea of shelters or "hides." These structures were first used in the 1930's when fisheries science was in its infancy.

Walt Aitken, one of Iowa's first fisheries scientists, was a pioneer in the design and construction of fish attractors. He proposed and built fish shelters at man-made lakes constructed by the

Civilian Conservation Corps (CCC). A good example was at Lake Wapello, constructed in 1936. While the dam was being built, CCC workers set up fish shelters throughout the dry lake valley. Readily available materials were used for construction, including brush, logs, poles and stone. Within a year the bottom, including fish shelters, was inundated.

Approximately 210 brush and log structures and 150 rock piles were completed. Ingenuity and creativity provided a vast array of structure sizes and styles. Various names were given to each of the types and descriptions were appropriate. CCC-ers knew them as bird's foot, tree top, wave breaker, hitch rack, May pole, ridgepole and comb shelters. The primary purpose in those years was protection of young fish from

predation; hence the term shelter. Structures were also built to protect shorelines from erosion. Lakes Macbride, Ahquabi, Darling, Keomah and Red Haw all have their share of shelters.

Today, one of the primary goals in constructing fish structure is simply to attract and concentrate fish. Thus, the task of finding fish is a whole lot easier. The structure of fish habitat is also quite different from the earlier days. Much of the structure is now made of discarded car and truck tires, plastic streamers and other synthetic material. In the 1960's, Christmas trees became a popular item.

An inventory of fish shelters in Iowa lakes showed over 300 structures in 42 lakes were built during 1960-80. In all, over 100 brush piles have been installed with more going in every year. Some 130 stake beds and tire piles have been built.

Do these structures really work? A bit of experimentation indicates anglers do, indeed, benefit. Research at Green Valley, Red Haw, Wapello and Hawthorn Lakes showed fish attractors at least doubled the catch. Fishing over stake beds at Green Valley Lake was compared with areas void of any natural habitat. Results were overwhelming; seven times as many fish were caught at stake beds.

So they work, but which type of structure works best? That's a bit more difficult to answer because species composition within the lakes tested varied. However, brush shelters seemed to do best, regardless of differences between lakes, particularly for crappie and bullhead. Stake beds were next most successful and provided significant increase in catches of bluegill and largemouth bass. Earthen ridges, tire piles and floating reefs ranked below brush and stakes, but, nevertheless, at least doubled the catch rate.

Fishing on structure can be accomplished by a variety of methods. The most successful, by far, is fishing from a boat. When using a boat, remember to stay far enough away so fish aren't alarmed. If it's breezy, drift past the structure casting toward it. An electric trolling motor is particularly helpful, breezy or not. If it's too windy for trolling or drifting, then anchor upwind and cast. Least successful is anchoring and fishing directly over the structure.

Fishing from shore and casting to the structure can be highly successful in the spring. For example, many crappie are taken over tire reefs at Red Haw Lake during the spawning season.

Fishing that brush pile or stake bed is certainly a bitter-sweet experience. Re-

gardless of whether you fish from a boat or shore you'll catch more fish, but be prepared to lose tackle. Accurate casting to the edge of the structure or retrieving your lure just over the top will save many a fouled lure. You may lose some tackle, but you'll more than make up for it in landed fish.

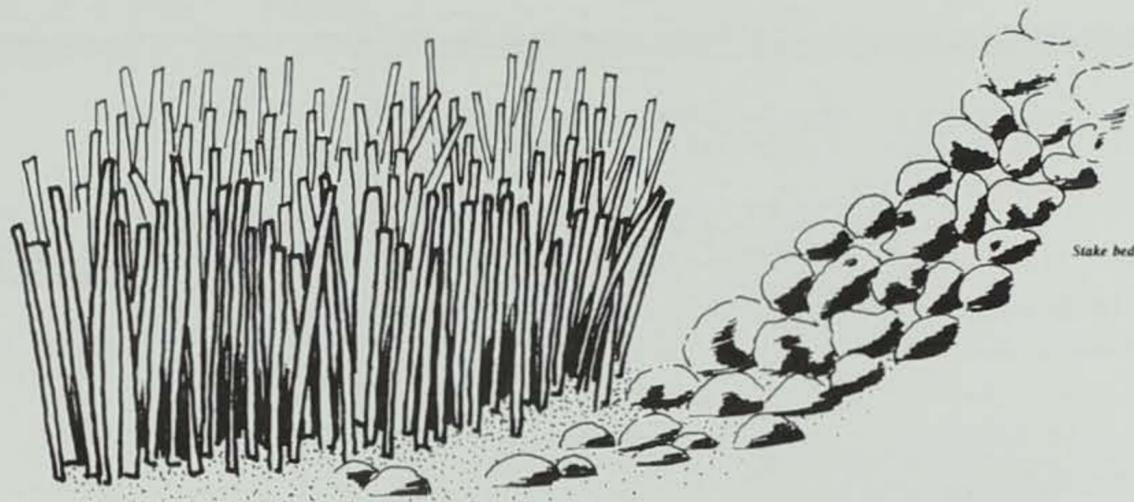
Tackle is a matter of personal preference, but keep in mind the two most abundant species in and around structure will be bluegill and crappie. Largemouth bass utilize structure, but some investigations show they are found at a greater distance around the edge and tend to cruise more than bluegill or crappie. Night crawlers for bluegill and minnows or small leadheads for crappie are good selections.

An intriguing question remains. Why are fish attracted to this assemblage of branches, wood, tires or rock? A few simple, plausible reasons may be: 1) young fish seek protection within the species, 2) fish seek food attached to or growing on the structure, 3) predatory fish are attracted by the numerous small fish within the structure, and 4) fish seek shade of the structure. (Some studies and many fishermen indicate attractors work better on sunny days.) Some investigators say fish require landmarks in their daily activities much as humans do. Animal behavior is extremely complex and undoubtedly many reasons are involved.

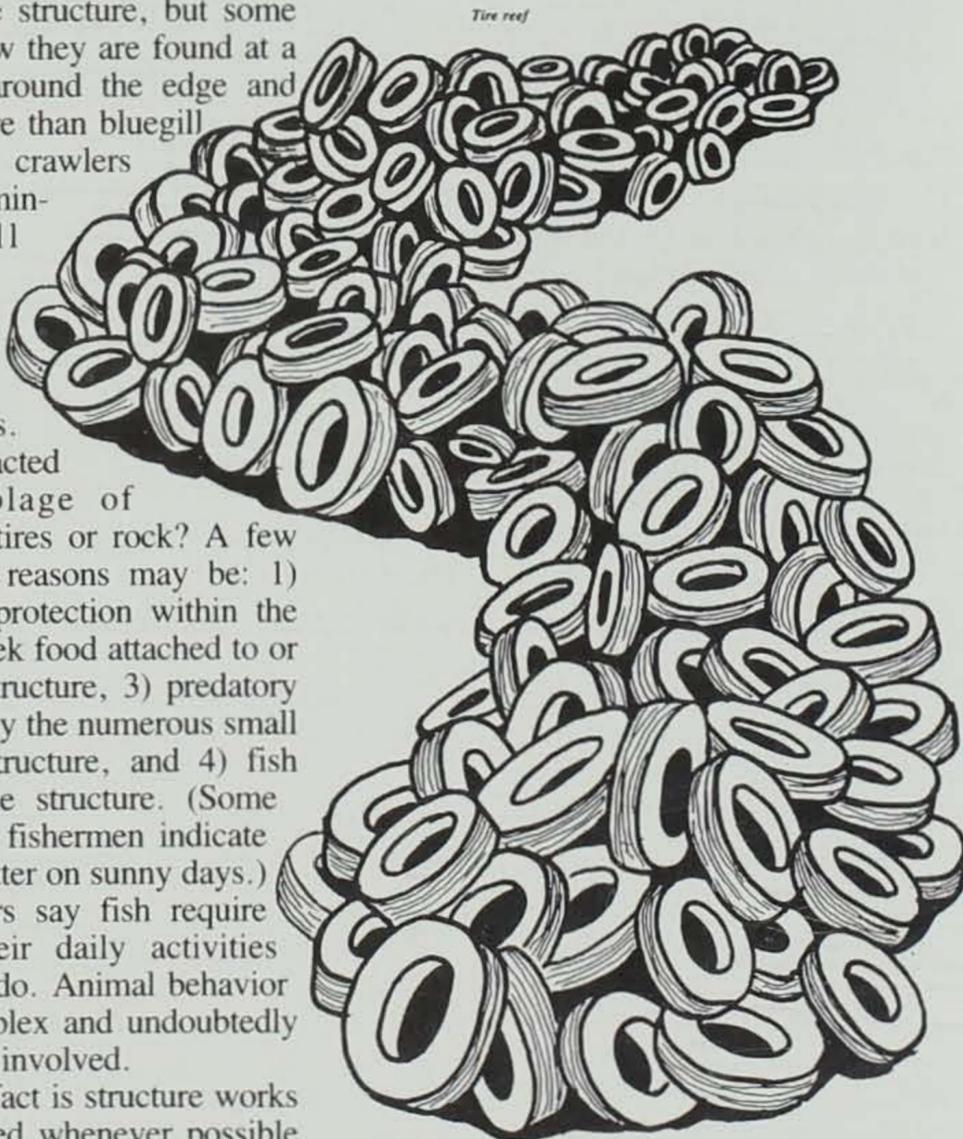
The important fact is structure works and should be used whenever possible to increase your catch. Structure at most lakes is plainly marked with canister bouys. Likewise, lake maps available from the Conservation Commission show the location of brush piles, stake beds and other structure.

So, when you're out fishing this spring and summer, keep two things in

mind: Move when the fish aren't biting and then move to an area where fish might be attracted. Undoubtedly your catch will be greatly increased by fishing this structure. Bouyed stake beds, brush piles and tire reefs may mean the difference between getting skunked or producing a platter of freshly fried fish.



Stake bed



Tire reef

Illustrations by Larry Pool



FISH PRODUCTION SCHEDULE

The following is the past (1983) and projected (1984) fish production schedule.

	1983	Weight (lb)	Projected for 1984
COLD WATER SPECIES			
Rainbow Trout	290,679	153,773	290,679
Brown Trout	61,483	32,830	61,483
Subtotal	352,162	186,603	352,162
WARM WATER SPECIES			
Bluegill	1,522,850	1,181	1,200,000
Channel Catfish (Age 0)	466,418	3,152	1,100,000
Channel Catfish (Age 1)	370,623	23,124	170,000
Largemouth Bass	130,397	163	1,000,000
Muskellunge (Fry)	157,000	unknown	157,000
Muskellunge	8,615	430	5,200
Northern Pike (Fry)	5,400,000	unknown	6,000,000
Northern Pike	98,082	196	25,000
Tiger Musky (Fry)	77,000	unknown	77,000
Tiger Musky	22,817	563	28,000
Walleye (Fry)	112,800,000	unknown	125,000,000
Walleye	66,685	3,685	200,000
White Amur	47,570	240	47,570
Subtotal	121,168,057	32,744	135,009,770
TOTAL	121,520,219	219,347	135,361,932

Iowa has also negotiated trades involving species we have in abundance for those we want to release in Iowa. These trades are as follows:

- Received from the state of Texas 500,000 wipers.
- Received from the state of Kansas 58,165 largemouth bass fingerling.
- Received from the state of Arkansas 250,000 white amur fry.
- Received from the state of Missouri 50,000 channel catfish fingerling.
- Received from the state of Kansas 200,000 channel catfish fry.
- Received from the state of Illinois 198 channel catfish brood fish.
- Shipped to the state of Illinois 47,000 muskellunge fry.
- Shipped to the state of South Dakota 110,000 muskellunge fry and 3,784 musky fingerling.
- Shipped to the state of Indiana 77,000 tiger musky fry.
- Shipped to the state of Wyoming 5,000 tiger musky fingerling.

EDITORIAL

CARTOON CONTEST ANNOUNCED

An editorial cartoon contest honoring the late conservationist and editorial cartoonist Jay N. "Ding" Darling is underway. The contest will encourage students to express themselves through the medium of the editorial cartoon.

All Iowa students in grades 7-12 are eligible to enter. Entries will be judged in two categories: Junior (grades 7-9) and Senior (grades 10-12).

Entrants are encouraged to orient their cartoons to conservation, natural resources, outdoor recreation or other subjects related to environmental quality. The contest deadline is April 20. The first place prizes of \$150 each and four runner-up prizes of \$75

HABITAT STAMP PROGRAM PAYING OFF AT HOME

Through 1983, county conservation boards have put more than \$2½ million to good use acquiring wildlife habitat, as a part of Iowa's habitat stamp program. To date, 43 counties have participated, resulting in the acquisition of some 4,200 acres of wildlife habitat at the local level. In addition to acquisition, many habitat development projects, including tree and shrub plantings, waterfowl habitat construction, cover seedings and timber stand improvements, have been funded by stamp reve-

nue. To be eligible, counties pay part of the cost (25%) of each project.

County conservation boards receive about half of the money generated by the sale of habitat stamps (the state uses the other half for similar projects), which are required of all hunters and trappers in Iowa.

These acquisition and development projects aim to preserve and enhance a portion of Iowa's dwindling habitat resources. They are designed to benefit both hunted and non-hunted species.



each will be awarded to contest winners. Awards and certificates will be presented July 2 in Des Moines.

A brochure with an entry blank will be mailed to all Iowa art, journalism and social studies teachers.

The contest is being conducted in conjunction with the U.S. Postal Service's plan to issue a postage stamp commemorating the 50th anniversary of Darling's 1933 design

for the first federal duck stamp.

The contest is sponsored by the Iowa Conservation Commission, the *Des Moines Register*, the Department of Public Instruction, and the Izaak Walton League. For more information contact Ken Smith, Iowa Conservation Commission, Wallace State Office Building, Des Moines, Iowa 50319, 515-281-5815.



BOOK REVIEW

The Hunting & Fishing Library

Learn the Secrets of Successful Hunting & Fishing

Noted hunting and fishing experts and biologists show you how fish and game live, where to find them, and how to bring them home. Hundreds of step-by-step color photographs show how to select and use equipment that's right for the job; see your lure the same way the fish does; read a lake or stream; land your catch surely and safely; determine proper rifle and shotgun loads; build a blind; pick the best stands; improve your wing shooting; field-dress a deer; cook wild game and much more.

FISHING WITH LIVE BAIT

By Dick Sternberg,
Publication Arts, Inc.,
5700 Green Circle Drive,
Minnetonka, Minnesota
55343,
1982, 160 pages, \$14.93,
hard cover.

By Dick Sternberg, Publi-
cation Arts, Inc., 5700 Green
Circle Drive, Minnetonka,
Minnesota 55343, 1982 160
pages, \$14.93, hard cover.

