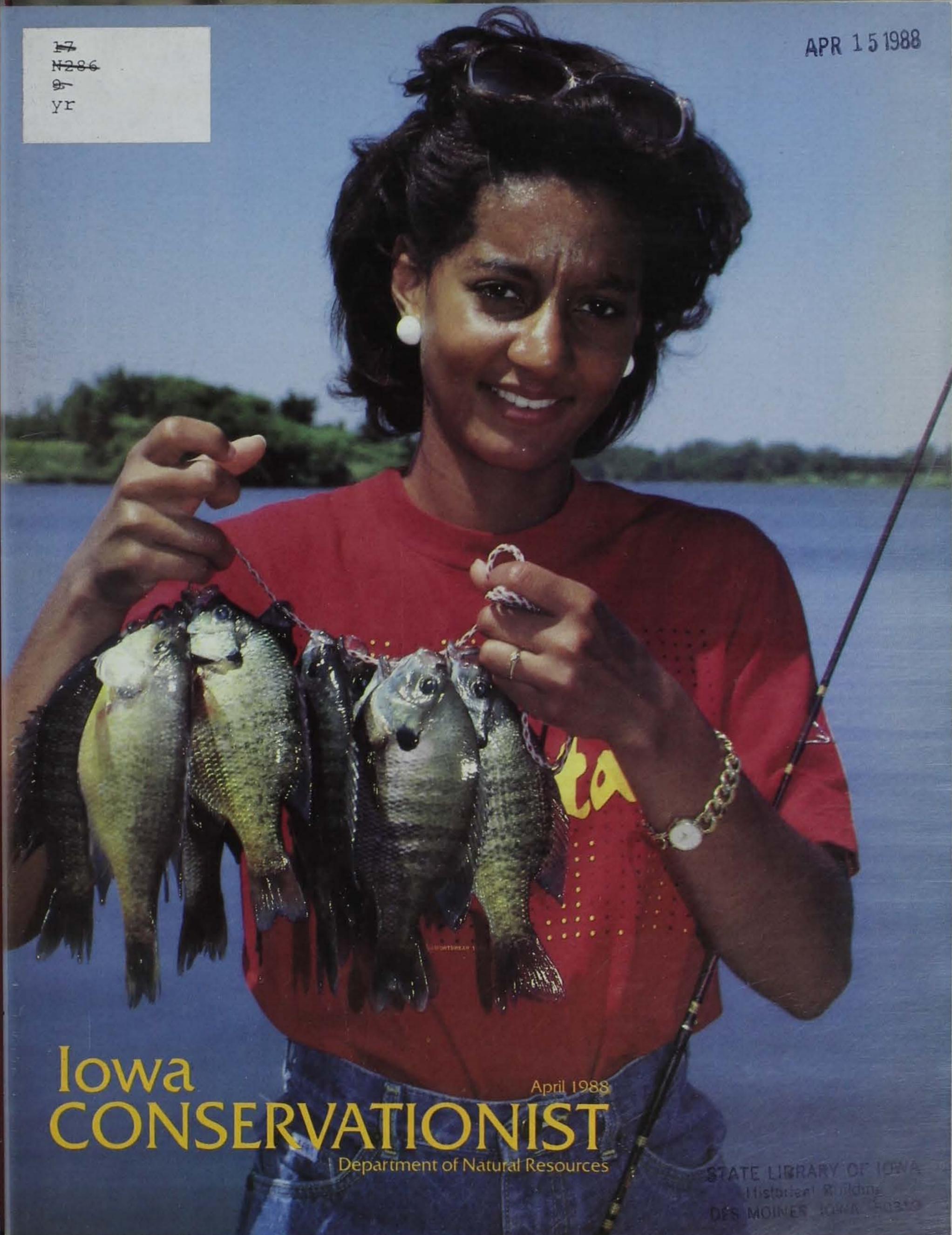


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APRIL 1988, Vol. 47, NO. 4

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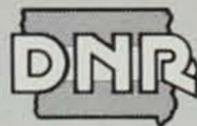
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Front—Bluegills, Iowa's most popular panfish. Photo by Lowell Washburn. Back—The hepatica can be found blooming in Iowa's woodlands in April. Photo by Bruce Morrison.

1 9 8 8 FISHING FORECAST

As temperatures warm and spring arrives many people's thoughts turn to bent rods and fresh fried fillets. According to fisheries biologists the following are the best bets for anglers this year.

NORTHWEST

by Tom Gengerke

Walleye

The best fishing will be found on Big Spirit, East Okobojo and West Okobojo (Dickinson County) and on Storm Lake (Buena Vista County) where 12- to 16-inch fish are common and the opportunity to catch larger fish, especially on Storm Lake and West Okobojo, is always present. The key to spring fishing on Big Spirit is a late ice-out followed by steadily increasing water temperatures. According to survey information there was excellent survival of the 1983 year class. Many of these fish will be 13 to 13-1/2 inches or larger. This exceptional year class will be readily apparent during 1988 and will contribute substantially to the creel for the next two years.

A jig, either haired or plastic-bodied and a minnow, or just a plain minnow, are traditional favorites for spring walleye fishermen. If water is flowing out of Big Spirit and into the north end of East Okobojo, anglers



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would be well advised to try that area; however, the majority of the activity occurs at the rock structures in the southern one-third of the lake. Also, anglers are reminded of the improved and expanding areas of submerged vegetation — remember walleyes and weeds often go together. Along with East Okoboji, West Okoboji has shown some improvement in the adult walleye population during the past three years. While many of the traditional areas such as Pillsbury, Fort Dodge, Gull and Pike's Point are good during the spring and fall activity periods, I would like to call your attention to the mid-summer period after the weed lines have become well-established. Pay particular attention to these areas when they are adjacent to deeper, cooler water.

During spring 1987, brood stock walleyes were collected, stripped of their eggs and returned to Storm Lake. An additional benefit to this

activity was the direct observation of true trophy walleyes by many Storm Lake anglers. Walleyes in the seven-pound range were quite common while several fish topped the scales at 10 pounds or more. Spinners tipped with crawlers, leeches or minnows are worth trying at this lake. I would also encourage a try at some catch and release fishing for these magnificent fish.

There will also be good walleye fishing on Lost Island Lake (Clay and Palo Alto Counties). Most of these fish will range from three-fourths pound to a pound and a quarter. The inlet and "bridge" area will be good producers, as will the east side public area — especially early in the season. Boat anglers have been successful during the summer period when they drift the flats with crawler and leech rigs.

River fishing for walleyes has been excellent during the past four to five years and from all indications 1988 will also be a producer. The Raccoon River below Sac City, the Little Sioux River (Buena Vista, Cherokee and Clay Counties), the Des Moines River (Emmet County) and the West Fork of the Des Moines River from Rutland to the Cornbelt Dam should be especially good. Walleyes exhibit definite upstream movement patterns during the spring, so concentrate your effort below lowhead dams or other barriers. More consistent fishing is found during the summer and fall months, after water levels have stabilized. Many fish in the two-to four-pound class have been taken using Rapalas, jigs and jig-minnow combinations.

Fishermen are reminded that the catch limit has been reduced from five to three on Spirit Lake, East Okoboji, West Okoboji, Upper Gar, Minnewashta and Lower Gar Lakes and that a 14-inch minimum length limit shall apply on walleyes in these lakes. Also, no more than one walleye above 20 inches in length may be taken per day from these lakes. The possession limit remains at twice the daily creel limit.

Yellow Perch

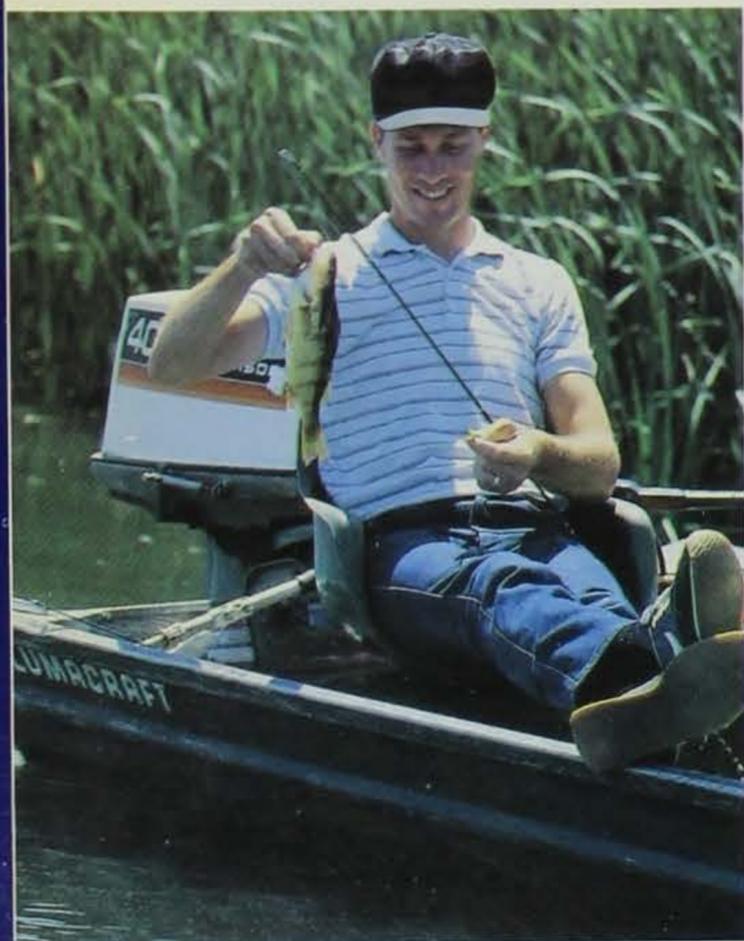
Last year, as predicted, the yellow perch fishing declined dramatically on Spirit Lake, as compared to the

above average, even phenomenal, fishing which all of us enjoyed during 1984 and 1985. The strong year classes which developed during the early 1980s due to a return of more normal water levels continued to decline through 1987. Unfortunately, harvest during 1988 should continue at about the same levels experienced during 1987.

The best fishing will be found on the Okobojis, particularly West Okoboji, and on Ingham (Emmet County) and Center Lakes (Dickinson County). Activity will start during June or July, around the weed beds, and will proceed into the fall. Surveys conducted on West Okoboji during summer 1987 indicated a strong year class of eight- to nine-inch fish in this lake. Hot spots may be scattered and while the traditional areas of North Bay, Miller's Bay, Emerson Bay and Smith's Bay are always worth a try, anglers are reminded that fish may be found at a variety of depths in these areas and the versatile angler is usually the successful angler. Small jigs tipped with silver wigglers or waxworms are especially effective, although a tear-drop may be more effective on Center Lake.

Bullhead

Black Hawk Lake (Sac County), Silver Lake (Dickinson County) Spirit Lake and Clear Lake (Cerro Gordo County) will provide excellent bullhead fishing opportunities for northwest Iowa anglers during 1988. All of these lakes are loaded with fish and should produce both quality and quantity for young and old alike. Crawford Creek (Iowa County) is another lake with a super population of eight- and nine-inch bullheads that are largely under fished. Bullhead fishing on Spirit Lake has been rather mediocre during the last two years; however, 1987 survey results indicate a three-fold increase in the population which should be evident in the 1988 harvest. I would also call attention to the recently completed fishing pier off the North Grade which will provide a quality access point for Spirit Lake anglers. As usual, the juicy crawler is the preferred bait and May and June the best months. Many of these areas are especially



LOWELL WASHBURN



DNR PHOTO



LOWELL WASHBURN

productive after dark, so bring your lantern.

Channel Catfish

Rivers and catfish go hand-in-hand and excellent fishing will be available in virtually all Iowa rivers during 1988. The Little Sioux (Buena Vista, Cherokee and Clay Counties), Big Sioux, West Fork of the Des Moines (Emmet and Humboldt Counties) and the Iowa (Hardin County) Rivers will be premier areas for Iowa "river rats." The best fishing occurs from June through September. Most catfish are taken from deep holes or from around snags which are providing cover and escape from the sun. The bulk of these fish range from 10 to 20 inches; however, the chance for a real pole bender is always present. Preferred baits include dead minnows, commercial stink baits, crayfish and — for the real catfisherman — leopard frogs and sour clams. The riverine channel catfish is probably the most under-used fishery resource in Iowa. Many of our rivers hold nearly 400 pounds of channel catfish per acre.

Excellent channel catfishing is also available in many of our area lakes. Lake Pahoja (Lyon County), Cornelia (Wright County), Little Wall (Hamilton County), Clear Lake and Black Hawk Lake will offer some of the best fishing for these prairie trout. My personal choice for a real quality "cat" would be East Okoboji and

Storm Lake. These populations have really matured over the years and are generally under used. There were a number of 20 pounders taken last year, so bring a heavy rod. Also, for early season catfish anglers, I would suggest trying shad entrails at Black Hawk and Storm Lake. I guarantee your hands will stink and you will catch fish.

Muskellunge

It is the fish of a thousand casts — or maybe just one. Activity usually peaks in late June, early July and again in late summer, with some hard-core fishermen experiencing good success again in late fall. From 1984 through 1986 Spirit Lake was considered to be the most consistent producer of trophy muskellunge in Iowa; however, this consistency was not sustained through 1987. Likewise, East Okoboji fishermen also experienced a declining catch rate as compared to what most anglers enjoyed the previous two years. West Okoboji, which had been providing somewhat sporadic fishing during that same time period, started to provide more and better fish. It is worthwhile to remember that West Okoboji holds the oldest population in Iowa, in fact, West Okoboji provided a new state record (38 lbs. 5 oz.) in 1986. While this is a remarkable fish, I have no doubt that another state record is out there . . . waiting.

Clear Lake is also back. Fish com-

monly range from 30 to 40 inches; however, fish in excess of 40 inches are not uncommon. Muskellunge in Clear Lake are taken from major rock reefs or points, where fish can feed in relatively shallow water yet remain adjacent to deep water. Large fish are caught every year by both novice and seasoned anglers alike, using all types of gear and a variety of presentations. But if you are really after a wall hanger, you had better bring the big plugs and a lot of stamina.

Northern Pike

Good to excellent fishing can be expected at Big Spirit, Tuttle Lake (Emmet County) and West Okoboji. Recruitment has been excellent during the past three to five years and many fish in the two- to six-pound class are available. Concentrate your effort around the rushes in Anglers Bay and the weed line or isolated pockets of vegetation in the rest of Big Spirit. Center Lake produced some nice northerns in 1986 and 1987 and should continue to offer excitement during 1988. The west end of Clear Lake, near the Ventura Grade inlet, will also concentrate northerns during the early part of spring. Flashy spoons are particularly effective; however, Mepps spinners, spinner baits with hammered blades, Rapalas and live chubs also work well. The Winnebago River from the state line to Mason City will also provide river anglers with plenty of

1 9 8 8 FISHING FORECAST

excitement. River anglers should watch for tributary streams or adjacent marshy areas since both of these habitat types hold northern pike.

Smallmouth Bass

Plenty of "bronze-back brawlers" will be taken this year. Lake fishermen would be advised to start early, concentrate on rock piles or rocky points and use a minnow, preferably a shiner, and fish it slowly. West Okobojo and Spirit Lake produce quality fish; however, more consistent fishing can be expected on West Okobojo. When water temperatures rise, switch to crankbaits.

River fishing, once the rivers begin to stabilize, usually produces more fish per trip, although they are seldom as large as those taken in lakes. The Iowa River from Alden to Steamboat Rock, the Boone River below Webster City and the Winnebago River from Fertile to its confluence with the Shell Rock offer some of Iowa's finest river smallmouth bass fishing. Knowledgeable anglers concentrate their effort downstream from riffle areas, near submerged timber and in deep holes. One of the best approaches is to float a river reach by canoe, since it allows you to fish more remote, less heavily fished areas. In northwest Iowa a 12-inch minimum length limit applies on all interior streams, and a 15-inch length limit is in effect for Big Spirit, West Okobojo, East Okobojo, Upper Gar, Lower Gar and Minnewashta Lakes.