The third in what promises to be an exceptional series, appropriately entitled — *The Hunting and Fishing Library*, this book will capture the attention of all anglers, novice and expert alike. Formerly with the Minnesota Department of Natural Re-

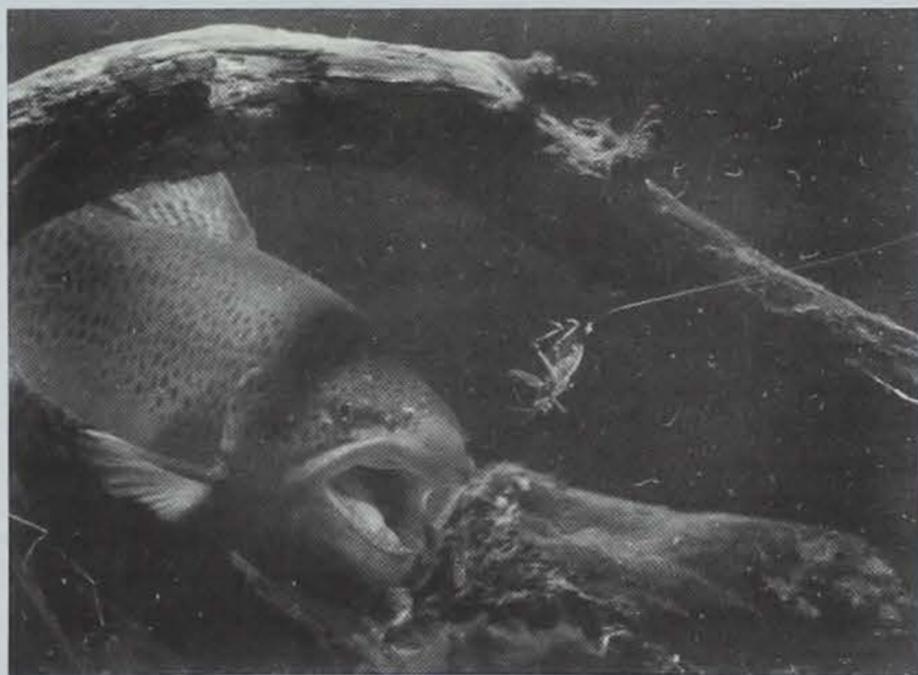
sources, Dick Sternberg was a professional fisheries biologist for 16 years. He has been able to meld this technical background with an exceptional talent for communicating. While over a hundred individuals, firms and agencies served as consultants and/or cooperators during its creation, the real power of the book must lie within the photography. It is without a doubt the finest collection of angling related photographs ever assembled within one volume.

Chapters are devoted to the selection of equipment for live-bait fishing, how to hook and rig baitfish, worms and leeches, insects, salamanders and frogs, crustaceans as well as cutbaits, frozen baits and preserved natural baits.

"The purpose of the book is to make you a better live-bait fisherman," Sternberg says. When we consider that three-fourths of all gamefish caught in the fresh waters of North America are taken on live bait — the purpose becomes very worthwhile indeed! A detailed discussion of when and where to catch gamefish is not included however the selection of terminal tackle, equipment considerations and above all — the step-by-step photos describing in explicit detail just how to hook and rig each bait are all presented in an easy to follow, abundantly illustrated format.

For information on this book and others in the series write: Hunting and Fishing Library, 5700 Green Circle Drive, Minnetonka, Minnesota 55343.

Tom Gengerke



CHECK YOUR FISHING TACKLE

Before your next fishing trip, whether it's been since last season or last weekend, be sure to check your tackle.

Fishing experts urge all fishermen to establish a basic checklist and go over their gear regularly. Start with your lures. Make sure the hooks are sharp. Replace broken or rusted hooks. Paint touch-up may be required. For minnow-imitating lures, fishermen should test run their lures alongside the boat before casting or trolling. If not running true, gently shift the lure eye right or left as necessary.

Spinnerbaits, perhaps the most popular early season bass lures, should also be tested. Realign wires by bending them so the spinner-bait runs true. Skirts can be replaced and trailer hooks added.

While examining lures, it's a good idea to clean and reorganize the tackle box.

The rod and reel needs a thorough "going-over." Start with the connecting link

between you and your next trophy — your line. It's vital! It should be inspected during each fishing trip and lures retied every 30-60 minutes or sooner if in brush or catching lots of fish. New line is a wise investment. Buy the best quality line, and change often, at least once a season.

The rod ferrules (where sections connect) and rod guides should be inspected. If guides are frayed or worn, replace immediately.

Reels need attention. Since they consist of gears and moving parts, lubrication is essential. Use reel oil recommended by the manufacturer. Reels should be oiled each day. Under heavy usage, oil a couple times per day. Reels need oil on shaft ends on the level wind system of bait casting reels and on other moving parts. Gears require grease a couple times per season.

With your tackle in good shape, remember to plan a fishing trip with the kids as soon as possible.



Nature Tale for Kids



CYON, THE BRAVE KINGFISHER

By Dean M. Roosa — Illustrations by Rex Heer

Four balls of fuzz grew to four gangling, ever-hungry, ever-noisy, long-beaked objects of parents' affections. The nest was getting crowded, and soon the largest was seen sitting in the nest entrance, eyeing the new and scary world. The next day, the recluse noted that two were on a dead willow and one in the nest entrance. A prolonged rain made observation impossible for several days, but the sun was greeted by four young sitting in a row on a branch near the nest entrance. They watched their parents fly and fish, dive and plunge. Three of the four were content only to watch. The fourth young, Cyon, simply couldn't wait to gain the freedom and pleasures of being "his own boss." Cyon was the first to fly, although he wasn't really ready, and hit a branch because he steered badly. He fell into shallow water, mortified, while his parents flew around in great concern. Cyon climbed out of the water and perched on

a log to dry his drenched feathers. Soon he tried again, with slightly better results, and again with better results. Soon he was accomplished — well, adequate — in his flying ability. His third flight was back to his brothers and sisters, where he misjudged his landing ability and crashed into them, knocking all into the water, causing complete bedlam in the shallow water and great worry to the parents. Little damage was done and Cyon was soon dried off and ready for new adventures, which came in the form of an eight-inch carp. Cyon, who had never attempted to catch a fish before, watched the bright form with interest. Instinct told him he should dive and capture this object for dinner. While his parents issued warnings, brothers and sisters watched, Cyon plunged 20 feet to the waters of the Skunk. Cyon missed his mark by a foot, and was slapped by the sudden escape movement of the fish. The swift current was

carrying him downstream; he tried to fly, and finally clambered onto a log in the river. The recluse thought all this hilarious. Cyon's parents disagreed. His brothers and sisters didn't know what to think, and Cyon, unabashed as usual, was drying off and wondered about his new-found freedom.

He was soon master of the air and water, bravely flying up the river, down the river, over the Fulton Lake, to Fisher's Slough, and up to the dam, where he became entangled in some discarded monofilament line. A fisherman patiently untangled him, wondering all the while what the strange bird was. Soon he was back in the air, glad to be free, a bit abashed, but looking for more adventure.

His brothers and sisters finally learned to fly and fish, not with the reckless abandon of Cyon, but they grew up to be good standard kingfishers. They migrated on schedule, fished along a stream in Arkansas all winter, and returned to the lower Skunk River to nest. Cyon's father did not live through the summer, and so the ruffle of Cyon's babyhood was vacant. He took up residence here, greeting the "birders," tolerating the recluse, generally enjoying life.

He became restless in early April, and flew north along the Skunk, north to Minnesota, to a beautiful lake surrounded by pines. He lives there yet, fishes a nearby stream kept open by a power plant, rattles at fishermen, defends a territory that includes a high clay bank, and has raised two families — though he simply can't understand why it takes the young so long to fly, dive, fish. Why, when he was young....

Back at the riffle on the Skunk, the recluse looks across the river at a group of "city folk" looking for birds, and sniffs in disgust.

Belted kingfishers are fairly common residents along Iowa's streams. Their rattling call, their headlong plunge into water in quest of a fish, their distinctive pose on a wire above a stream or lake, their carefree demeanor and apparent love of life — all these traits have cheered my days as I studied Iowa's natural history. The following is a story — part true, part fiction — about a kingfisher family that lived on the Skunk River. I got to know certain members of the family well in the summers of 1982 and 1983.

The Skunk River is a wonderful little river, with riffles, big overhanging maples, cottonwoods and sycamores. The

CLASSROOM CORNER

By Robert Rye

Skunk River is an awful little river, with portions dredged and straightened, farmed to the edge. Either statement is true, depending on where on the Skunk, you are. There is a wonderful riffle on the Skunk known to a few fishermen, an old recluse who likes to lie in the shade and listen to the gurgling water, and a family of kingfishers.

Kingfishers have a call best described as a dry rattle — certainly not melodious, yet a song distinctive and somewhat exciting — a song of native Iowa. Fishermen at the riffle came to expect the rattle as they fished, although they didn't know the singer. They occasionally worried that the bird was eating too many of "their" young bass. The recluse knew the singer well. The song gave him solace and he knew there was a high bank nearby with a long tunnel ending in the family's nest. For several years, in midsummer he would see several young, clumsy kingfishers sitting on a tree branch trying to muster the courage to fly and later take that first plunge into the water.

Even in winter, the recluse would take the long trek to the riffle, which never froze, to see if a kingfisher was there. Often he heard the familiar call, because a certain number of kingfishers remain in Iowa all winter. The local bird club would visit the riffle to include the adult male on their official Christmas count. The recluse saw the group of "birders" from the city, and snorted in disgust.

One spring the recluse decided to study the family more closely. He knew a nest was nearby because all of the requisites were present — good fishing, a riffle that never froze, a high bank, good perches, and what the recluse and kingfisher both needed — no people! Knowing the birds' habitat needs, the recluse could nearly walk straight to the nest, and did. Nearby was a big, hollow sycamore, which he could use as a blind.

In April, the calling and chasing of the kingfishers was heard and seen throughout the woods. Soon a single adult was perched on a branch above the high clay bank. Eggs were laid in the tunnel, and the woods grew quiet.

Four little kingfishers entered the world on May 29. There was excitement in the air and soon the adults were making increased fishing trips up and down the river, plunging into the water with a force that caused a splash heard for 150 feet. But, small fish were plentiful and no effect on the population was felt.

Of all our natural resources, none lends itself better to study than the water resource. We are all intimately involved with water because of our bodily need for it. We are sensitive to supply failure or to lowering of quality. We use it in many ways: drinking, cleaning, cooling and heating, cooking, farming, swimming, boating and fishing.

The Conservation Commission is concerned with the state's water resource — especially when you find some uses are counter productive and sometimes cause pollution. Water can carry disease from untreated organic wastes, or poisons from industrial wastes or pesticides. In addition, there is concern for safety when a single person or many are recreating on the same body of water.

The characteristics of water can be studied in many ways. In the classroom, place about 1½ inches of water in a bowl, position a heat lamp at an angle to approximate the sun and turn it on the surface. Sprinkle some chalk dust on the water and drop in a couple of crystals of potassium permanganate. Carefully observe movements of surface and bottom water. Now, turn on the fan to approximate a wind source, and observe. What changes occur? If these substances were environmental contaminants, what would happen?

Other water studies include: checking light penetration with a secchi disc and relating the readings to past and future happenings of a site, checking thermal layering by collecting water samples at different depths, checking stream flow rates, or collecting plankton with a nylon stocking. The list could continue with many other activities.

Knowledge of the resource is important. Water safety should always be a part of water study. Test yourself on water safety with the quiz provided by Sonny Satre, Water Safety Coordinator for the Iowa Conservation Commission:

WATER SAFETY QUIZ

1. The number one rule for aquatic safety is: (a) learn to swim; (b) have a safe boat; (c) have PFD's (personal flotation device) aboard your boat; (d) all of the above.

2. When boating, (a) small children must wear a PFD (personal flotation device); (b) it's a good idea for everyone on board to wear a PFD; (c) there must be at least two PFD's aboard all boats; (d) there must be enough PFD's aboard for each person in the boat. (Select the two best answers.)
3. If your boat capsizes, you and your companions should: (a) try to swim to shore; (b) stay with the boat; (c) send the best swimmer to shore; (d) first take off heavy clothes.
4. Hypothermia is (a) a form of exposure; (b) the #1 killer of outdoor recreationists; (c) a word that describes the rapid, progressive mental and physical collapse accompanying the chilling of the inner core of the human body; or (d) all of the above.
5. Aquatic fatalities or water-related deaths (a) are the third leading cause of accidental death for all ages; (b) are the second leading cause of death in the U. S. up to age 44; (c) mostly occur from June through August; or (d) all of the above.
6. There are three primary factors according to research, which cause most drownings: (a) inability to swim; (b) dangerous effects of cold water; (c) victim was intoxicated; (d) standing up in a boat; or (e) swimming fatigue.
7. If you fall into the water unintentionally, you should (a) not panic; (b) not remove clothing; (c) float on your back; or (d) all of the above.
8. The minimum age to operate a motorboat which is propelled by a motor more than 6 H.P. is: (a) 16; (b) 14; (c) 12; or (d) 10.
9. An approved fire extinguisher is required to be on board all outboard motorboats larger than: (a) 6 H.P. (b) 10 H.P. (c) 20 H.P. or (d) 25 H.P.
10. It is unlawful to: (a) anchor a boat away from shore and leave unguarded if not attached to a legal buoy; (b) operate a vessel from sunset to sunrise without proper lighting; (c) water ski without an observer other than the operator on board; or (d) all of the above.

ANSWERS:

6. a, b, & c 7. d 8. c 9. b 10. d
1. a 2. b & d 3. b 4. d 5. d

WARDEN'S DIARY

By Jerry Hoilien

Trout fishing is probably the most talked about. Back in 1876 the Conservation Commission began the trout program and it's been going strong ever since. We have a right to be proud of our trout program this year, as we'll release some 330,000 trout here in God's Country. We have some 28,000 trout fishermen (at least that's how many buy trout stamps).

The laws on the requirements for trout stamps have changed, but now because of the wide variety of fish in the streams we stock, a trout stamp is required of those who possess trout. The other day I came upon a group of fishermen all standing around a nice trout hole. Two said they were trout fishing (they had their stamps), but the other two were fishing "suckers" (they only had a fishing license) and the last one "wasn't fishing at all." The pole beside him belonged to his buddy. Well, I naturally just had to circle back and slip-up on them. It took several hours but I was successful on two of them. Darn fish wouldn't cooperate for the third.

Don Priebe, Conservation Officer in S.W. Iowa and I always wished we had a mechanical duck to fly over those hunters who stay out in the marsh after legal hours with their guns loaded and ready. And we sit close behind them and no ducks fly anywhere near them. I must be getting older and meaner because if I'd have had a "fin" like the one in Jaws, I'd have run it right through that trout hole just to see the look on their faces. How about that!

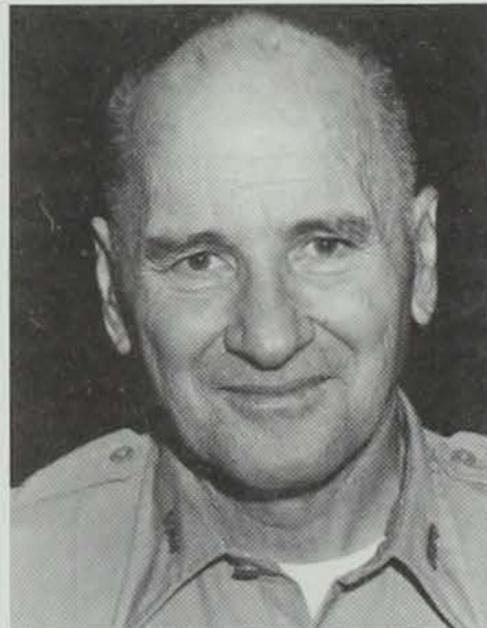
Trout stamps cost only \$5.00 and must be signed in ink across the face. Don't be like the guy who told me he was a stamp collector and he wouldn't ruin a stamp by writing on it. The judge called him an illegal trout fisherman. Stamp collecting is fine and I think it's great, but we can't tell who's passing them around and who isn't, so do it right.

We have a good population of small-mouth bass in the smaller streams in northeast Iowa too. Sucker fishing in the spring has always been a real popular sport too.

Then there's the mighty Mississippi River with something for everyone. Walleyes, northerns, bass and tons of crappie and bluegill are there in abundance.

Isn't it amazing how many fish there are? Something for just about everyone. Someone pretty wise must have figured it all out, don't you agree? I asked my minister one time, "Is it true, that the Good Lord doesn't take off for time spent with fishing pole in hand?" Good fishing.

Curt Smith



Curt Smith went to work as a game-warden (conservation officer) in 1959 and advanced to northeast regional supervisor in 1969; serving well the state, its people and his men until he suffered a stroke last June. He had planned to retire at the end of the year and hopefully he will recover fully for his well deserved retirement.

Curt is well known throughout Iowa and many of the surrounding states for the many cooperative projects he initiated and worked with these past years. Everyone knows and remembers him, even way back when he farmed in southwest Iowa, near Atlantic. "You know Curt Smith? Great guy! I remember when..." began many a conversation about Curt. He has a way about him, a grin, a firm handshake, a sparkle in his eye like he knows something you don't. His men like and respect him and he never let them down. You never had to look back and see whether Curt was going to back you in a tight situation. You knew he was there, just off your right shoulder, solid as a rock, ready and able to take what came. I know — I've been there with him.

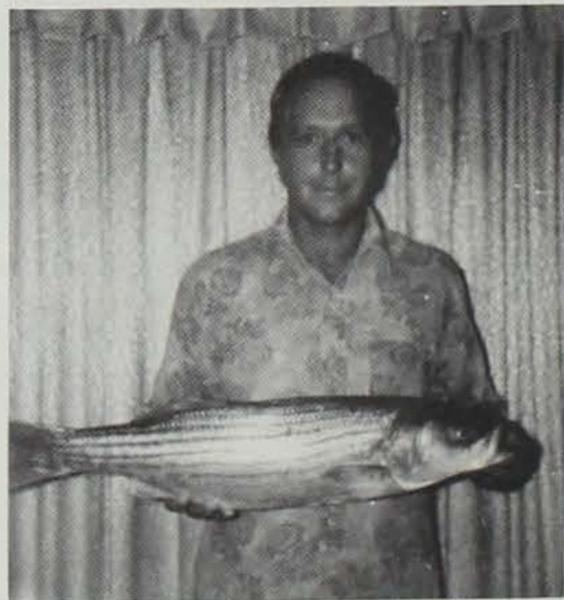
We'll miss him — he fought the good fight — he deserves his rest. I'd like to say from all of us, THANKS CURT — WELL DONE!

'83 FISHA

Weight Length Where Caught Date Name and Address

*new state records

Weight	Length	Where Caught	Date	Name and Address
BASS (Largemouth)				
9 lb. 8 oz.	23-1/2"	Farm Pond Van Buren County	5-30	Bill Luke Eagle Grove
8 lb. 12 oz.	22"	Farm Pond Mills County	4-25	Robert Kinsella Omaha, Nebraska
8 lb. 6 oz.	24"	Farm Pond Montgomery County	5-10	Vera Rieber Carson
8 lb. 4 oz.	23-1/2"	Farm Pond Montgomery County	6-4	Kendall Holm Red Oak
8 lb. 1 oz.	23"	Red Haw Lake Lucas County	5-3	Harold Lee Marshalltown
8 lb.	23"	Sun Valley Lake Ringgold	4-28	Gary Erwin Madrid
7 lb. 12 oz.	22"	Gravel Pit Carroll County	9-4	Kenneth Frank Carroll
7 lb. 8 oz.	24"	Farm Pond Mills County	5-8	Mark Johnson Malvern
7 lb. 8 oz.	23"	Farm Pond Monroe County	8-16	Mike Mihalakis Dubuque
7 lb. 8 oz.	22"	Union Grove Lake Tama County	5-12	Connie Pherigo Newton
7 lb. 7-1/2 oz.	21-1/2"	Otter Creek Lake Tama County	5-25	Lewis Kenney Vinton
7 lb. 7 oz.	23-1/2"	Gravel Pit Franklin County	5-15	Mylon Card Hampton
7 lb. 4 oz.	23"	Farm Pond Mills County	4-28	James Heitz Omaha, Nebraska
7 lb. 4 oz.	23"	Farm Pond Muscatine County	4-30	Craig Kahl Durant
7 lb. 4 oz.	23"	Farm Pond Harrison County	4-18	Bob Sauvain Woodbine
7 lb. 4 oz.	22"	Sand Pit Johnson County	6-12	Cody Bill Paul Iowa City
7 lb. 4 oz.	22"	Union Grove Lake Tama County	5-12	John Pherigo Newton
7 lb. 2 oz.	23-1/2"	Otter Creek Lake Tama County	10-15	Roger Williams Des Moines
7 lb. 2 oz.	22-1/2"	Lake Iowa Iowa County	5-21	Dennis Koss Cedar Rapids
7 lb. 1 oz.	23"	Farm Pond Muscatine County	5-3	Jeff Custer Davenport
7 lb.	22"	Nodaway Lake Adair County	9-24	Gary Heinbuch Fontanelle
7 lb.	22"	Private Lake Fremont County	5-8	Bob Sauvain Woodbine
BASS (Ocean Striped)				
*9 lb. 4 oz.	29"	Rathbun Tailwaters Appanoose County	7-30	Richard Pauley Mystic
7 lb. 10 oz.	27-1/2"	Rathbun Lake Appanoose County	7-20	Steven McDaniel Mystic
6 lb. 7 oz.	26"	Rathbun Lake Appanoose County	3-22	Mike Scay Moravia



Richard Pauley, record striped bass

BASS (Rock) — No Entries

Weight	Length	Where Caught	Date	Name and Address
BASS (Smallmouth)				
6 lb.	22-1/2"	Clay Pit Franklin County	4-18	Harlan Smit Sheffield
5 lb. 8 oz.	22"	Mississippi River Allamakee County	10-4	Henry Banke Arlington
4 lb. 13 oz.	20-1/2"	Spirit Lake Dickinson County	10-29	Dean Taylor Sioux City
4 lb. 12 oz.	21-1/2"	West Okoboji Dickinson County	11-7	Al Akin Spirit Lake

HAWARDS

Weight	Length	Where Caught	Date	Name and Address
1 lb. 4 oz.	10-1/2"	West Okoboji Dickinson County	2-26	Wendy VanKley Doon
1 lb. 3 oz.	11-1/2"	Farm Pond Dallas County	7-8	Connie Stonehocker DeSoto
1 lb. 3 oz.	11-1/2"	Farm Pond Madison County	5-10	Kim Strub Des Moines
1 lb. 2 oz.	11"	Farm Pond Madison County	6-26	Steven Garner Winterset
1 lb. 2 oz.	11"	Farm Pond Greene County	7-7	Dave Hart Jefferson
1 lb. 2 oz.	11"	Spirit Lake Dickinson County	6-18	Darrell Kruger Spirit Lake
1 lb. 2 oz.	10-1/2"	Lake Anita Cass County	5-22	John Pherigo Newton
1 lb. 2 oz.	10-1/2"	Farm Pond Linn County	8-6	Milton Palmer Central City
1 lb. 2 oz.	10"	Mississippi River Allamakee County	5-30	Larry Mestad Decorah
1 lb. 1-1/2 oz.	11-1/2"	Spring Lake Clayton County	2-21	Timmy Harbaugh Holy Cross
1 lb. 1 oz.	10"	Mississippi River Clayton County	2-26	Mike Burns Dubuque
1 lb. 1 oz.	10"	Red Haw Lake Lucas County	6-6	Jay Brooks Newton
1 lb.	10"	Smith Lake Kossuth County	8-19	Roger Hough Algona
BUFFALO				
33 lb.	41"	Lower Gar Dickinson County	5-1	Larry Eckman Milford
BULLHEAD				
*4 lb. 12 oz.	16"	Farm Pond Harrison County	5-22	Herschel Brown Missouri Valley
2 lb. 10 oz.	16"	Farm Pond Warren County	5-28	Michael Holzworth Des Moines
2 lb. 10 oz.	16"	Farm Pond Monona County	5-15	Robert McClure Turin
2 lb. 9 oz.	16"	Farm Pond Wapello County	5-27	Dan Steele Knoxville
2 lb. 9 oz.	16"	Farm Pond Guthrie County	6-12	Gale Thompson Panora
2 lb. 9 oz.	15"	Farm Pond Marion County	6-25	Roger DeMoss Knoxville
2 lb. 8 oz.	16-1/2"	Farm Pond Warren County	5-10	Michael Holzworth Des Moines
CARP				
28 lb.	39"	Mississippi River Dubuque County	8-29	Carl Lux Dubuque
BLUE CATFISH — No Entries				
CHANNEL CATFISH				
29 lb.	36"	East Okoboji Dickinson County	5-30	Edgar Fairchild Sioux Rapids
27 lb.	38"	Des Moines River Boone County	7-30	Russell Amundson Story
26 lb. 4 oz.	37"	Farm Pond Plymouth County	9-11	Dan Clement Le Mars
24 lb.	38"	Skunk River Washington County	7-23	Macy Wiggins Mt. Pleasant
22 lb. 8 oz.	35-1/2"	Farm Pond Adair County	4-30	John Ford Casey
22 lb. 4 oz.	34"	Union Grove Tama County	7-2	Bob Wyjack Marshalltown
21 lb. 8 oz.	33"	Farm Pond Lucas County	8-15	John Deming Chariton
20 lb. 8 oz.	38"	Gravel Pit Clay County	5-23	Mike Fanning Evely
20 lb.	33"	Big Creek Polk County	7-9	Kris Baumgart Des Moines
19 lb. 12 oz.	34"	Big Creek Polk County	6-6	Dennis Capps Des Moines
19 lb. 8 oz.	35"	Thomas Lake Mills County	7-23	James Stukey Des Moines
18 lb. 4 oz.	35"	Iowa River Iowa County	6-12	James Slockett Marngo
18 lb.	34"	Red Rock Dam Marion County	5-29	Edmund Smith III Chariton
18 lb.	32"	Big Creek Polk County	5-9	Dennis Capps Des Moines
17 lb. 11 oz.	33"	Big Creek Polk County	6-25	Jeff Jorgensen Urbandale
16 lb. 4 oz.	30"	Gladbrook Lake Tama County	5-29	Jeff Turner Marshalltown
16 lb.	31-1/2"	Des Moines River Webster County	5-22	Richard Chalmers Fort Dodge
15 lb. 12 oz.	32"	Lake Icaria Adams County	9-6	Lemoyne Beery Shambaugh
15 lb.	26"	Des Moines River Humboldt County	10-6	Delores Koob Humboldt
FLATHEAD CATFISH				
51 lb.	48"	Des Moines River Van Buren County	6-29	Harold Slaughter & Dave Eastin Farmington
35 lb.	42"	Missouri River Fremont	11-1	Michael McCollum Bartlett
34 lb.	40"	Missouri River Fremont County	9-26	Martin Study Bartlett
33 lb.	39"	Mississippi River Scott County	4-25	William Ashby Davenport
32 lb. 1 oz.	42"	Skunk River Washington County	8-6	Fred Oswald Amana
32 lb.	39"	Raccoon River Polk County	9-15	Ramkishore Mangra Des Moines
31 lb. 12 oz.	41-1/2"	Wapsipicon River Clinton County	7-2	Jan Bartels & Larry Gottschalk Toronto
31 lb.	34"	Sand Pit West Des Moines Polk County	6-3	Jimmy Murphy West Des Moines
30 lb. 8 oz.	40"	Skunk River Washington County	8-14	Opal Wiggins Mt. Pleasant
30 lb.	39"	Nodaway River Taylor County	8-29	Cleo Houck Gravity
28 lb.	40-1/2"	Wapsipicon River Clinton County	7-7	David Napier Bettendorf
26 lb.	38"	Wapsipicon River Clinton County	8-27	Jan & Debra Bartels Toronto
20 lb. 10 oz.	33"	Wapsipicon River Clinton County	7-8	David Napier Bettendorf

Weight	Length	Where Caught	Date	Name and Address
CRAPPIE				
3 lb. 6 oz.	19"	Farm Pond Appanoose County	6-22	Rusty Corder Moulton
3 lb. 1-1/2 oz.	17"	Farm Pond Pottawattamie County	5-31	Christian Heller
2 lb. 9 oz.	18"	Farm Pond Monona County	7-10	Myron Kunze Mapleton
2 lb. 7 oz.	17"	Three Rivers Pond Bremer County	4-10	Michael Powelka Janesville
2 lb. 4 oz.	16-1/2"	Farm Pond Appanoose County	2-5	Brocke Laws Centerville
2 lb. 4 oz.	15-1/2"	Pleasant Creek Linn County	9-18	Steve Griffin Cedar Rapids
2 lb. 3 oz.	15"	Black Hawk Lake Sac County	6-25	Earl Stribe Manning
2 lb. 3 oz.	14-1/2"	Y-Camp Lake Des Moines County	4-24	Robert Doring Burlington
2 lb. 3 oz.	14"	Red Rock Lake Marion County	5-12	Roger DeMoss Knoxville
2 lb. 2 oz.	15"	Mississippi River Clayton County	10-10	Clyde Oberbroeckling Holy Cross
2 lb. 1 oz.	15-1/2"	Mississippi River Clayton County	5-14	Steven Cigrand Cascade
2 lb. 1 oz.	15"	Coralville Lake Johnson County	5-16	Harold Hunt Cedar Rapids
2 lb. 1 oz.	14-1/2"	Mississippi River Allamakee County	5-30	Daryl Mestad Decorah
2 lb.	15"	Clear Lake Cerro Gordo County	6-23	Bill Knoke Mason City
2 lb.	15"	Mississippi River Clayton County	10-10	Clyde Oberbroeckling Holy Cross
2 lb.	14"	Farm Pond Lousa County	5-8	Edward Milder Columbus Junction
FRESHWATER DRUM — No Entries				
MUSKY				
*38 lb. 4 oz.	48"	Rathbun Tailwaters Appanoose	4-30	Charles Moen Pleasantville
25 lb. 14 oz.	47"	West Okoboji Dickinson County	8-12	Darwin Bichel East Moline, Ill.
25 lb. 6 oz.	46"	Spirit Lake Dickinson County	9-12	Jim Meyerdirk Royal
23 lb. 4 oz.	45"	Spirit Lake Dickinson County	8-2	Randy Sheets Waterloo
23 lb.	45"	West Okoboji Dickinson County	9-21	Jon Moe Worthington, Minn.
22 lb.	45"	West Okoboji Dickinson County	6-18	Dan Rigby Spencer
22 lb.	41-1/2"	Big Creek Lake Polk County	5-20	Robert Janovick Madrid
21 lb. 14 oz.	55"	West Okoboji Dickinson County	6-19	Steve Van Rockel Cherokee
18 lb. 6 oz.	41"	Spirit Lake Dickinson County	9-5	Martin Schoening Peterson
18 lb.	40"	Spirit Lake Dickinson County	8-21	Ronald Vollstedt Manilla
16 lb. 12 oz.	41"	Spirit Lake Dickinson County	8-14	Paul Anderson Estherville
Released	40"	Spirit Lake Dickinson County	7-2	Terry Burmeister Two Rivers
15 lb. 4 oz.	39"	Spirit Lake Dickinson County	12-11	Del Gonder Spirit Lake
14 lb. 6 oz.	41"	Spirit Lake Dickinson County	8-2	Dennis Jobe Hiawatha
MUSKY (Tiger)				
*24 lb. 1 oz.	46-3/4"	West Okoboji Dickinson County	9-24	Bryan Steven Spencer
20 lb.	42"	Hawthorne Lake Mahaska County	7-30	Robert Ehret Gibson
NORTHERN PIKE				
20 lb.	40"	Gravel Pit Polk County	6-11	Rodger Cory Altoona
17 lb. 13 oz.	40"	Five Island Lake Palo Alto County	4-16	Merwin Baer Algona
17 lb. 3 oz.	40"	West Okoboji Dickinson County	12-21	Marc Heien Spencer
17 lb.	41"	Five Island Lake Palo Alto County	8-9	Larry Porath
16 lb. 5 oz.	38"	West Okoboji Dickinson County	1-7	Rich Helman Milford
14 lb. 6 oz.	—	Little Sioux River Clay County	6-11	Tom Nelson Spencer
14 lb. 1 oz.	38-1/2"	West Okoboji Dickinson County	1-15	Mike Wynja Melvin
14 lb.	36"	Iowa River Hardin County	3-23	Dean Lycke Alden
13 lb.	38-1/2"	Spirit Lake Dickinson County	7-2	Randy Porsch Sioux City
12 lb. 14 oz.	36-1/2"	West Okoboji Dickinson County	1-30	Dan James Larrabe
12 lb. 13 oz.	37-1/2"	West Okoboji Dickinson County	12-10	Ron VanBeek Doon
12 lb. 4 oz.	37"	West Okoboji Dickinson County	1-13	Kirby Fields Spencer
12 lb.	36"	West Okoboji Dickinson County	1-16	Gregg Foster Riverton
12 lb.	34"	Tuttle Lake Emmet County	1-22	Dave Yager Fenton
11 lb. 10 oz.	34-1/2"	West Okoboji Dickinson County	1-5	Tim Drenkow Melvin
11 lb. 9 oz.	34"	West Okoboji Dickinson County	1-29	Larry Lavin Spencer
11 lb. 8 oz.	36-1/2"	West Okoboji Dickinson County	6-11	Pat Brown Lake City
11 lb. 8 oz.	31-1/2"	Mississippi River Allamakee County	4-7	Paul Hecht Lanning
11 lb. 7 oz.	36"	West Okoboji Dickinson County	2-13	Michael Wynja Melvin
11 lb. 7 oz.	35-1/2"	West Okoboji Dickinson County	11-18	Ron Busch Rock Rapids
11 lb. 6 oz.	35"	West Okoboji Dickinson County	1-15	Kevin Mortenson Milford
11 lb. 5 oz.	34-1/2"	Little Sioux River Clay County	7-19	John Rigby Spencer
11 lb. 4 oz.	36-1/2"	Union Grove Lake Tama County	8-10	Paul Cox Marshalltown
11 lb. 2 oz.	36"	Wapsipicon River Bremer County	4-26	Mark Goodenbour
11 lb.	35"	West Okoboji Dickinson County	1-15	Kevin Strange Melvin
11 lb.	34-1/2"	Wapsipicon River Clinton County	7-26	Paul Meyer Davenport
10 lb. 8 oz.	33-1/2"	Wapsipicon River Clinton County	8-13	Alvin Stendor Donahue