Largemouth Bass

If it is largemouth you are after, try Swan Lake (Carroll County). This lake was recently renovated and the fishery is really taking off. A special 16-inch minimum length limit is in effect for this fishery. Approximately 10 percent of the bass population is larger than 16 inches, and anglers will have lots of excitement catching and releasing bass which are 14

inches long and weigh almost two pounds.

Beeds Lake (Franklin County) and Briggs Woods (Hamilton County) are prime bass waters in north-central Iowa. Both lakes have several strong year classes and good numbers of legal-size fish. Fishing the weed line and submerged timber is effective on Briggs Woods and working the causeway riprap is popular on Beeds Lake. Lake Pahoja is another lake which the serious bass angler should remember. Lake Pahoja has been providing excellent fishing since 1986 and 1988 should be no exception. Try the recently installed stakebeds in this lake, and if you still need encouragement, stop at the park office and look over their fish photos for an up-to-the-minute testimonial. In all cases, spinner baits and minnow-imitating lures are proven producers.

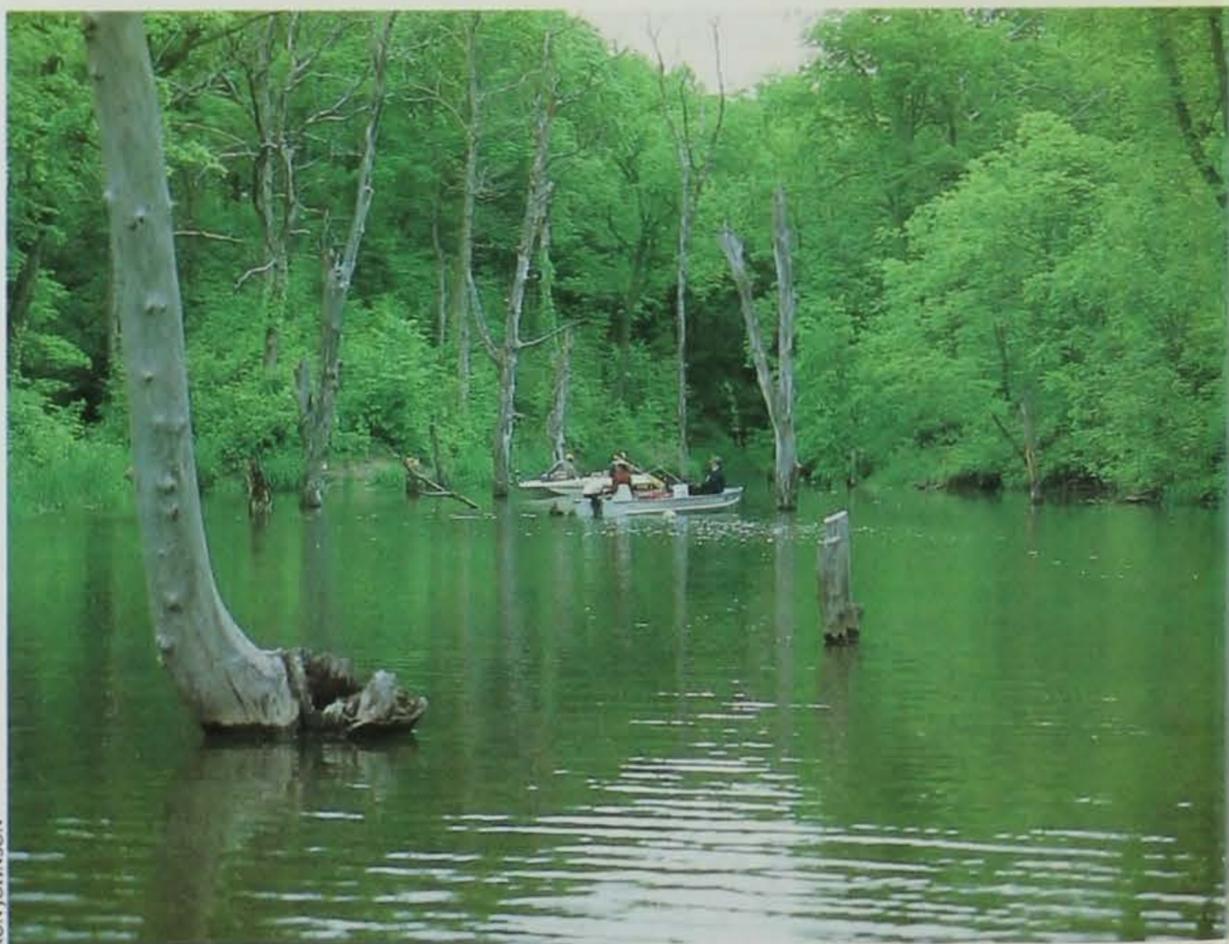
Bluegill

Indian Lake (Hancock County) provided excellent fishing for six- to eight-inch bluegills during 1986 and 1987 and this trend should continue through 1988. Fishing the outside edge of the weed line, where bluegills feed heavily on aquatic invertebrates is a sure bet. Anglers will also find these fish during late May and early June when they are spawning

near the emergent vegetation. Surveys conducted during 1986 and 1987 also indicate good bluegill populations exist in the Pine Lakes (Hardin County), Briggs Woods and Snyder Bend (Woodbury County). Two of the up and coming hotspots in northwest Iowa will be Yellow Smoke Lake near Denison (Crawford County) and Swan Lake. Both lakes contain large numbers of six- to eight-inch bluegills. Vacationers to the Iowa Great Lakes region should keep in mind that the waters of West Okobojo take a little longer to warm up, and therefore, good bluegill fishing occurs a little later at this lake than it does in many Iowa lakes — providing a mid-summer bonus for the ardent "gill" fisherman.

Crappie

The best crappie fishing will occur at Yellow Smoke Lake, Briggs Woods and Lake Pahoja. Briggs Woods supports excellent numbers of 8- to 10-inch crappies which were produced in 1983. Yellow Smoke has been a real hotspot for these "papermouths" during the past year and plenty of fish will be available this spring. Anglers should concentrate their efforts near partially submerged or standing trees. Badger Lake near Fort Dodge is another lake which should



RON JOHNSON

not be overlooked during 1988. Fish for these crappies during the summer months by drifting with a mini-jig. Slab-side crappies are available at Storm Lake. Anglers should watch the marina on the southwest corner of the lake as soon as the ice goes out, as well as the inlet area in the fall. A mini-jig under a small bobber is the preferred method at this lake.

Other Species

Excellent *yellow bass* fishing is available at Clear Lake. These scrappy fighters are very abundant in this lake. They will readily take night-crawlers or small yellow or white leadheads fished near the bottom, on a windswept shore or over a rock substrate. Fish run from 7 to 10 inches and are excellent table fare.

White bass enthusiasts should look to Storm Lake, East Okoboji and Clear Lake. Fish will range from 10 to 16 inches and will be most active during the spring and fall periods. A jig and minnow fished over a sand bottom will provide plenty of action. East Okoboji was exceptional during fall 1987 and there will be real action on this lake during 1988.

The *freshwater drum* is available in large numbers in West and East Okoboji. In fact, it is difficult to fish a jig in these lakes and not hook a sheepshead. A piece of crawdad on the jig virtually ensures success. These fish are the fourth most commonly caught fish on the Mississippi River, and they are delicious when the dark meat is cut away and the firm white flesh is boiled, chilled and served with a shrimp sauce as freshwater shrimp cocktail.

When it comes to fishing, the glacial lakes and rich prairie streams of northwest and north-central Iowa offer variety, quality and quantity. Lots of friendly people are rightly proud of the resources and resource management in this part of Iowa and they invite you to experience angling at its best and share with them in a quality outdoor experience. Fish Iowa — naturally!

Tom Gengerke is the northwest district fisheries supervisor stationed in Spirit Lake.

1987 FISH AWARDS

Editor's note: Due to the large number of entries received, beginning this year, only the top ten (and ties) and released of each species are listed.

*New State Record

Weight Where Caught Date Name and Address

BASS, LARGEMOUTH (Minimum — 7 lbs. or 22")

9 lbs. 8 oz.	Pond	5-29	Deric Saunders Bonapart
8 lbs. 6 oz.	Van Buren County Farm Pond	11-3	Arlie VanderHoek Pella
8 lbs. 4 oz.	Mahaska County Wheeler Pond	3-16	Darrel Rains Villisca
8 lbs. 3 oz.	Montgomery County Farm Pond	5-17	Clarence A. Wilson Waterloo
8 lbs. 1 oz.	Poweshiek County Park Pond	4-12	Rev Vance Tracy
8 lbs.	Marion County Farm Pond	3-17	Doug W. Lenton Marengo
8 lbs.	Iowa County Sand Pit	5-29	Tim McMurrin Independence
7 lbs. 14 oz.	Buchanan County Farm Pond	4-19	Ron Thiel Council Bluffs
7 lbs. 12 oz.	Fremont County Farm Pond	4-9	Joe Konrad Carlisle
7 lbs. 12 oz.	Polk County Pond	10-17	James Hertz Omaha, NE
Released 22 1/2"	Mills County Farm Pond	7-5	Mark D. Williams Jasper County Newton

BASS, OCEAN STRIPED (Minimum — 5 lbs.)

— no entries

BASS, ROCK (Minimum — 1 lb.)

1 lb. 3 oz.	Farm Pond Lee County	5-24	Julie Roth Farmington
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BASS, SMALLMOUTH (Minimum — 4 lbs. or 20")

5 lbs. 2 oz.	Big Spirit Lake Dickinson County	4-26	Rick Petersen Spencer
4 lbs. 14 oz.	Big Creek Polk County	7-25	Loren Knox Ames
4 lbs. 12 oz.	Maquoketa River Jones County	3-26	Gary Steuri Monticello
4 lbs. 12 oz.	West Okoboji Dickinson County	8-3	Frank A. Heidelbauer Sioux Falls, S.D.
4 lbs. 12 oz.	Cedar River Floyd County	4-5	Gordon R. Lockey Nashua
4 lbs. 11 oz.	Big Spirit Lake Dickinson County	10-4	Tom Kass Pocahontas
4 lbs. 9 oz.	Spirit Lake Dickinson County	4-15	Rick Petersen Spencer
4 lbs. 8 oz.	West Okoboji Dickinson County	7-10	Connie S. Riedemann Hartley
4 lbs. 8 oz.	West Okoboji Dickinson County	6-1	Merritt Cook Okoboji
4 lbs. 8 oz.	Cedar River Black Hawk County	4-4	Roger Hoepfner Waterloo
Released 22 1/4"	Cedar River Black Hawk County		Chad Wolf Waterloo
Released 20 3/8"	Spirit Lake Dickinson County	9-7	Donald Merrill Omaha, NE

BASS, WHITE (Minimum — 2 1/2 lbs.)

3 lbs. 12 oz.	Mississippi River Louisa County	8-10	Robert Martin Columbus Junction
3 lbs. 5 oz.	Maquoketa River Delaware County	6-14	William V. Wilson Manchester
3 lbs. 3 oz.	Mississippi River Louisa County	7-8	Bob Martin Columbus Junction
3 lbs. 1 oz.	Mississippi River Des Moines	2-21	Alex Dolhancky Burlington
2 lbs. 12 oz.	Mississippi River Clinton County	8-11	Dean A. Bodnar Clinton
2 lbs. 11 oz.	Farm Pond Des Moines County	3-22	Dean A. Johnson Burlington
2 lbs. 9 oz.	Lake Rathbun Appanoose County	6-17	Stanley E. Maddy Mystic
2 lbs. 8 oz.	Iowa River Johnson County	4-30	Tracy Schreiner Cedar Rapids
2 lbs. 8 oz.	Mississippi River Allamakee County	9-14	LaVern Mead Oelwein

BASS, WIPER (Minimum — 4 lbs.)

*9 lbs. 13 oz.	Des Moines River Polk County	9-13	Fred Konrad Carlisle
9 lbs. 8 oz.	Des Moines River Polk County	9-1	Dick Kyras Perry
8 lbs. 12 oz.	Saylorville Polk County	8-28	Dick Kyras Perry
8 lbs. 11 oz.	Des Moines River Polk County	5-25	Jerry Little Ankeny
8 lbs. 8 oz.	Des Moines River Polk County	8-20	Hubert H. Pomeroy Granger
8 lbs. 3 oz.	Saylorville Polk County	5-1	David Wahl Ames
8 lbs. 1 oz.	Saylorville Polk County	8-27	Dick Kyras Perry
7 lbs. 14 oz.	Saylorville Polk County	8-13	Dick Kyras Perry
7 lbs. 14 oz.	Des Moines River Boone County	4-26	Dennis L. Smeltzer Woodward
7 lbs.	Saylorville Polk County	8-10	Dick Kyras Perry

BASS, YELLOW (Minimum — 3 1/4 lbs.)

— no entries

Weight Where Caught Date Name and Address

BLUEGILL (Minimum — 1 lb.)

2 lbs. 13 oz.	Twelve Mile Creek Union County	4-12	Don & Christi Arms Creston
1 lb. 6 oz.	Pond Polk County	2-1	Mark Ward Runnells
1 lb. 5 oz.	Frog Hollow Lake Fayette County	4-12	Dana A. Kellogg Oelwein
1 lb. 5 oz.	Bussey Lake Clayton County	3-6	Gary Olberding Dyersville
1 lb. 5 oz.	Rock Quarry Henry County	5-10	Dave Hightower Mt. Pleasant
1 lb. 5 oz.	West Okoboji Dickinson County	7-1	Russ Warburton Hastings, NE
1 lb. 4 oz.	Mississippi River Clinton County	7-6	Phil Bradley Camanche
1 lb. 4 oz.	Pond Appanoose County	1-16	Kelly Conrad Eddyville
1 lb. 3 oz.	Farm Pond Henry County	5-7	Jody Wilson Mt. Pleasant
1 lb. 3 oz.	Farm Pond Taylor County		Scott Oliver Irwin
1 lb. 3 oz.	Farm Pond Clarke County	5-30	Laura Palmer Weldon
1 lb. 3 oz.	Farm Pond Appanoose County	6-13	Scott Albright Waterloo
1 lb. 3 oz.	Mississippi River Allamakee County	4-10	David Lubbbers Elkader
1 lb. 3 oz.	Briggs Woods Hamilton County	10-17	Roy E. Hanson Jr. Fort Dodge
1 lb. 3 oz.	Farm Pond Mahaska County	10-16	Norman W. Van Wyk Pella
1 lb. 3 oz.	Farm Pond Appanoose County	6-13	Jason Albright Waterloo

BOWFIN (Minimum — 5 lbs.)

*10 lbs. 2 oz.	Mississippi River Allamakee County	5-17	Joel Morgan Dike
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Joel Morgan, record bowfin, 10 lbs., 2 oz.

BUFFALO (Minimum — 20 lbs.)

20 lbs. 4 oz.	West Okoboji Dickinson County	6-25	Tim Stellmach Milford
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BULLHEAD (Minimum — 2 1/2 lbs.)

4 lbs. 5 oz.	Farm Pond Decatur County	4-16	Lonnie M. Cowden Van Wert
4 lbs.	Farm Pond Warren County	6-09	Jon C. Johnson Des Moines
3 lbs. 10 oz.	Farm Pond Union County	4-12	Art Kirchoff Creston
3 lbs.	Farm Pond Madison County	3-22	Phil Imboden Earlham
2 lbs. 8 oz.	Farm Pond Adair County	3-24	Kevin Wormley Greenfield
2 lbs.	Viking Lake Montgomery County	6-13	David A. Govig Red Oak

CARP (Minimum — 25 lbs.)

34 lbs.	Mississippi River Dubuque County	3-7	Gary S. Hackbarth Robins
26 lbs. 9 oz.	Lower Gar Dickinson County	5-9	Troy Harris Ocheyedan
26 lbs.	Mississippi River Jackson County	5-10	Kristin Sjobakken Dubuque

Weight Where Caught Date Name and Address

CATFISH, BLUE (Minimum — 20 lbs.)
— no entries

CATFISH, CHANNEL (Minimum — 15 lbs.)