Chris Jayne, record bluegill

Weight	Length	Where Caught	Date	Name and Address
10 lb. 8 oz.	32"	Silver River Dickinson County	4-10	Tom Kruger Allendorf
10 lb. 8 oz.	32"	Little Sioux River Clay County	4-30	John Rigby Spencer
10 lb. 6 oz.	34"	Little Sioux River Dickinson County	8-1	Ed Packebush Milford
10 lb. 2 oz.	35"	West Okoboji Dickinson County	5-29	Ed Feldhacker Cherokee
10 lb. 2 oz.	33"	West Okoboji Dickinson County	2-14	Craig Holmberg Terril
10 lb. 2 oz.		Little Sioux River Clay County	6-11	Tom Nelson Spencer



Bryan Steven, record tiger musky

Weight	Length	Where Caught	Date	Name and Address
PADDLEFISH				
40 lb.	59-1/2"	Mississippi River Jackson County	12-26	Howard Rick Urbana
37 lb.	58"	Skunk River Henry County	4-25	Richard Kerr Mt. Pleasant
36 lb.	59"	Mississippi River Jackson County	1-28	Loren Rockwell Maquoketa
35 lb. 10 oz.	55-1/2"	Mississippi River Jackson County	1-21	Gary Sobotka Bellevue
35 lb.	54-1/2"	Mississippi River Jackson County	12-31	Dennis Mayne Cedar Rapids
34 lb.	54"	Mississippi River Jackson County	1-1	Dennis Mayne Cedar Rapids
32 lb. 12 oz.	55"	Mississippi River Jackson County	1-22	David Cook Center Point
PERCH				
1 lb. 7 oz.	13-1/2"	Swan Lake Dickinson County	1-22	Quinten Dodds Superior
1 lb. 6-1/2 oz.	12-3/4"	Mississippi River Allamakee County	3-3	Marty Andera Spillville
1 lb. 6 oz.	14"	Elk Lake Clay County	1-16	Don Conlon Spencer
1 lb. 6 oz.	13"	Big Spirit Lake Dickinson County	3-3	Dan Kramme Arnolds Park
1 lb. 6 oz. (2)	13"	Elk Lake Clay County	1-13	Steve Loehr Spencer
1 lb. 4 oz.	14"	Elk Lake Clay County	1-23	Troy Leonard Spencer
1 lb. 4 oz.	14"	Elk Lake Clay County	1-8	Terry Thomsen Everly
1 lb. 4 oz.	13"	West Okoboji Dickinson County	12-17	Steve Loehr Spencer
1 lb. 4 oz.	13"	Elk Lake Palo Alto County	2-5	Dick Mangrove Spirit Lake
1 lb. 4 oz.	13"	Elk Lake Clay County	1-26	Timothy Murphy St. Ansgar
1 lb. 4 oz.	13"	Mississippi River Allamakee County	12-1	Vern Ostermann Everly
1 lb. 4 oz.	13"	Elk Lake Palo Alto County	1-9	Truman Paulson Harper's Ferry
1 lb. 4 oz.	13"	Elk Lake Palo Alto County	1-9	Donald Malm Spencer

Weight	Length	Where Caught	Date	Name and Address
1 lb. 4 oz. (3)	13"	Lost Island Lake Palo Alto County	2-11	Lowell Wade Spencer
1 lb. 4 oz.	12"	Trumbull Lake Clay County	6-7	Delwyn Johnson Albert City
1 lb. 4 oz.	11-1/2 oz.	Mississippi River Allamakee County	4-2	Paul Hecht Lansing
1 lb. 4 oz.		Elk Lake Clay County	1-14	Bob VanOmping Spencer
1 lb. 4 oz.		Elk Lake Clay County	1-14	Gordon Quail Spencer
1 lb. 3 oz.	13"	Spirit Lake Dickinson County	2-15	Vernon Hansen Jackson, Minn.
1 lb. 3 oz.	12-1/2"	West Okoboji Dickinson County	2-5	Richard Bremer Ocheyedan
1 lb. 3 oz. (2)	12-1/2"	Mississippi River Allamakee County	12-13	George Paulson Harper's Ferry
1 lb. 2-1/2 oz.	12-1/2"	Trumbull Lake Clay County	6-7	Scott Johnson Albert City
1 lb. 2 oz.	13"	Elk Lake Clay County	1-28	Art Bates Spencer
1 lb. 2 oz.	13"	Elk Lake Clay County	2-17	Bob Burns Hartley
1 lb. 2 oz.	13"	Lost Island Lake Palo Alto County	2-11	Lowell Wade Spencer
1 lb. 2 oz.	12-1/2"	Lost Island Lake Palo Alto County	2-14	Richard Alexander Milford
1 lb. 2 oz.	12-1/2"	Lost Island Lake Palo Alto County	9-26	Dick Hyde Spencer
1 lb. 2 oz.	12-1/2"	Mississippi River Allamakee County	12-9	George Paulson Harper's Ferry
1 lb. 2 oz.	12-1/2"	Elk Lake Clay County	1-12	Gordon Quail Spencer
1 lb. 2 oz.	12-1/2"	Lost Island Lake Palo Alto County	1-12	John Reese Laurens
1 lb. 2 oz.	12-1/2"	Lost Island Lake Clay County	11-21	Richard Riley Algona
1 lb. 2 oz.	12"	Elk Lake Clay County	1-30	Bob Bates Spencer
1 lb. 2 oz.	12"	Lost Island Lake Clay County	4-23	Larry Bendlin Spencer
1 lb. 2 oz.		Elk Lake Clay County	1-14	Bob VanOmping Spencer
1 lb. 1 oz.	13-1/2"	Elk Lake Clay County	1-23	Bob Bates Spencer
1 lb. 1 oz.	13"	Elk Lake Clay County	1-28	Art Bates Spencer
1 lb. 1 oz.	13"	Elk Lake Clay County	5-16	Ken Larsen Spencer
1 lb. 1 oz.	13"	Palo Alto County	6-23	Jack Wilson Cherokee
1 lb. 1 oz.	12-1/2"	West Okoboji Dickinson County	1-27	Bob Bryant Arnolds Park
1 lb. 1 oz.	12-1/2"	Lost Island Lake Clay County	9-24	Darrell Fretz Spencer
1 lb. 1 oz.	12-1/2"	Lost Island Lake Palo Alto County	10-1	Roger Hough Algona
1 lb. 1 oz.	12-1/2"	Elk Lake Clay County	1-31	Craig Middendorff Sioux Rapids
1 lb. 1 oz.	12"	Mississippi River Allamakee County	4-18	Gale Goranson Harper's Ferry
1 lb. 1 oz.	12"	West Okoboji Dickinson County	1-22	John Lennon Fort Dodge
1 lb.	13"	Elk Lake Clay County	2-12	Dan Foxhoven Spencer
1 lb. (2)	12"	Elk Lake Clay County	1-13	Art Bates Spencer
1 lb.	12"	West Okoboji Dickinson County	12-16	Jim Burgess Arnolds Park
1 lb. (2)	12"	West Okoboji Dickinson County	3-12	Robert Fitzgerald Milford
1 lb.	12"	Lost Island Lake Palo Alto County	10-1	Roger Hough Algona
1 lb.	12"	Sunken Grove Island Pocahontas County	6-28	Larry Snow Manson
1 lb. (3)	11-1/2"	Mississippi River Allamakee County	12-9	George Paulson Harper's Ferry
1 lb.	11-1/2"	Lost Island Lake Clay County	12-4	Richard Ries Pocahontas
1 lb. (3)		Elk Lake Clay County	1-14	Gordon Quail Spencer
1 lb. (2)		Elk Lake Clay County	1-14	Bob VanOmping Spencer
1 lb. (2)		Elk Lake Clay County	1-28	Art Bates Spencer
1 lb. (2)		Elk Lake Clay County	1-8	Steve Loehr Spencer

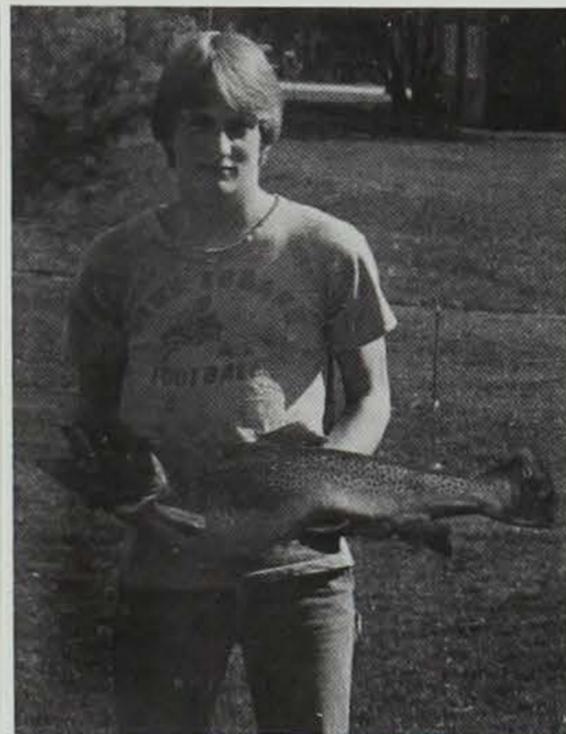
Weight	Length	Where Caught	Date	Name and Address
SAUGER				
5 lb. 10 oz.	24"	Mississippi River Dubuque County	4-5	Michael Fessler Dubuque
5 lb. 1 oz.	22"	Missouri River Woodbury County	10-18	Dan Murphy Sr. Sioux City
4 lb. 5 oz.	21"	Mississippi River Jackson County	1-5	Richard Wilkening Bettendorf
4 lb. 5 oz.	20-1/2"	Mississippi River Jackson County	2-16	Brian Morgan Princeton
4 lb. 5 oz.	20-1/2"	Mississippi River Jackson County	2-18	Mike Purcell Princeton
4 lb.	21"	Mississippi River Clayton County		Marilyn Maier Cedar Rapids
3 lb. 8 oz.	21"	Mississippi River Clayton County	3-5	Jerry Manemann Worthington
3 lb. 7 oz.	20-1/2"	Mississippi River Jackson County	5-1	Harley Ramsey Elgin
3 lb. 6 oz.	20-1/2"	Mississippi River Clayton County	12-11	Ralph Livingston Guttenberg
3 lb. 5 oz.	20"	Mississippi River Jackson County	3-23	Joe Skoff Maquoketa
3 lb. 4 oz.	20"	Mississippi River Muscatine County	1-22	Roger Rossetti Iowa City
3 lb. 4 oz.	20"	Mississippi River Jackson County	1-19	Virginia Sapp Bellevue
3 lb. 4 oz.	19"	Mississippi River Jackson County	2-16	Jerry Courtney Princeton
3 lb. 3 oz.	21"	Mississippi River Muscatine County	1-25	Stephen Decker Iowa City
3 lb. 3 oz.	20-1/2"	Mississippi River Jackson County	3-28	John Schroeder Maquoketa
3 lb. 3 oz.	20"	Mississippi River Dubuque County	3-21	Michael Pickel Dubuque
3 lb. 2 oz.	20-1/2"	Mississippi River Clayton County	5-2	Bruce Anderson Cedar Rapids
3 lb. 1 oz.	19-1/2"	Mississippi River Jackson County	3-3	John Reiser Rock Falls, Ill.
3 lb.	20"	Mississippi River Dubuque County	11-26	Richard Ruden Dubuque