27 lbs.	East Okoboji	5-2	Everett Thum
26 lbs. 8 oz.	Dickinson County Des Moines River	6-25	Allyson Dave Wells
26 lbs. 1 oz.	Lee County Cedar River	8-7	Donnellson Jim Herzberg
21 lbs. 8 oz.	Black Hawk County Lake Icaria	7-11	Cedar Falls Terry Helver
21 lbs.	Adams County Farm Pond	4-26	Corning Mary Ann Ludwig
20 lbs. 3 oz.	Farm Pond Cass County	7-04	Carroll Bruce Baggenstoss
18 lbs. 12 oz.	Lake Icaria Adams County	4-25	Phillip Beckman Council Bluffs
18 lbs. 10 oz.			Bud Campbell Hastings
18 lbs. 8 oz.	East Okoboji Dickinson County	4-30	Jim Otto Spirit Lake
18 lbs. 8 oz.	West Okoboji Dickinson County	7-24	Dennis Edmonds Little Sioux
Released 33'	Deer Pond Polk County	3-8	John Shelley Des Moines

CATFISH, FLATHEAD (Minimum — 20 lbs.)

46 lbs. 13 oz.	Missouri River Woodbury County	8-15	Gary Hempey Sioux City
45 lbs.	Wapsipicon River Scott County	5-29	Wayne E. Thomson Long Grove
36 lbs. 4 oz.	West Fork Woodbury County	6-20	Gilbert W. Downing Branson
35 lbs. 8 oz.	Lee County	7-17	Derek Propper Farmington
35 lbs.	Des Moines River Polk County	2-7	Don Beck Des Moines
35 lbs.	Cedar River Benton County	8-15	Donald Trachta Vinton
34 lbs.	Skunk River Washington County	8-11	Mike & Myron Moore Oskaloosa
34 lbs.	Wapsipicon Clinton County	9-4	Jan Bartels Toronto
33 lbs. 13 oz.	Cedar River Black Hawk County	7-25	Dwayne Robinson Brandon
32 lbs.	Des Moines River Lee County	9-6	Blaine Martin Farmington

CRAPPIE (Minimum — 2 lbs.)

4 lbs.	Farm Pond Powersick County	5-16	Randy Fowler Marshalltown
2 lbs. 15 oz.	Viking Lake Montgomery County	5-19	Gerold Inman Randolf
2 lbs. 15 oz.	Farm Pond Hardin County	4-26	Brian Schwank Eldora
2 lbs. 12 oz.	Rathbun Lake Appanoose County	5-7	Rose Polacok Coal Valley, IL
2 lbs. 10 oz.	Sand Pit Sioux County	5-3	Joel Smith Maurice
2 lbs. 7 oz.	Red Rock Lake Marion County	5-12	Gary Kuiper Pella
2 lbs. 6 oz.	Decatur Lake Monona County	4-18	Glenn W. Ashby Jr. Omaha, NE
2 lbs. 6 oz.	Mississippi River Allamakee County	5-30	Lawrence Lucas Cresco
2 lbs. 5 oz.	Farm Pond Montgomery County	5-2	David Govig Red Oak
2 lbs. 4 oz.	Cedar River Black Hawk County	11-16	Jim Corwin Cedar Falls
2 lbs. 4 oz.	Farm Pond Warren County	4-28	Rich Andrus Carlisle
2 lbs. 4 oz.	Quarry Chickasaw County	2-19	Tony Wyle New Hampton
2 lbs. 4 oz.	Farm Pond Sioux County	5-6	Jeff Munro Maurice
2 lbs. 4 oz.	Farm Pond Plymouth County	5-2	John L. Ades Cherokee

DRUM, FRESHWATER (Minimum — 15 lbs.)
— no entries

GAR (Minimum — 10 lbs.)
— no entries

MUSKIE (Minimum 15 lbs. or 40")

37 lbs.	West Okoboji Dickinson County	7-11	Tony Schmillen St. James
31 lbs.	Big Spirit Lake Dickinson County	8-3	Spirit Lake Dale D. Cooklin
27 lbs.	Spirit Lake Dickinson County	7-19	Rodney Hartman Aplington
25 lbs. 14 oz.	Lake Okoboji Dickinson County	9-24	Christopher Jon Arnolds Park
24 lbs. 9 oz.	West Okoboji Dickinson County	8-20	Bernard Curry Carlisle
24 lbs. 8 oz.	Big Spirit Lake Dickinson County	8-13	Andy Irwin Pierson
24 lbs. 5 oz.	Big Spirit Lake Dickinson County	5-3	Kim R. Brown Ankeny
22 lbs. 11 oz.	Big Spirit Lake Dickinson County	6-13	Duane L. Nelson Jackson
20 lbs. 15 oz.	Shelbrock River Butler County	3-11	Douglas A. Blunt Charles City
20 lbs. 9 oz.	East Okoboji Dickinson County	5-28	Richard Koser H. Dodge
Released 48"	Spirit Lake Dickinson County	7-6	Mauri Muhm Spirit Lake
Released 46"	Big Spirit Lake Dickinson County	8-21	J.C. Frakes Cherokee
Released 44-1/2"	Big Spirit Lake Dickinson County	8-21	J.C. Frakes Cherokee
Released 43"	Clear Lake Cerro Gordo County	6-24	Dick Crail Algona
Released 43"	Spirit Lake Dickinson County	7-8	Dean S. Rosset Skokie, IL

MUSKIE, TIGER (Minimum — 15 lbs. or 40")

*25 lbs. 4 oz.	Lake Rathbun Appanoose County	5-16	Mick Brock Albia
23 lbs. 12 oz.	Big Creek Lake Polk County	4-9	Gary Gabel Ankeny
23 lbs. 2 oz.	Hawthorn Lake Mahaska County	6-21	Joyce Woodard Oskaloosa
19 lbs. 14 oz.	Lake Rathbun Appanoose County	5-15	Patricia Fanning Dike
17 lbs. 7 oz.	Lake Rathbun Appanoose County	6-20	Phillip F. Widmar Centerville
16 lbs. 2 oz.	Lake Rathbun Appanoose County	7-6	Richard Pauley Mystic
15 lbs.	Hawthorn Mahaska County	7-14	Jeffrey Rhinehart Brooklyn



Mick Brock, record tiger muskie, 25 lbs., 4 oz.

NORTHERN PIKE (Minimum — 10 lbs. or 34")

20 lbs. 15 oz.	Long Lake Allamakee County	3-7	David L. Tank New Hampton
18 lbs. 6 oz.	West Okoboji Dickinson County	1-2	Calvin Benz Raytown, MO
17 lbs. 10 oz.	Blue Lake Monona County	3-27	Gary Holbrook Onawa
16 lbs. 8 oz.	Frenchtown Lake Clayton County	1-18	Kevin Wiegler Central City
16 lbs. 2 oz.	Five Island Lake Palo Alto County	2-7	Archie J. Banwart Rodman
15 lbs. 14 oz.	Big Spirit Lake Dickinson County	7-20	Rick Petersen Spencer
15 lbs. 8 oz.	Linn Grove Dam Buena Vista County	4-16	B. Anderson & Aaron Kohn Cherokee
15 lbs.	Tuttle Lake Emmet County	1-18	Joe Yager Woodward
14 lbs. 14 oz.	Center Lake Dickinson County	3-19	Dwane Krogman Lismore, MN
14 lbs. 12 oz.	Blue Lake Monona County	5-13	Robert J. Vacek Omaha, NE

PADDLEFISH (Minimum — 25 lbs.)

65 lbs.	Mississippi River Jackson County	12-10	Charles Boyles Cedar Rapids
58 lbs.	Mississippi Lock 16 Muscatine County	6-4	Tom Laeser Muscatine
46 lbs.	Mississippi River Clayton County	7-12	Todd Langel Luxemburg
45 lbs.	Mississippi River Jackson County	12-10	David M. Boyles Urbana
41 lbs.	Mississippi River Jackson County	12-10	David M. Boyles Urbana
40 lbs.	Mississippi River Clayton County	7-3	Paul D. Christianson Guttenberg
39 lbs.	Mississippi River Jackson County	12-30	Robert L. Biedenbach Jr. Walker
39 lbs.	Mississippi River Jackson County	12-11	Earl Boyles Junction City, KS
39 lbs.	Mississippi River Jackson County	12-11	Earl Boyles Junction City
37 lbs.	Mississippi River Jackson County	2-21	Maurice Anderson Bellevue
37 lbs.	Mississippi River Jackson County	12-30	Robert L. Biedenbach Jr. Walker

PERCH (Minimum — 1 lb.)

1 lb. 12 oz.	Fish Lake Allamakee County	1-5	Thomas D. Fleming Cedar Rapids
1 lb. 9 oz.	Farm Pond Oswego County	2-1	Ross Hinkey Hartley
1 lb. 8 oz.	Mississippi River Allamakee County	4-3	Jim Tope West Union
1 lb. 7 oz.	Mississippi River Allamakee County	4-11	Stanley Tope West Union
1 lb. 5 oz.	Mississippi River Allamakee County	2-26	George Paulson Harpers Ferry
1 lb. 4 oz.	Ingam Lake Emmet County	2-13	Rodney Dalen Estherville
1 lb. 4 oz.	Mississippi River Allamakee County	2-14	George Paulson Harpers Ferry
1 lb. 4 oz.	Mississippi River Allamakee County	2-28	George Paulson Harpers Ferry
1 lb. 4 oz.	Mississippi River Allamakee County	2-11	George Paulson Harpers Ferry
1 lb. 4 oz.	Busey Lake Clayton County	1-25	Scott Sippel Dubuque
1 lb. 4 oz.	Fish Lake Allamakee County	1-2	Thomas D. Fleming Cedar Rapids

Weight Where Caught Date Name and Address

SAUGER (Minimum — 2 1/2 lbs. or 18")

5 lbs. 5 oz.	Mississippi River Linn County	11-25	James C. Sly Davenport
5 lbs. 4 oz.	Missouri River Woodbury County	11-5	Edward Peter Sioux City
5 lbs.	Mississippi River Allamakee County	9-28	Butch Mead Delwin
4 lbs. 15 oz.	Missouri River Woodbury County	2-25	Douglas D. Carlson Sioux City
4 lbs. 13 oz.	Missouri River Woodbury County	10-12	Mike Schroeder Sergeant Bluff
4 lbs. 8 oz.	Big Sioux River Woodbury County	3-03	Steve Janmin Sergeant Bluff
4 lbs. 8 oz.	Missouri River Woodbury County	11-20	Wille L. Dean Sioux City
4 lbs. 8 oz.	Little Sioux River Cherokee County	11-20	Albert Leonard Quimby
4 lbs. 4 oz.	Missouri River Woodbury County	3-7	Terry Kronmehoeck Sioux City
4 lbs. 4 oz.	Mississippi River Dubuque County	10-22	Richard Hess Dubuque

SHEEPSHEAD (Minimum — 15 lbs.)

22 lbs. 12 oz.	Mississippi River Jackson County	2-6	Harry Hauger Maquoketa
17 lbs. 9 oz.	Mississippi River Allamakee County	5-24	Jon L. Egan Monona
17 lbs. 8 oz.	Mississippi River Clayton County	8-16	Ralph Livingston Guttenberg

STURGEON, SHOVELNOSE (Minimum — 3 lbs.)

4 lbs. 7 oz.	Cedar River Linn County	4-18	Bill Demory Cedar Rapids
3 lbs. 12 oz.	Mississippi River Dubuque County	5-8	Dan Freisburger Dubuque

SUCKER (Minimum — 4 lbs.)

6 lbs. 2 oz.	Big Sioux River Plymouth County	4-11	Ritch A. Stolpe Sioux City
6 lbs.	Big Sioux River Plymouth County	4	Ritch A. Stolpe Sioux City
4 lbs. 2 oz.	Maquoketa Jones County	5-16	Jay D. Appleby Monticello

SUNFISH, REDEAR (Minimum — 1 lb.)

1 lb. 8 oz.	Offet Creek Lake Tama County	7-15	Stacy W. Bazal Vining
1 lb.	Viking Lake Montgomery County	6-16	Conny Farnum Red Oak

TROUT, BROOK (Minimum — 1 lb. or 13")

Released 14"	Spring Branch Delaware County	4-17	Robert J. Hoffman Swisher
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TROUT, BROWN (Minimum — 3 lbs. or 18")

11 lbs. 5 oz.	Silver Creek Allamakee County	7-5	Tim Bohl Lake Mills
10 lbs. 4 oz.	North Bear Creek Allamakee County	9-19	Scott Schutte Monona
9 lbs. 6 oz.	Big Mill Jackson County	6-05	Terry J. Davison Davenport
9 lbs. 4 oz.	Little Turkey Delaware County	2-14	Paul Steger Dyersville
8 lbs. 12 oz.	Richmond Spring Delaware County	8-6	Harry J. Johnson Dubuque
8 lbs. 10 oz.	Little Turkey Delaware County	3-23	Paul Steger Dyersville
8 lbs. 4 oz.	Richmond Springs Muscatine County	8-19	Ronald O. Wagl Manchester
8 lbs.	Waterloo Creek Allamakee County	11-7	Carol Henkel Dubuque
7 lbs. 15 oz.	Fountain Springs Delaware County	8-13	Harold L. Janss Alburnett
7 lbs. 8 oz.	Sny Magill Clayton County	7-14	Stephen A. Arndt Davenport
7 lbs. 8 oz.	Ensign Hollow Clayton County	6-09	Pamela A. Wilcox Waterloo

TROUT, RAINBOW (Minimum — 1 lb. or 18")

15 lbs.	Waterloo Creek Allamakee County	4-9	Fred Daugs Monona
15 lbs.	South Bear Winnebago County	5-7	Duane R. Clark Shell Rock
14 lbs. 12 oz.	Silver Lake Allamakee County	5-13	Barb Sanford Davenport
14 lbs. 6 oz.	Brut River Winnebago County	5-1	Norris Youngblood Decorah
14 lbs.	Bohemian Winnebago County	4-29	John R. Will Spillville
14 lbs.	North Bear Creek Winnebago County	5-23	Jerry Huisinga Clinton
14 lbs.	North Bear Creek Winnebago County	4-3	Fred Daugs Monona
13 lbs. 12 oz.	Waterloo Creek Allamakee County	6-9	Richard A. Herman Centerville
12 lbs. 8 oz.	North Bear Creek Winnebago County	6-5	Gregory Chis Des Moines
12 lbs. 3 oz.	North Bear Creek Winnebago County	6-11	Jack Hartwiggen Bethesda

WALLEYE (Minimum — 8 lbs. or 28")

12 lbs. 9 oz.	Cedar River Black Hawk County	3-31	John Muggge Cedar Falls
12 lbs.	Cedar River Black Hawk County	1-2	Pete Breitbach Gilbertville
12 lbs.	Black Hawk County Mississippi River	10-19	Brian Niday Dubuque
11 lbs. 14 oz.	Saylorville Polk County	4-5	Dick Kyras Ferry

SOUTHWEST

by Joe Schwartz

Weight	Where Caught	Date	Name and Address
11 lbs. 5 oz.	Des Moines River Boone County	2-24	Brent Herzberg Boone
11 lbs. 1 oz.	Des Moines River Palo Alto County	12-9	Robert Sigsbee Algona
11 lbs.	Des Moines River Polk County	3-24	Kim R. Brown Ankeny
11 lbs.	Des Moines River Polk County	4-8	Fred Warren Norwalk
10 lbs. 11 oz.	Big Creek Polk County	2-1	Jimmie D. Thompson Ames
10 lbs. 10 oz.	East Okoboji Dickinson County	12-16	Glenn L. Somers Milford
10 lbs. 10 oz.	West Okoboji Dickinson County	1-9	Larry Eckman Arnolds Park