Weight	Length	Where Caught	Date	Name and Address
3 lb.	19-1/2"	Mississippi River Jackson County	3-17	Larry Davis Maquoketa
3 lb.	19-1/2"	Mississippi River Jackson County	4-10	Everett Koehler Clinton
3 lb.	19-1/2"	Mississippi River Clayton County	12-31	Jerry Manemann Worthington
3 lb.	19"	Mississippi River Scott County	2-6	LeRoy Brown Iowa City
2 lb. 15 oz.	19"	Mississippi River Clayton County	4-13	Jerry Manemann Worthington
2 lb. 15 oz.	18"	Mississippi River Jackson County	2-16	Jerry Courtney Princeton
2 lb. 12 oz.	19"	Mississippi River Dubuque County	11-25	David McAllister Dubuque
2 lb. 12 oz.	19"	Mississippi River Clinton County	11-2	William Pokorny Sr. Bryant
2 lb. 11 oz.	20"	Mississippi River Clayton County	5-25	Lee Gamm Arlington
2 lb. 11 oz.	19-1/2"	Mississippi River Allamakee County	10-2	Randy Brock Postville
2 lb. 11 oz.	19-1/2"	Mississippi River Allamakee County	7-14	George Paulson Harper's Ferry
2 lb. 11 oz.	19"	Mississippi River Clayton County	6-27	Bill Deutmeyer Dyersville
2 lb. 11 oz.	19"	Mississippi River Allamakee County	10-1	Gale Goranson Harper's Ferry
2 lb. 11 oz.	18"	Mississippi River Jackson County	3-8	Mark Walsh Maquoketa
2 lb. 10 oz.	18-1/2"	Mississippi River Jackson County	3-7	John Schroeder Maquoketa
2 lb. 9 oz.	19"	Mississippi River Clayton County	10-31	Donald Roling Worthington
2 lb. 8 oz.	20-1/2"	Mississippi River Scott County	6-13	W. J. Pokorny Jr. Bryant
2 lb. 8 oz.	19"	Mississippi River Jackson County	3-16	Larry Davis Maquoketa
2 lb. 8 oz.	18"	Mississippi River Clayton County	4-6	Ronald Gansmer Dubuque
2 lb. 8 oz.	17-1/2"	Mississippi River Clayton County	4-1	Dennis Wedewer New Vienna
STURGEON — No Entries				
SUCKER (Miscellaneous)				
*15 lb. 1 oz.	32-1/4"	Missouri River Monona County	9-29	Glen Dittman Onawa
5 lb. 10 oz.	25"	Cedar River Mitchell County	9-5	Ben Indra Osage
5 lb. 4 oz.	22"	Durango Creek Dubuque County	3-29	Verne Miller Dubuque
SUNFISH (Redear)				
1 lb. 2 oz.	10-1/2"	Farm Pond Woodbury County	7-10	Dale Hiserote Sheldon
1 lb.	11-1/2"	Pleasant Creek Linn County	6-29	Vernon Spangler Center Point
1 lb.	9-1/2"	Viking Lake Montgomery County	5-28	Mike Darby Omaha, Nebraska
BROOK TROUT				
1 lb. 1/4 oz.	13"	Banston Dubuque County	10-29	Charlie Ruff Dubuque
BROWN TROUT				
*13 lb. 3 oz.	31"	French Creek Allamakee County	5-7	Brad Kramber Waukon
12 lb. 4 oz.	26"	Richmond Springs Delaware County	9-10	Ed Singer Independence
12 lb. 1 oz.	30"	French Creek Allamakee County	7-26	Raymond Sporer Dorchester
12 lb.	27-1/2"	Turkey River Clayton County	7-16	Ransom Coughlin Cedar Rapids
11 lb. 11 oz.	25-1/2"	Delaware County	9-5	Ivan Milligan Fort Dodge
11 lb. 10 oz.	31-1/2"	Little Paint Allamakee County	6-13	Dorance Roth East Dubuque
11 lb. 4 oz.	28"	Wexford Allamakee County	6-23	Truman Wagner Waterloo
11 lb. 5 oz.	28"	Baileys Ford Delaware County	8-18	Tom Fleming Cedar Rapids
11 lb. 1 oz.	28"	Wapsipicon Mitchell County	5-24	James Runkle McIntire
11 lb. 1 oz.	27"	West Canoe Winnebago County	5-17	Mike Booth New Hampton
10 lb. 7-1/2 oz.	28-1/2"	Joy Springs Clayton County	4-8	Howard Amish Iowa City
10 lb. 4 oz.	27"	Sny Magill Clayton County	8-13	Brian Sindi Montpelier
10 lb. 3 oz.	26"	North Cedar Clayton County	6-19	Jeff Kinley Marquette
9 lb. 12 oz.	25"	Little Paint Allamakee County	7-4	James McCullough
9 lb. 12 oz.	24"	Richmond Springs Delaware County	9-4	Clinton Victoria Cedar Falls
9 lb. 8 oz.	25-1/2"	Richmond Springs Delaware County	9-5	Carl Lagow Waterloo
9 lb. 6 oz.	28"	Swiss Valley Dubuque County	8-28	Nick Kempis Dubuque
8 lb. 1 oz.	25-1/2"	Fountain Springs Delaware County	5-27	Ralph Osenbaugh Cedar Rapids
7 lb. 11 oz.	24"	Swiss Valley Dubuque County	9-2	Keith Phillips Dubuque
7 lb. 10 oz.	24"	Catfish Creek Dubuque County	6-7	John Garmann Dubuque
7 lb. 7 oz.	25-1/2"	Big Paint Creek Allamakee County	3-12	Ed Hill Waverly
6 lb. 13 oz.	23"	Bloody Run Clayton County	6-2	Leon Bird Dubuque
6 lb. 12 oz.	25"	Joy Springs Clayton County	6-27	Richard Zubowski Sr. Manchester
6 lb. 12 oz.	24"	Swiss Valley Dubuque County	5-13	Kenneth Henkel Dubuque
6 lb. 10 oz.	24-1/2"	Little Mill Jackson County		Earl Avety Calamus
6 lb. 10 oz.	23-1/2"	Lower Swiss Valley Dubuque County	9-27	Alan Johnson Cedar Rapids
6 lb. 8 oz.	25-1/2"	Big Mill Jackson County	6-15	Rick Brandt Davenport
6 lb. 8 oz.	24-1/2"	Spring Branch Creek Delaware County	6-3	Ralph Osenbaugh Cedar Rapids
6 lb. 8 oz.	23"	Swiss Valley Dubuque County	9-24	Mike Lucas Dubuque
6 lb. 6-1/2 oz.	24-1/2"	Elk Creek Delaware County	8-5	Jeff Pierce Colfax

Weight	Length	Where Caught	Date	Name and Address	Weight	Length	Where Caught	Date	Name and Address	Weight	Length	Where Caught	Date	Name and Address
6 lb. 6 oz.	21-1/2"	Spring Branch Delaware County	5-31	Steve Retz Cedar Rapids	10 lb. 4 oz.	28"	Fountain Springs Delaware County	5-6	Steven Kopp Dubuque	9 lb.	29"	Shell Rock River Butler County	2-28	Robert Voigts Clarksville
6 lb. 4 oz.	22"	Spring Creek Mitchell County	6-4	Terry Muller Osage	10 lb.	25"	Richmond Springs Delaware County	9-4	Todd Wilson Waterloo	9 lb.	28-1/2"	Wapsipinicon River Linn County	3-4	Alan Krueger Center Point
6 lb. 2 oz.	23-1/2"	Elk Creek Delaware County	8-9	Nick Hey Cascade	9 lb. 15 oz.	28"	Trout River Winneshiek County	6-9	Kurt Espe Decorah	9 lb.	28"	Lake Rathbun Appanoose County	3-31	Benjamin Thompson Des Moines
6 lb. 2 oz.	24"	Swiss Valley Dubuque County	5-9	Harley Amundsen Dubuque	9 lb. 14-1/2 oz.	26"	Joy Springs Clayton County	7-21	Mark Woeste Lake View	8 lb. 12 oz.	28"	West Okoboji Dickinson County	6-18	Deb-Dennis Anderson Red Oak
5 lb. 15 oz.	22-1/2"	Swiss Valley Dubuque County	10-14	Nick Kemps Dubuque	9 lb. 5 oz.	31"	Baileys Ford Delaware County	7-2	Tina Halverson Marshalltown	8 lb. 10 oz.	29"	Lake Cornelia Wright County	6-7	Dave Frye Parkersburg
5 lb. 13 oz.	22-1/2"	Fountain Springs Delaware County	5-23	Dale Barth Independence	9 lb. 5 oz.	28-1/2"	Turtle Creek Mitchell County	4-23	Dean Schultz	8 lb. 9 oz.	27-1/2"	West Okoboji Dickinson County	10-24	Clarence Bondlin Arnolds Park
5 lb. 12 oz.	23"	Swiss Valley Dubuque County	5-6	Eugene Robey Dubuque	9 lb. 5 oz.	26"	North Bear Creek Winneshiek County	4-24	Ron Uhlenhopp Waterloo	8 lb. 8 oz.	28"	West Okoboji Dickinson County	6-24	Don Johnson Spirit Lake
5 lb. 12 oz.	22-1/2"	Richmond Springs Delaware County	5-30	Glen Sears Waterloo	9 lb. 4 oz.	27"	Trout River Winneshiek County	5-6	Herb Ransom Van Horne	8 lb. 8 oz.	27"	Des Moines River Humboldt County	10-11	Delores Koob Humboldt
5 lb. 8 oz.	23-1/2"	Bankston Park Dubuque County	4-29	Kevin Schlosser Dubuque	9 lb. 2 oz.	27-1/2"	Spring Branch Delaware County	7-7	Harold McGowan Cedar Rapids	8 lb. 8 oz.	26-1/2"	Saylorville Lake Polk County	1-13	Andrew Williams Des Moines
5 lb. 8 oz.	23"	Lower Swiss Valley Dubuque County	6-8	Robert Horsch Cascade	8 lb. 15 oz.	26"	Bear Creek Fayette County	6-16	Gene Bond Arlington	8 lb. 7 oz.	28-1/2"	West Okoboji Dickinson County	8-3	Maury Muht Spirit Lake
5 lb. 6 oz.	23"	Spring Branch Creek Delaware County	3-6	Glen Estep Cedar Rapids	8 lb. 14-1/2 oz.	27"	Richmond Springs Delaware County	9-15	Jay Iverson Cedar Rapids	8 lb. 5 oz.	27-1/2"	West Okoboji Dickinson County	5-7	Angie Kiley Renwick
5 lb. 2 oz.	21-1/2"	North Bear Creek Winneshiek County	6-18	Craig Bienemann Waverly	8 lb. 14 oz.	29-1/2"	Sny Magill Clayton County	5-30	Tim Feldpouch Guttenberg	8 lb. 4 oz.	29-1/2"	West Okoboji Dickinson County	10-20	Irvingham Schnell Milford
4 lb. 11 oz.	23-1/2"	Maquoketa River Delaware County	3-18	Mike Garner Cedar Rapids	8 lb. 5 oz.	26"	Richmond Springs Delaware County	5-16	Joel Jacobson Marion	8 lb. 4 oz.	28-1/2"	Lake Rathbun Appanoose County	3-4	Jeff Albright Waterloo
4 lb. 6 oz.	21-1/2"	Clear Creek Allamakee County	4-16	Bradley Langrhr Waterloo	8 lb.	24"	Trout Run Winneshiek County	4-26	Kenneth Chandler Nashua	8 lb. 4 oz.	27-1/2"	Shell Rock River Floyd County	4-10	LaDonne Stouch Charles City
4 lb. 4 oz.	21-1/2"	Baileys Ford Delaware County	5-17	Frank Bartling Cedar Rapids	7 lb. 9 oz.	27"	Buck Creek Clayton County	5-30	Tim Feldpouch Guttenberg	8 lb. 2 oz.	29"	Lake Rathbun Appanoose County	8-2	Richard Pauley
4 lb. 4 oz.	20"	Baileys Ford Delaware County	8-25	Mike Burns Dubuque	7 lb. 8 oz.	22"	Spring Branch Delaware County	7-9	Francis Testa Mt. Vernon	8 lb. 2 oz.	27-1/2"	Lake Icaria Adams County	4-15	Mark Driscoll Clarinda
4 lb. 4 oz.	19-1/2"	English Hollow Clayton County	6-25	Tracy Robbins Fayette	7 lb. 5 oz.	21-1/2"	Swiss Valley Dubuque County	5-24	Carl Spaete Delmar	8 lb. 1 oz.	27-1/2"	West Okoboji Dickinson County	1-16	Marlin Gustin Royal
4 lb. 1 oz.	20"	Little Mill Jackson County	5-4	Kathie Mueller Davenport	6 lb. 4 oz.	25"	Trout River Winneshiek County	5-6	Lloyd Lees Polk City	8 lb.	26"	Mississippi River Clayton County	4-27	Doris Pieper Garnaville
4 lb.	22-1/2"	Yellow River Allamakee County	2-27	Robert Schroeder Postville	6 lb. 4 oz.	24"	Turkey River Clayton County	7-11	Jeffrey Merrell Cedar Rapids					
3 lb. 15 oz.	22"	Big Mill Jackson County	4-27	Carl Lux Dubuque	5 lb. 10-1/2 oz.	23"	Baileys Ford Delaware County	5-30	Douglas Greil Cedar Rapids					
3 lb. 8 oz.	19-1/2"	Little Turkey Clayton County	6-11	Terry Armstrong Central City	5 lb. 10 oz.	23"	Sny Magill Clayton County	6-10	Leon Bird Dubuque					
3 lb. 7-1/2 oz.	19-1/2"	Bohemian Winneshiek County	10-6	Richard Stoffus Lawler	5 lb. 8 oz.	23"	Coon Creek Winneshiek County	6-13	Russell Weinsenstein Charles City					
3 lb. 6-1/2 oz.	19-1/2"	French Creek Allamakee County	5-19	Guy Holtzman Waterloo	5 lb. 8 oz.	22"	South Cedar Clayton County	5-3	Stephen Tully Dubuque					
3 lb. 6 oz.	18-1/2"	Sny Magill Clayton County	4-12	Carl Lux Dubuque	5 lb. 3 oz.	24-1/2"	Bear Creek Fayette County	5-5	Robert Cocke Waterloo					
3 lb. 3 oz.	19"	French Creek Allamakee County	5-10	Guy Holtzman Waterloo	5 lb. 2 oz.	21-1/2"	Spring Creek Mitchell County	4-28	Andy Aird Charles City					
3 lb. 2 oz.	20"	Swiss Valley Dubuque County	3-12	Michael McDermott Dubuque	4 lb. 12 oz.	22"	Yellow River Allamakee County	8-6	Michael Stoffus Lawler					
3 lb. 2 oz.	19-1/2"	Mississippi River Scott County	5-21	Lyle Haakenson Davenport	4 lb. 12 oz.	21"	Coon Creek Winneshiek County	5-10	Guy Holtzman Waterloo					
3 lb. 1 oz.	18-1/2"	Richmond Springs Delaware County	4-29	Ken Brenner Moline, Ill.	4 lb.	21"	French Creek Allamakee County	5-10	Scott Manning Waukon					
3 lb.	18"	French Creek Allamakee County	5-19	Guy Holtzman Waterloo	3 lb. 14 oz.	19"	Richmond Springs Delaware County	8-26	Scott Barth Independence					
					3 lb. 8 oz.	20-1/2"	Fountain Springs Delaware County	7-25	Mark Woeste Lake View					
					3 lb. 4 oz.	20-1/2"	Lower Swiss Valley Dubuque County	5-21	John Bakay Newton					
					3 lb. 4 oz.	20"	Fountain Springs Delaware County	7-25	Mark Woeste Lake View					
					3 lb. 3 oz.	20"	Bankston Dubuque County	5-26	Joseph Lammer Dubuque					
					3 lb. 3 oz.	18"	Coon Creek Winneshiek County	6-3	Mike Booth New Hampton					
					3 lb. 2-3/4 oz.	19"	Fountain Springs Delaware County	7-22	Mike Salmon Cedar Rapids					
					3 lb. 2 oz.	19-1/2"	Swiss Valley Dubuque County	5-7	William McCarthy Dubuque					
					3 lb.	20"	Trout Run Winneshiek County	6-18	Don Hoppmann Dubuque					
					3 lb.	17"	Trout Run Winneshiek County	6-25	Mike Booth New Hampton					
					3 lb.	15"	Howard County	5-27	Walter Bateman Cresco					