WHITE AMUR (Minimum—25 lbs.)
—no entries

IOWA ALL-TIME RECORD FISH

Weight	Length	County Where Caught	Date	Angler
BASS (Largemouth) 10 lbs. 12 oz.	23 1/2	Lake Fisher Davis County	5-84	Patricia Zven Davenport
BASS (Ocean Striped) 9 lbs. 4 oz.	29	Lake Rathbun Appanoose County	7-83	Richard Pauley Mystic
BASS (Rock) 1 lb. 8 oz.	10 1/2	Mississippi River Dubuque County	6-73	Jim Driscoll Dubuque
BASS (Smallmouth) 6 lbs. 8 oz.	21 3/8	Spirit Lake Dickinson County	5-79	Rock Pentland Estherville
BASS (White) 3 lbs. 14 oz.	20	West Okoboji Dickinson County	5-72	Bill Born Milford
BASS (Wiper) 9 lbs. 6 oz.	25 3/4	Des Moines River Polk County	9-87	Dick Kyras Perry
BASS (Yellow) 1 lb. 8 oz.	13 1/2	Cedar River Black Hawk County	9-86	Timothy Dolan Waterloo
BLUEGILL 3 lbs. 2 oz.	12 7/8	Farm Pond Madison County	7-86	Phil Algreen Earlham
BOWFIN (Dogfish) 10 lbs. 2 oz.	30 1/2	Mississippi River Allamakee County	5-87	Joel Morgan Dike
BULLHEAD 5 lbs. 8 oz.	22	Farm Pond Hamilton County	10-86	Michael Hurd Ellsworth
BUFFALO 51 lbs.	45	East Okoboji Dickinson County	4-86	Jeff Dues Sibley
CARP 50 lbs.	44	Glenwood Lake Mills County	5-69	Fred Hougland Glenwood
CATFISH (Blue) 30 lbs. 11 oz.	39 3/4	Des Moines River Lee County	7-86	Steve Proper Farmington
CATFISH (Channel) 31 lbs.	37	Gravel Pit Cedar County	6-86	Kyle Gettschick Lowden
CATFISH (Flathead) 62 lbs.	46	Iowa River Johnson County	7-65	Roger Fairchild Coralville
CRAPPIE 4 lbs. 9 oz.	21 1/4	Green Castle Lake Marshall County	5-81	Ted Trowbridge Marshalltown
DRUM (Freshwater) 46 lbs.	38 1/2	Spirit Lake Dickinson County	10-62	R. F. Farran Clarion
MUSKELLUNGE 38 lbs. 5 oz.	48	West Okoboji Dickinson County	12-86	Dan Dickinson Spirit Lake
TIGER MUSKIE 25 lbs. 4 oz.	45	Lake Rathbun Appanoose County	5-87	Mick Brock Albia
NORTHERN PIKE 25 lbs. 5 oz.	45	West Okoboji Dickinson County	2-77	Allen Forsberg Albert City
PADDLEFISH 107 lbs.	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 lbs. 8 oz.	25	Missouri River Woodbury County	10-76	Mrs. William Buser Sloan
SHEEPSHEAD 46 lbs.	38 1/2	Spirit Lake Dickinson County	10-62	R.F. Farran Clarion
STURGEON (Shovelnose) 12 lbs.	33	Des Moines River Van Buren County	4-74	Randy Hemm Douds
SUCKERS (Moc.) 15 lbs. 1 oz.	32 1/4	Missouri River Monroe County	9-83	Glen E. Dittman Onawa
SUNFISH (Redear) 1 lb. 13 oz.	10 1/4	Lake Geode Henry County	9-67	Dale Corrick Burlington
TROUT (Brook) 2 lbs. 14 oz.	17	Canoe Creek Winneshiek County	3-81	Lyle Brown, Jr. Decorah
TROUT (Brown) 15 lbs. 4 oz.	31	French Creek Allamakee County	7-84	Fred Dausg Minneapolis, Mn.
TROUT (Rainbow) 19 lbs. 8 oz.	35	French Creek Allamakee County	7-84	Jack Reuter Waterloo
WALLEYE 14 lbs. 8 oz.	30 1/2	Des Moines River Polk County	9-86	Gloria Eoratti Ankeny
WHITE AMUR 40 lbs.	39	Cold Springs Cass County	9-82	John Johnson Oakland

Crappie

Fishing for this popular panfish will be excellent in many of our lakes again this year. The biggest and best fish will come from the two central Iowa flood control reservoirs while our most consistent catches will be from small public fishing lakes.

Red Rock (Marion County) and Saylorville (Polk County) both have excellent populations of slab-side crappies, but fishing success will depend on springtime water quality. Best results depend on clear water. Fish up to 15 inches are available. Roberts Creek (Marion County) will be good if Red Rock fills, backs into this sub-impoundment and replenishes the crappie populations.

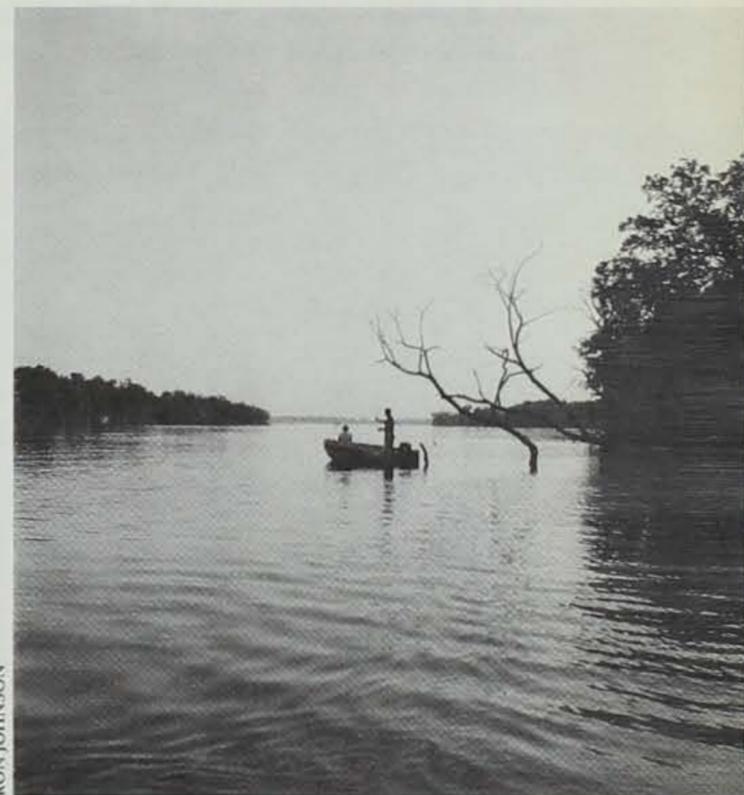
Popular fishing lakes where crappies have been taken in the past will be good again this year with a few deletions because of changes in year class strengths. Big Creek (Polk County) will not be the crappie producer this year it has been in the past. This popular Des Moines area lake has an abundance of crappies, but most measure only seven inches. There are a few larger ones so some serious sorting will be needed. Icaria (Adams County) and Anita (Cass County) will be the best crappie fishing in southwest Iowa this year.

Icaria was drawn down in fall 1987 for construction work and will be refilled this spring. How and when the lake fills will depend on rainfall amounts. This may have an effect on crappie fishing success. Anita has produced excellent catches of crappie the past couple of years and 1988 should be no exception. Crappies at Anita start biting immediately after ice-out.

Fish close to shore in spring and early summer, especially around submerged sticks, rocks or tree stumps. Move to deeper water as the season progresses and the water warms. Try protected coves, the face of the dam or marked fishing reefs. Weather and runoff play an important role in spring crappie fishing. Fishing is best when water temperatures climb

steadily and passing cold fronts do not send fish back to deeper water. Wet springs often cause muddy water and poor fishing. Best baits are small leadhead jigs and live minnows.

Other lakes with good crappie populations are Hickory Grove (Story County), Thayer, Green Valley and Twelve Mile (Union County), Nine Eagles (Decatur County), West Lake Osceola (Clarke County) and Three Fires (Taylor County). For the most part, fish caught in these lakes will range from 8 to 10 inches; although, most have a few larger fish. Green Valley fish are somewhat smaller, but



RON JOHNSON

they are very abundant and easy to catch. Rocks along the face of the dam are especially productive during the spring spawning run. Fishing pressure at Three Fires has been low in recent years because of its proximity to Icaria and spotty fishing success due to muddy water. Do not rule out this lake for crappies up to 12 inches if we receive moderate spring runoff and the water remains clear. Small lakes like Thayer and Nine Eagles tend to have good crappie fishing earlier and for shorter periods than the big lakes. Last year the large crappies were caught earlier in the season and the smaller fish later. This was especially noticeable at Icaria and may be true again this year. It is something to keep in mind when planning a trip.