IOWA ALL-TIME RECORD FISH

Weight	Length	County	Date	Angler
BASS (Largemouth)				
10 lbs. 5 oz.	24-1/4"	Farm Pond Lee County	8-70	Paul Burgund Fort Madison
BASS (Ocean Striped)				
9 lb. 4 oz.	29"	Lake Rathbun Appanoose County	7-83	Richard Pauley Mystic
BASS (Smallmouth)				
6 lb. 8 oz.	21-3/8"	Spirit Lake Dickinson County	5-79	Rick Pentland Estherville
BASS (Rock)				
1 lb. 8 oz.	10-1/2"	Mississippi River Dubuque County	6-73	Jim Driscoll Dubuque
BASS (White)				
3 lb. 14 oz.	20"	West Okoboji Dickinson County	5-72	Bill Born Milford
BASS (Wiper)				
4 lb. 2 oz.	19-1/8"	Des Moines River Marion County	10-83	Norman Van Wyk Pella
BASS (Yellow)				
1 lb. 5 oz.	12-1/2"	Clear Lake Cerro Gordo County	5-78	Lowell Washburn Fertile
1 lb. 5 oz.	13"	Sand Pit Black Hawk County	6-78	Timothy Dolan Waterloo
BLUEGILL				
2 lb. 6 oz.	10-3/4"	Farm Pond Henry County	5-83	Chris Jayne Mt. Pleasant
BULLHEAD				
4 lb. 12 oz.	16"	Farm Pond Harrison County	5-83	Herschel Brown Missouri Valley
BUFFALO				
49 lb. 15 oz.	41"	Cherry Lake Tama County	4-80	James D. Schmitt Toledo
CARP				
50 lb.	44"	Glenwood Lake Mills County	5-69	Fred Houglund Greenwood
CATFISH (Blue)				
30 lb. 8 oz.	40"	Lake Manawa Pottawattamie Co.	6-79	Fred Doitscher Council Bluffs
CATFISH (Channel)				
30 lb. 4 oz.	39"	Viking Lake Montgomery County	8-74	Glenn Harms Shenandoah
CATFISH (Flathead)				
62 lb.	46"	Iowa River Johnson County	7-65	Roger Fairchild Coralville
CRAPPIE				
4 lb. 9 oz.	21-1/4"	Green Castle Lake Marshall County	5-81	Ted Trowbridge Marshalltown
MUSKY				
38 lb. 4 oz.	48"	Lake Rathbun Appanoose County	4-83	Charles L. Moen Pleasantville
TIGER MUSKY				
24 lb. 1 oz.	46-3/4"	West Okoboji Dickinson County	9-83	Bryan Steven Spencer
NORTHERN PIKE				
25 lb. 5 oz.	45"	West Okoboji Dickinson County	2-77	Allen Forsberg Albert City
PADDLEFISH				
107 lb.	69-1/2"	Missouri River Monona County	3-81	Robert Pranschke Onawa
PERCH (Yellow)				
1 lb. 15 oz.	14-3/4"	Spirit Lake Dickinson County	9-74	John Walz Estherville
SAUGER				
6 lb. 8 oz.	25"	Missouri River Woodbury County	10-76	Mrs. William Buser Sloan
SHEEPSHEAD				
46 lb.	38-1/2"	Spirit Lake Dickinson County	10-62	R. F. Farran Clarion
STURGEON (Shovelnose)				
12 lb.	33"	Des Moines River Van Buren County	4-74	Randy Hemm Douds
SUCKERS (Misc.)				
15 lb. 1 oz.	32-1/4"	Missouri River Monroe County	9-83	Glen E. Dittman Onawa
SUNFISH (Redear)				
1 lb. 9 oz.	10-1/4"	Central Lake Jones County	5-82	Roland Rieflin Cascade
TROUT (Brook)				
2 lb. 14 oz.	17"	Canoe Creek Winneshiek County	3-81	Lyle Brown, Jr. Decorah
TROUT (Brown)				
13 lb. 3 oz.	31"	French Creek Allamakee County	5-83	Brad Kramber Waukon
TROUT (Rainbow)				
15 lb. 8 oz.	30-1/2"	Turkey River Clayton County	8-77	Chuck Greth West Des Moines
WALLEYE				
14 lb. 2 oz.	31-1/2"	Spirit Lake Dickinson County	10-68	Herbert Aldridge Spirit Lake



Brad Kramber, record brown trout

Weight	Length	Where Caught	Date	Name and Address
RAINBOW TROUT				
15 lb. 1 oz.	31"	Waterloo Creek Allamakee County	6-9	Ron Schwanke Waterloo
13 lb. 4 oz.	26"	Spring Branch Delaware County	8-30	Nick Miller Cedar Rapids
12 lb. 3 oz.	28-1/2"	Trout Run Winneshiek County	5-3	Gerald Nye
12 lb.	30"	Wexford	6-3	Willhart Schellhorn Oelwein
11 lb. 11 oz.	29"	Swiss Valley Dubuque County	5-6	Roger Hall Cedar Rapids
11 lb. 4 oz.	29-1/2"	Turkey River Clayton County	7-21	Jim Moser Cedar Rapids
10 lb. 13 oz.	27"	North Bear Creek Winneshiek County	5-28	Mike Fisher Van Horne
10 lb. 11 oz.	28"	Bloody Run Clayton County	5-20	Mike Brown Des Moines
10 lb. 9 oz.	27"	Clayton	5-7	Albert Meyers
10 lb. 6 oz.	28"	Trout Run Spillville	5-4	John Witt Spillville
10 lb. 4-3/4 oz.	25-1/2"	Richmond Springs Delaware County	9-9	Merlin Miller Lynnville
10 lb. 4 oz.	29"	North Bear Creek Allamakee County	5-8	Craig Bienemann Waverly

THE LEADHEAD

Least Expensive Yet Most Versatile Lure

By Dale Anderson

Dale Anderson is a fisheries research technician and has been with the commission since 1970. He holds a B.S. degree from Iowa State University.

No other lure is so simple yet deadly at catching fish as the leadhead. A leadhead, or jig, is a lure with a weighted head, fixed hook and tail made of feathers, plastic, or hair. The weight of the lure varies from 1/100th of an ounce to 2 ounces, although in Iowa, sizes over 1/2 ounce are seldom used. Since the jig is heavy and compact, it casts easily and sinks readily. Left motionless in the water, it is absolutely useless for catching fish, but when retrieved correctly, the jig becomes one of the most effective lures ever made.

Any good sports shop displays a great variety of styles, sizes, and colors of the popular lure. How can the average angler possibly make an intelligent choice when such a variety is available? It's not really as complicated as it may sound. Most anglers know what kind of fish they most want to catch and use lures designed to attract just that species. The leadhead, however, appeals to so many fish that seemingly fruitless trips have often been turned around when another species is discovered to be ready and eager to accept the lure. Flexibility is the byword when jig fishing.

For most species during much of the year, keeping the lure close to the bottom produces best. Here is where jig fishing gets the description "bottom-bumping." It would seem at first that nothing could be simpler than getting a hunk of lead to the bottom of a lake. The problem lies in keeping the jig close to the bottom, without becoming snagged, as it is retrieved. An angler can solve this problem by becoming a "line-watcher." As a jig is cast and begins to sink, the line between the rod tip and where the line enters the water straightens. The same section of line will suddenly form a bow when the lure hits the bottom. This is the cue to begin retrieving. Retrieving should be made

in a series of short hops, with the lure kept close to the bottom. Watching for the line to bow between hops assures the jig is maintaining its bottom-bumping status. Eventually, the jig touching the bottom can actually be felt, providing a sensitive rod is used. Graphite or boron rods are especially good for this.

The bottom-bumping method is the most common jig fishing technique, but certainly not the only one. Many fishermen resort to bobbers during the panfish spawning season to keep their jigs suspended a few feet below the water's surface. Bobbers serve a threefold purpose. They maintain the jig at a predetermined depth; they provide additional weight, which aids in casting light jigs; and they provide a visual sign of a strike. This method is used mainly with small jigs on panfish, but may also be useful whenever suspended fish of any kind are found.

Another technique is called swimming the jig. This is sort of like bobber fishing without the bobber in that the jig is kept off the bottom. The speed and weight of the jig are what determine the depth the lure runs. This method is especially good on suspended feeding fish since it imitates an escaping bait fish. Fish actively feeding on or near the surface on calm days during the spring and summer can be located by surface disturbances and the resulting ring of small waves radiating from the area. Feeding fish must be approached slowly and quietly since they are remarkably wary when these conditions exist. When man-made lakes stratify in June, July and August, drifting or swimming a jig behind a boat is very effective. In this case, schools of panfish are suspended from five to fifteen feet down, across open bodies of water. Drifted leadheads imitate swimming baitfish and are readily taken by bluegill and crappie.

Fishermen arriving at a lake or river will often ask successful anglers who are leaving, "What color are they hitting on?" Probably no other choice in leadhead fishing is so widely debated yet so easy to make as color. A few

basic colors — white, yellow, black, and possibly brown, in a variety of sizes, will suit most fishing situations. Other colors catch anglers' eyes (and pocketbooks) more than they catch fish.

Choice of the size of jig, and matching that size to the right line will have more influence on success than any other factor in jig fishing. Most novice jig fishermen will use a leadhead which casts easily, with whatever size line they happen to have on their reels. Since heavy line usually comes with the less expensive reels, a heavy jig is required to pull the line off the reel. With this combination, lack of success is almost guaranteed for the most abundant species — panfish. Generally, small jigs will catch more fish. The lightest line that is practical for the species and water being fished is necessary. Jigs are about the least expensive lure that can be used, so losing a few in brush or rocks is worth the investment, when that's what it takes to catch fish.

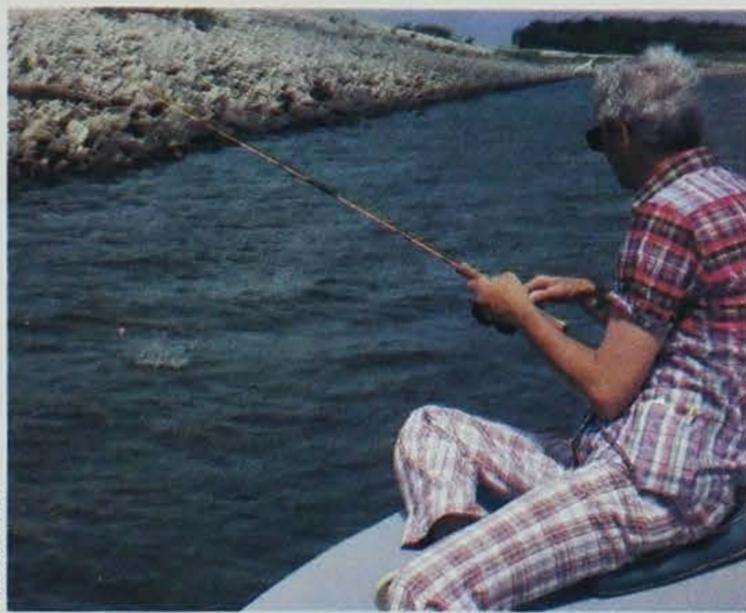
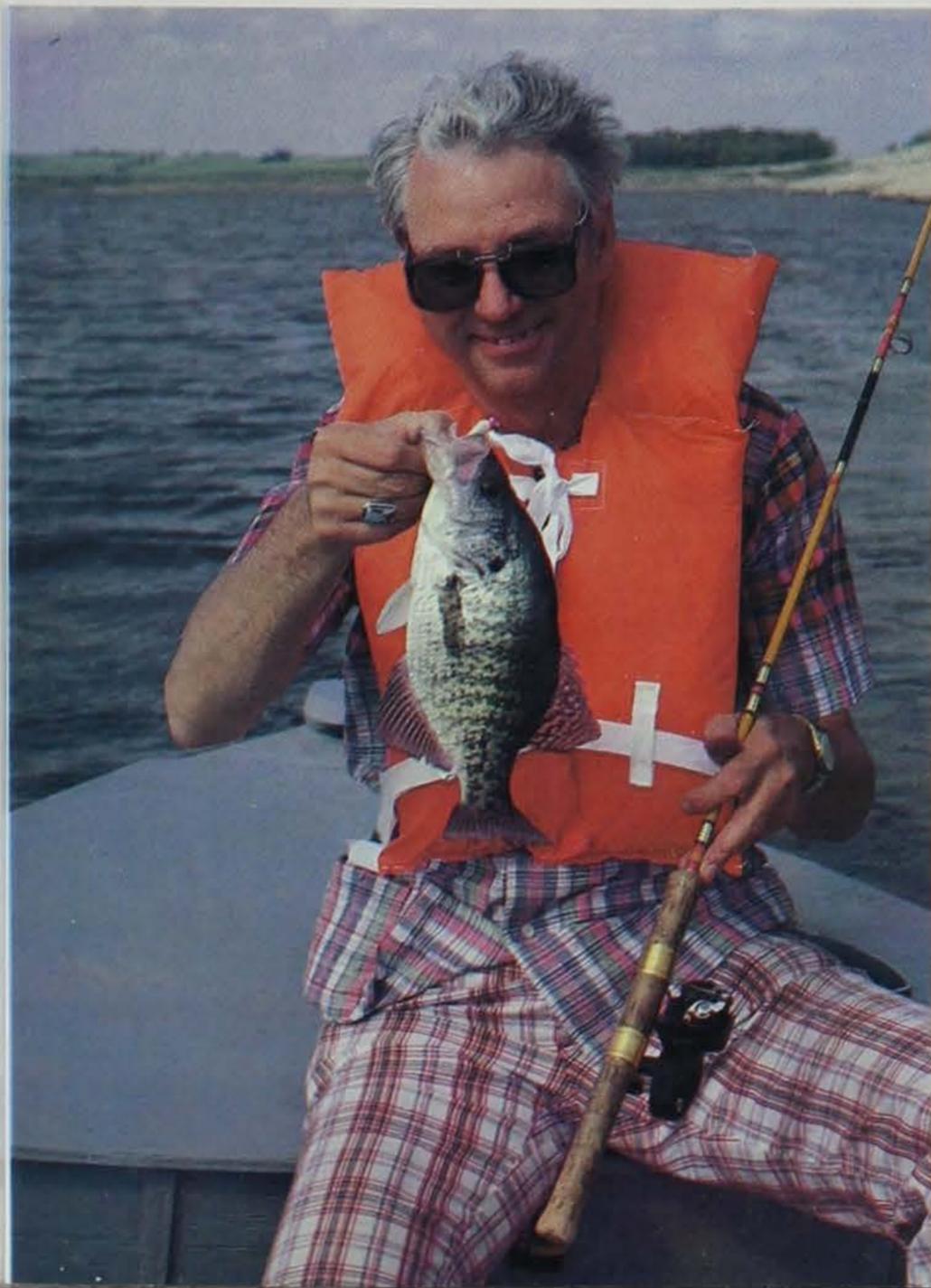
Jig fishing, like any other kind of fishing, has its own little tricks that greatly increase effectiveness. A common trick is to "flavor" the hook with a piece of nightcrawler or a minnow. This trick alone can often mean the difference between a highly successful trip and an empty stringer. Another alteration used by many good jig fishermen is to pinch or clip off part of the jig tail to make it shorter and thinner. With less tail behind the hook, fewer fish strike short of the hook.

There are times when fish will take nothing but the smallest of leadheads fished near the bottom. Because depth and wind conditions make it difficult to get the tiny lures down, tandem rigs work well. The first, sometimes larger, jig is tied on as usual; then, using an additional one- to three-foot length of line, the tiny trailer is attached. This method also allows the fisherman to try different colors at the same time.

While searching the tackle box for that perfect lure, the wise angler never overlooks the simple leadhead. Even though it is the least expensive lure there, it certainly can be the most effective.



Wayne Lonning



Ken Formanek

Leadheads take almost all species of game fish, but are particularly effective for walleyes (top).

Casting small jig-and-bobber combinations (above) produces as many crappies during spawning season as any other method, including bait fishing. Fished properly, leadheads will hook their share of large crappies like this one (left) taken from Red Rock Lake.

GETTING KIDS "HOOKED" ON FISHING

By Lannie Miller and Tom Gengerke

Lannie Miller is a fisheries biologist located at Black Hawk. He holds a B.S. degree from Kansas State University and has been with the commission since 1974.

By way of introduction let's just say that we're a couple of dads who really enjoy fishing. As fisheries biologists, we also take great pleasure in seeing other people catch fish, especially kids! In fact, we would offer as simply a statement of fact, that one of life's finest pleasures is seeing the look on a child's face as he or she catches that first fish. Whether it is a bluegill, bullhead or bass, the excitement, wide eyes and radiant smile all make for a truly magic moment in our lives. We're going to suggest something of a "how to" approach for creating those magic moments by offering a few of our experiences out on the water.

Expectations — Yours and Theirs

A family fishing trip will contain many of the same highlights you experience whenever your family travels together, goes out for pizza or attends the local little league game. Patience is the watch-word. It's easy to preach and

hard to practice. We're living in an "instant" society where even instant proficiency is often expected. You'll do a lot for your kids and for yourself if you maintain a relaxed approach to the whole process and are careful how you define success.

The first consideration is safety. Each child must have a quality life jacket. For a very young child we recommend the jacket have a leg strap on it to prevent falling out.

The degree of exuberance we feel for the sport may not be immediately transferred to our children. We don't set ourselves or our kids up for a letdown with a "do or die" situation. There's more to a family fishing trip than just catching fish; in fact, Henry David Thoreau explained it best when he said "Many men go fishing all of their lives without knowing it is not the fish they are after." For example, a friend, Lee, called last summer and suggested we take our boys out to the "rock pile" and catch some fish. Now Lee is an ardent angler and an impassioned outdoorsman; but most important of all, he knew where the rock pile was! Well, to make

a long story bearable, we got to the lake, launched the blue "luxury liner" and after a short albeit intense search, we found the submerged rock pile. Michael, Jason and Todd were wound tighter than 100 yards of 14-lb test in the prop. Lee had 'em fired up! We rigged terminal tackle, created organization out of seven rods and five bodies and started fishing.

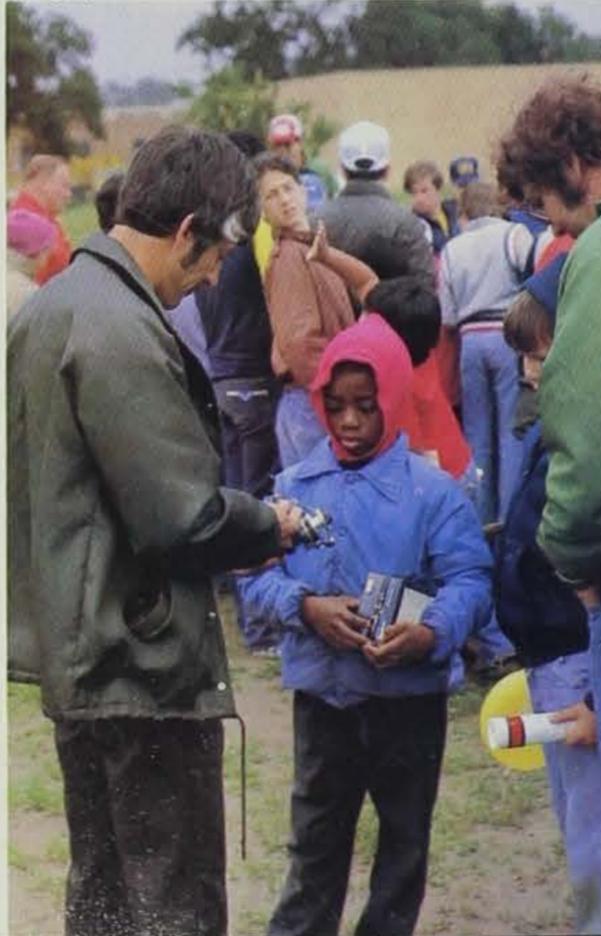
We learned a few things during that trip. We learned not to get excited when one of the boys let out over 250 yards of line. We learned how to rig several rods and still regulate a constant flow of sandwiches, cookies, candy bars and pop. We learned to control ourselves when a seven-year-old questioned the selection of jig color. But perhaps the best lesson of all wasn't really anything new, it was simply reinforcement of an old concept: kids by nature are confirmed optimists. Our attitude defined success, and although we caught few fish on that trip our shared experience was valuable. With Lee along, we have never had an "unsuccessful" trip with our kids.

Once a positive, relaxed attitude is achieved, we concentrate on another important ingredient in the making of an angler — catching fish. The old proverb

Tom Gengerke



Tom Gengerke



Tom Gengerke



about how the fishing was great but the catching was a little slow goes only so far when trying to get a youngster "hooked" on fishing. The best place to take a novice angler is to a lake or pond that has plenty of "easy-to-catch fish," such as bluegill, crappie or bullheads. Size is not important. We do not take a burgeoning angler out for walleye, smallmouth bass, muskellunge or any other difficult-to-catch species. The time for that will come later. We also consider where we fish for these easily-caught species. Working crappies out of brush or bluegills out of thick vegetation requires skills youngsters may not yet have.

Encouraging and explaining techniques to the young angler are good, but too much assistance is dangerous. Sometimes it's easier, as well as more effective, to teach by example, rather than by constantly haranguing the young partner. This may include baiting, casting or even removing the hook from the fish. But again, we don't overdo it. It sometimes takes a little longer, but most kids really enjoy working a crawler onto a hook or struggling to remove a hook from a wild fish. There certainly is nothing wrong with the "I'll do it" attitude when it comes to casting the bait. Although this can lead to temporary frustrations, we try to remain enthusiastic, complimentary and supportive of their actions.

Tackle

We keep the fishing tackle as simple as possible and make sure it works

Ron Johnson



properly. It would seem ridiculous to try to start a three- or four-year-old boy or girl on a split bamboo fly rod, or even have them work a sophisticated bait-casting reel. A simple spin-cast rod and reel outfit equipped with line light enough to cast is both economical and easy to operate. (One learns to appreciate "economical" if a two-year-old throws his rod in the lake because his five-year-old brother is catching more fish!) A couple of practice sessions in the yard or driveway using a casting plug or bell sinker helps familiarize the young angler with the rod and reel, as well as make the initial field excursion more enjoyable.

Although simplicity is critical for youngsters, we must beware of delaying the development of additional skills. We were unaware of just how well one of our kids could handle an open face spinning outfit until a patient instructor at a Youth Fishing Clinic gave him the opportunity to practice. We let the kids look over the tackle box. We know this strikes fear into the heart of every fly, spinner-bait or plastic worm fisherman but folks, we just grin and let the kids handle all that neat stuff. At certain ages, there's absolutely nothing better than sticking hooks into sassy shads, mad-dads or plastic worms!

The matter of presentation must be kept as simple as possible. Advanced techniques can be incorporated into the learning process as their experience and individual abilities progress. We think it is advisable to use a *small* bobber as opposed to bottom fishing. Bottom fishing requires a certain feel to detect a bite. This touch is usually only devel-

Tom Gengerke

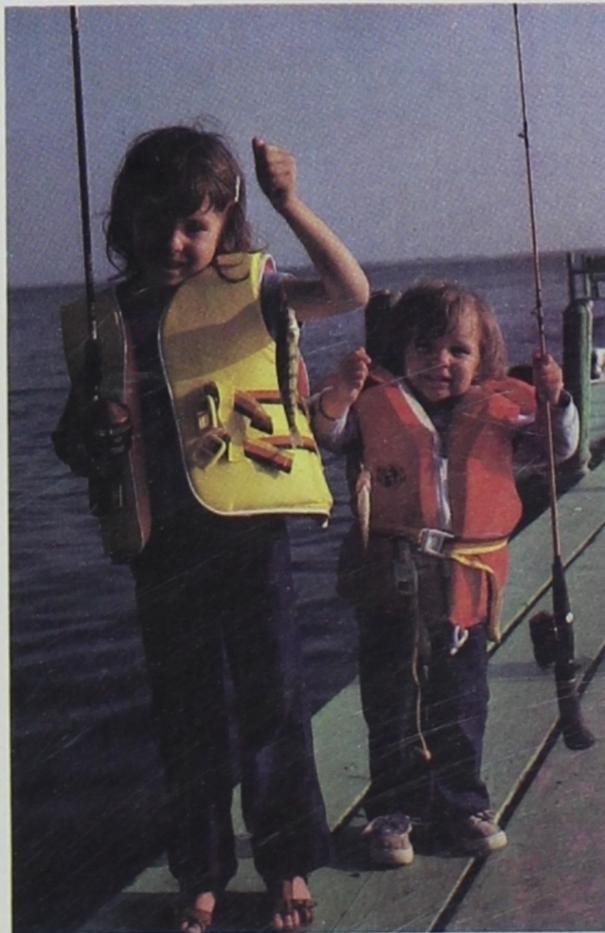


oped as a result of catching many fish; whereas if we use a bobber, the young child can actually see the fish bite and subsequently will be better able to set the hook. Quite frankly, it's tough to beat a small hook, split shot and crawler drifting below a *small* bobber for teaching anyone how to fish. When there's a lull in the action we discuss sportsmanship and good conservation practices. We think it's all part of making an angler. And that's a gift that will last a lifetime.

Additional Help

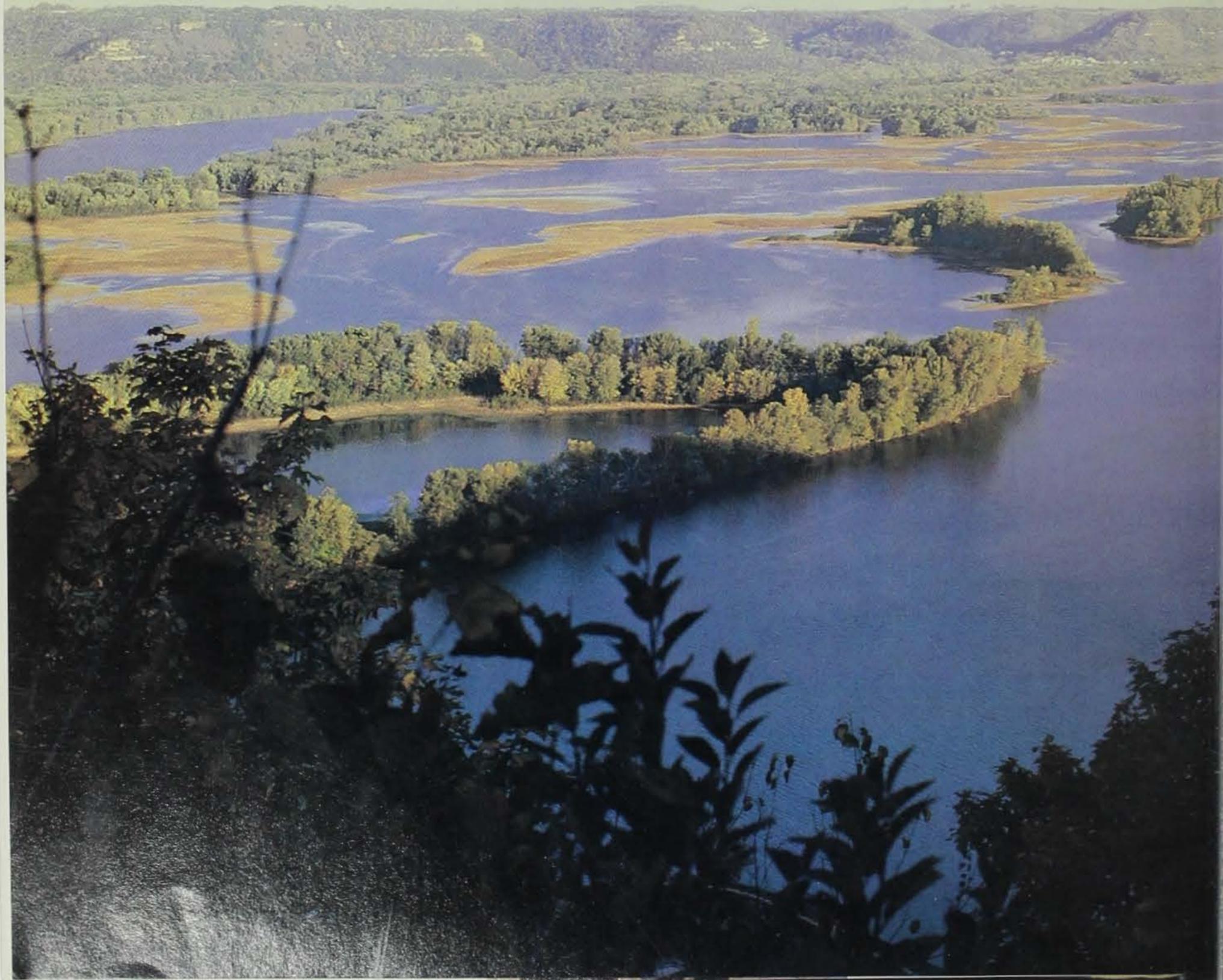
In 1978, the Fisheries Section of the Iowa Conservation Commission began sponsoring Youth Fishing Clinics throughout the state. These clinics are designed to introduce young anglers to a variety of angling related topics. Fish management, tackle, safety considerations, regulations, fish identification, cleaning and handling of fish, how to fish as well as some hands-on-experience with different equipment are just a few of the highlights. Parents are welcome and often attend, making these clinics a family learning experience. During 1983, fifteen clinics were conducted across the state and over 1,500 children participated. Local sponsors are the heart and soul of these activities and must be commended for their willingness to share their time and expertise with the youth of Iowa. Most of these clinics are held in the spring and are publicized by local media.

Lannie Miller



OL' MISS CALENDAR

By John Pitlo Jr.



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One of the beauties of the "big river" is the variety of water available to fish and fishermen. Habitats range from quiet shallow backwater lakes and low-moving side channels, to swift, deep tailwaters, main channel borders and wing dam areas. Fish seem to "turn on" during different times of the year in different habitats. I'll start with a typical spring and follow the year through, suggesting when and where to find various fish.

Late Winter and Early Spring

One of the best known fishing events in the midwest is the annual "run" of walleye and sauger into tailwater areas below locks and dams. Fishing for these species usually peaks in March and April. Depending on water temperature, these fish spawn near the end of April and then disperse throughout the pool. Fishing for them in the tailwaters then ends until the following fall.

There is usually a short period during March when snagging for paddlefish is excellent. Tailwaters are best just after ice-out and before the spring flood that usually peaks in mid-April. Paddlefish disperse with spring flood waters and then move back into tailwater areas in June after the spawn is complete.

About the time walleye and sauger are spawning, northern pike fishing starts. Northerns are the earliest spawners in the river and have recuperated from this effort by the end of April. Backwater lakes and slow-moving side channels near beds of flooded vegetation are where they spawn and remain for awhile. Baits should be worked slowly around stumps, logs, brush and weed beds. Northern pike are underharvested, and there are literally thousands to be caught.

Spring

Bullheads start moving into the shallows as the water warms to the upper 50's. Fish are in shallow, backwater lakes, in bays, along edges of trees, in flooded drainage ditches and, if the water is high enough, in flooded grain fields. I've seen excellent catches of large bullheads come from flooded cornfields during May.

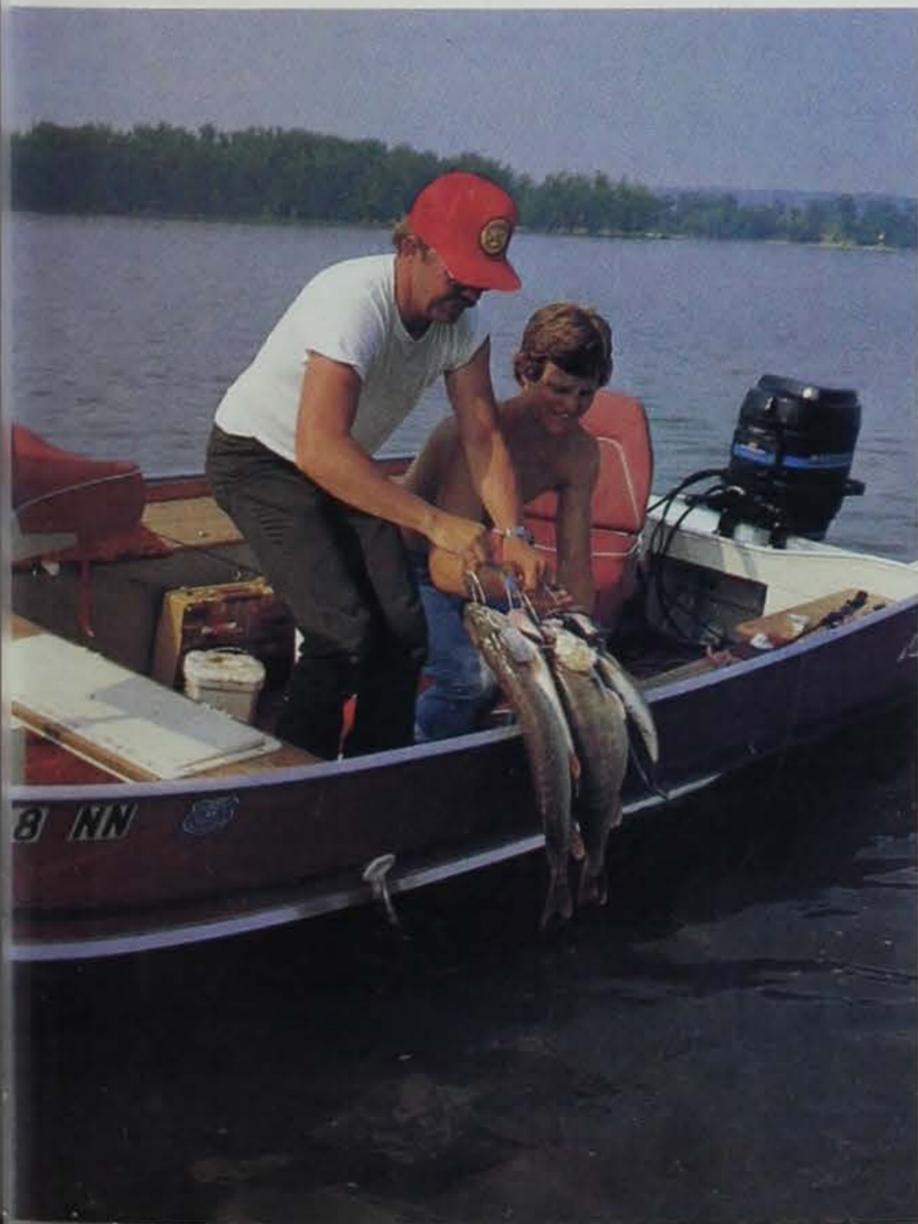
Crappie start moving toward spawning areas in May. Small minnows and jigs take them near fallen trees, brush piles and log jams. Water three to six feet deep, with little or no current is ideal. Crappie are a schooling fish and if one is caught, there is a good chance that more are in the immediate area.

Late Spring and Summer

Largemouth bass become more active as the water warms in May and June. Backwater lakes and sloughs are best, with fish located around stumps, brush and weedbeds in shallow water and little current. Slow-moving lures, like jigs with pork rind or plastic worms, seem to produce in spring. Spinner baits and other weedless lures are needed to fish the heavy weedbeds during summer.

Bluegills are active throughout the year, but some of the best fishing occurs in June during the spawning period. Again, shallow lakes and sloughs, around stump fields and weed beds hold them. If the river is normal to low, excellent catches can be taken from wing and closing dams during June, July and August. Most fishermen anchor above the wing dam and drift garden worms or small pieces of night-crawler across the rocky face of the structure. Small hooks and just enough split shots to reach bottom are important for bluegills.

As water temperatures climb above 60° F, catfish become more active and start biting. Most catfish are taken from areas with some current. Side channels



Because of the great diversity of habitat in the Mississippi River (opposite page), no place in Iowa, if indeed anywhere, offers fishing for such a wide variety of species. Northern pike and walleyes (left) as well as largemouth bass (above) are merely a sample.

with log jams and brush piles are good places to start. Anchoring above a brush pile and drifting a bait into it is preferred. Other good areas to try are above and below wing dams and in running sloughs.

Walleye and sauger move back on wing dams in late June through July. One method to catch these fish is by trolling backwards on the upstream side of the dam with a big nightcrawler on a worm harness. Anglers stay 30 to 40 feet above the wing dam and work laterally along the structure so their baits bounce along the rocky face of the dam. Another method involves anchoring upstream of the dam and casting jigs dressed with plastic worms so they bounce among the rocks of the dam. I fish one dam for 15-20 minutes and if a fish isn't caught or a bite detected, I move to the next structure. I repeat this until fish are located.

Freshwater drum fishing reaches its peak during the heat of the summer when fishing for most other species slows. Many drum are caught from boats anchored near the main channel border, around wing dams and sandy flats. They are bottom feeders and readily take a big gob of worms or crawdad meats.

Early Fall

White bass fishing can be super around wing dams, rock piles and rip-rap banks during the early fall. Small

spinners, jigs and minnows seem to be the best baits and when a school of stripers is located, fishing can be fast and furious. "Striper" anglers keep a keen lookout for surface boils, rolls or splashes as white bass tend to drive bait fish to the surface as they feed on them.

Fall

When the hunting seasons open in October, the number of anglers on the river declines noticeably and at times, certain areas of the river are void of human activity. At this time, walleye and sauger start moving back into the tailwaters, as do paddlefish. Now is the time to catch a trophy walleye from wing dams. The larger females feed heavily as egg development begins in preparation for next spring's spawning. I like to troll on the upstream side of the wing dam, using a 3-way rig with a rapala or large shiner for bait. I rarely catch limits of fish, but the ones I do catch are usually large.

Early October is also a good time for largemouth bass. These fish seem to group together in the fall and fantastic fishing can be had if a school is located in backwater lakes and bays around stumps, logs and brush. Largemouth bass seem to be more tolerant of running side channels with slow-moving currents. If you can find a small cut with some medium current flows, fish the edges of the current hard as these can be hot spots.

Winter

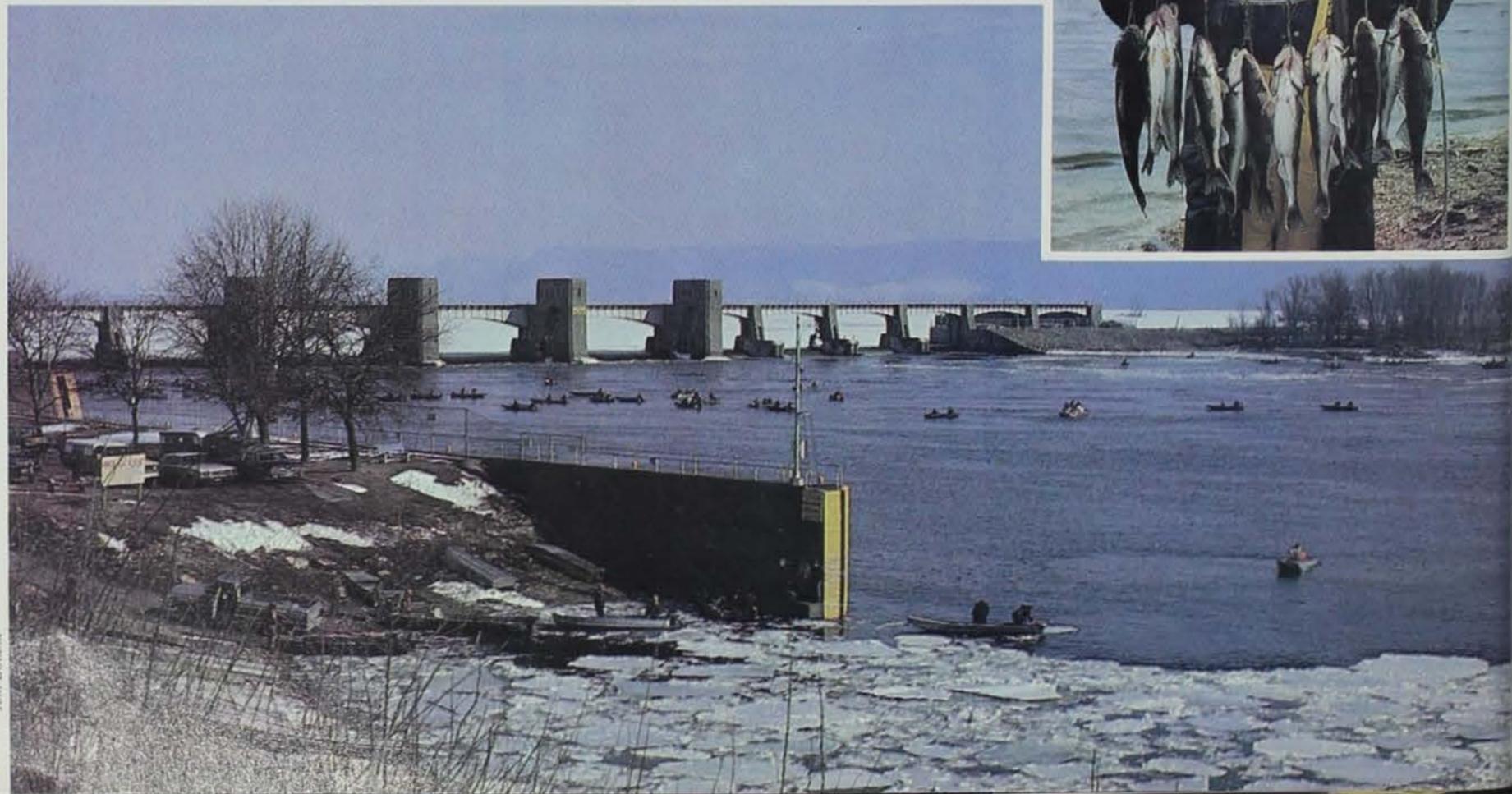
Once the backwater lakes begin to ice over, the ice fishing for bluegill and crappie begins. The best catches seem to occur during the first month of ice-over, as soon as the ice is safe. Light line (2-6 lb test), small jigs and tear-drops tipped with grubs or minnows take panfish from cover such as stumps, logs and brush.

Although the backwaters may be ice covered, lock and dam tailwater areas that remain open are still productive. Depending on the severity of the winter, as much as one mile of open water offers good walleye and sauger fishing, especially if a January or February "thaw" occurs.

Obviously, the beautiful "Ole' Miss" provides the widest variety of fishing opportunities found in Iowa. It's most successful anglers don't wait for a specific period, barometric level, river stage or water temperature, but go fishing when the opportunity arises.

John Pitlo is a fisheries research biologist located at Bellevue. He holds a B.S. degree and an M.S. degree from Iowa State and has been with the commission for six years.

Lock and dam tailwaters seasonally attract thousands in search of sauger and walleyes.



Tom Boland



PROFILE OF AN ENDANGERED SPECIES



PALLID STURGEON (*Scaphirhynchus albus*)

By Doug Carlson and Dean Roosa

Dean Roosa is the state ecologist. He holds an M.S. degree in botany from Iowa State University and has been with the commission since 1975.

Doug Carlson is a native of Monona County, Iowa. He received his B.S. from Iowa State University in 1970 and is now an aquatic biologist with the New York Department of Environmental Conservation.

They are known to some of the old timers along the Missouri River as white sturgeon, white hackleback or white sand sturgeon. Yet for the most part, their identification is best summarized by the expression, "I've never seen a fish like **this** before." The spade-shaped snout, unusual "hackles," and smooth belly are very distinctive, and once you've seen a pallid sturgeon, you are not likely to forget it. Seeing one of these sturgeon, however, is not so easy. Although they live to be over 30 years old, they travel almost mysteriously in open river systems, preferring the fast water areas that most fish avoid.

The pallid sturgeon is among a family of fishes known for their long lives, their huge production of eggs used for caviar, and their intricate patterns of

behavior. There are only nine species of sturgeon in North America, and Iowa's border waters have all three of the inland or entirely freshwater species. The pallid sturgeon is least frequently caught of all these kinds because of their historically low abundance, and more importantly, because of their recent losses of habitat.

Pallid sturgeon live in areas like their closest relative, the shovelnose sturgeon, but do not congregate behind wing dikes and bars, like shovelnose do, nor are they as quickly to be caught on a worm-baited hook. However, their habits are like the other sturgeons in that they appear to travel in groups which sometimes stay together for months or years. They are very selective about habitat. Feeding areas are so precisely chosen by this fish that on more than one occasion, two individuals have been caught on the same hook on consecutive days, when they appear to be nowhere else in the river.

Pallid sturgeon are also very particular about choosing their spawning areas. It is believed that they "home-in" on a spawning area, behaving like salmon, who upon maturing, return to the spot where they were hatched.

The changes in river habitat from man's channelization are the greatest threat to the pallid sturgeon in Iowa.

Spawning areas have never been located, but are probably in the areas of the main channel and lower tributaries where most channelizing has occurred. It is probable that prime spawning areas have been lost, and their amount of living space has certainly been reduced. Very few of these fish are caught each year. In Iowa, apparently the only recent records are from the Missouri River; one from the early 1970's from studies for the Port Neal power station, the other from near Sioux City in May, 1977. There have been no known catches in the Mississippi River since the construction of the lock and dam at Keokuk. This species, considered rare throughout its range, is listed as "endangered" in Iowa.

The classification of a fish as endangered provides protection for the critical habitat (when it's identified), and it also protects the fish from harvest. While returning fish without harvest is a symbol of good faith by fishermen, the most important issues are in resource protection.

The public must demand full examination of impacts before allowing the gutting-out of a stream. The prairie rivers of the Midwest are a rare resource of our heritage and the life therein has diversity and specialization worth every ounce of protection we can give them.