1 9 8 8 FISHING FORECAST

Bluegill

I have been writing this fishing forecast for 10 years now, and this is the first year I can list five lakes where "jumbo" bluegills are abundant. Usually Anita produces this sporty panfish in sizes up to 10 inches and this year it will do so again. Two new lakes, Twelve Mile and Little River, will also see many large bluegills taken. Late fall anglers and ice fishermen caught many fish in 1987, and I expect spring fishermen to do the same. DeSoto Bend (Harrison County) was recently renovated and stocked and will produce bluegills of a size anyone will be happy to take home. Try the edges of its abundant weed beds. The final area is Walnut Creek Marsh (Ringgold County). This 65-acre body of water was built primarily for waterfowl and furbearers, but offers surprisingly good fishing for big bluegills. It is very weedy and best success is in early spring before vegetation becomes too abundant. Other good bluegill lakes include Big Creek, Viking (Montgomery County), Hickory Grove, Three Fires, Don Williams (Boone County) and Mormon Trail (Adams County). Fish in these lakes range from six to eight inches.

Spring and early summer are by far the best periods to catch bluegills because they congregate in shallows to spawn. Spawning activity peaks in southern Iowa around Memorial Day. Search water from two to six feet deep to locate spawning beds. Fish on spawning beds can be taken with live bait, small jigs or flies.

As the season progresses, big bluegills abandon the shallows and move to deeper water where they spend the summer. They can be found along the edges of weeds or in deep coves. Many times they are on humps or areas that break old creek channels or other deep water areas. Summer bluegills are usually found in water 10 to 20 feet deep. They can

often be taken by drifting a boat with the wind, allowing the bait or lure to be suspended at 10 to 15 feet.

Bass

All of the lakes and ponds in the region have largemouth bass populations and many of the older lakes have the potential of producing a trophy bass for the patient angler. Lakes Anita, Nine Eagles, Hickory Grove, Viking, Green Valley and Manawa (Pottawattamie) all have good-sized bass up to eight pounds. Green Valley is unusual for Iowa in that it has an 18-inch length limit on bass. If you want to fish one of the best bass lakes in the state, try Green Valley. There are several lakes that are new or recently renovated that have good populations of smaller bass up to 16 inches. Twelve Mile, Little River, West Lake Osceola, Ahquabi (Warren County), Rock Creek, DeSoto Bend and Three Fires are good lakes to fish if you prefer to catch a lot of bass rather than a few lunkers. Both federal reservoirs have good bass populations, but bass tend to be difficult to catch because of variable water conditions. Red Rock can be especially good at times. A bass tournament there last year ended with 58 of 60 boats bringing in bass. That's an exceptionally high percentage for a tournament.

Walleye

There are four lakes and two large reservoirs in southwest Iowa that will produce good numbers of walleye this year. Icaria and Big Creek will produce fish up to nine pounds with the average keeper about two pounds. Icaria has a large year class of fish around 10 inches which will be caught frequently, but are a little small to keep. Twelve Mile and Little River have lots of walleye, but most are 10 to 15 inches. Both lakes have some fish which will top out at four pounds.

River fishing for walleye can be excellent at times. The best places are below Saylorville and Red Rock dams and in the Des Moines River above Saylorville to the Boone County line. Several fishing riffles in county parks or about anywhere there is rock on the bottom prove to be the best habitat. It should be good again this



DNR PHOTO

year with twisters being a preferred lure.

Bullheads

Several lakes have large populations of bullheads, but they tend to be on the small size. Most are six to eight inches, and if you are interested in catching a bucketful, you might try Prairie Rose (Shelby County), Rock Creek or Green Valley Lakes. Bigger bullheads can be caught at Twelve Mile and Little River Lakes. Most of these fish are in the 10- to 12-inch range.

Channel Catfish

The southwest region of Iowa abounds with lakes and streams where channel catfish can be caught. The Des Moines River is one of the best, and summer fishing in any of the slack-water area pools or around snags will always produce a nice stringer of one- to one and one-half-pound "cats." One of the best places in the district to fish for especially nice catfish is immediately below Saylorville dam in the fall. Other rivers are also good producers of catfish. You might try the Raccoons, Nishnabotna or Grand for a catfish river trip. Wading the smaller rivers from pool to pool is often productive, but floating in a small boat or canoe when water levels permit is highly effective and you can expect to take a nice stringer of "cats."

NORTHEAST

by David Moeller

Walleye and Sauger

Walleye and sauger fishing in northeast Iowa means river fishing. It also means lots of fish including some real trophy-sized lunkers. The Mississippi River is the main walleye producer; however, several inland rivers will produce some fine stringers also. What the inland rivers lack in numbers, they make up for in sizes of fish. While the majority of walleye run between two and four pounds, individual fish up to 12 pounds come out of each of these rivers annually. These better inland rivers include the Cedar (Black Hawk, Bremer, Chickasaw and Floyd Counties), the Shell Rock (Butler, Bremer and Floyd Counties), the West Fork Cedar (Butler County) and the Wapsipicon (Buchanan County).

The smaller sauger is found only in the Mississippi River; however, populations are very large. The majority of sauger caught range from three-fourths to two pounds, with an occasional fish up to three and one-half pounds.

Your best opportunity for a trophy-sized walleye or sauger is in the early spring, just after ice-out. Just prior to spawning, adult walleye and sauger congregate in large numbers in the tailwaters below dams. These fish seem eager to fill their bellies and limits of large fish are common. Working your bait or lure right on the bottom is important. Jigs tipped with a minnow, sonars, leadheads with a

twister tail and minnows on a three-way rig work well.

From early summer to fall, the walleye frequently hang out on the rock wing dams, riprap areas and other natural rocky substrates. Crank baits, minnows or artificial minnows on a three-way rig, twister tails and nitecrawlers bounced on the rocks will generally do the trick.

The late fall and winter months again find the walleye and sauger in the tailwater areas. Even though the river freezes over in the winter months, the tailwater areas below the dams on the Mississippi River remain open and boat anglers who brave the cold are often rewarded with some of the greatest walleye and sauger fishing in the Midwest.

Most of the lakes in the region provide good to excellent catfishing because all are stocked annually with hatchery fish. Several of the lakes with bigger fish are Green Valley, Icaria, Viking and Big Creek.

A couple of the newer lakes have been producing catfish and are definitely worth a try. They include West Lake Osceola, Little River and Twelve Mile. Twelve Mile received an initial stocking of 96,000 fish and has done exceptionally good. Last fall bluegill fishermen were pestered by one and one-half to two and one-half pounders.

Favorite baits for catfish include sour shad immediately after ice-out, and prepared stink baits, nightcrawlers, chicken livers and cut fish later in the season. Best fishing is after dark.

Other Species

Northern pike fishing can be exceptional below Red Rock and Saylorville early in the spring. Use twisters with a steel leader for best success.

Flathead catfishing is good on all of our large rivers. On the Des Moines try below Saylorville, above Saylorville to the Boone County line and in Red Rock Lake. In the past several years, the Missouri River has produced lots of flatheads along its full length. Best fishing is immediately off the end of wing dams using green sunfish for bait.

Wipers, a hybrid between white bass and ocean striped bass, continue to provide good fishing from Saylorville upstream to Fort Dodge, although, the best fishing is below Saylorville dam. Best months for fishing are April and May if the water is low. June and September are also good. The last few years four to five pounders were common. Leadhead jigs and twister tails work well for this fish.

Tiger muskies have been stocked in all of our state and county public fishing lakes larger than 100 acres. Occasionally large fish are hooked each year by surprised crappie, walleye or bass anglers. If you specifically want to catch a tiger muskie, try Lake Manawa, Nine Eagles or Little River. The largest fish are in Lake Manawa.

Joe Schwartz is the southwest district fisheries supervisor located in Lewis.



JERRY LEONARD

Trout

The first signs of spring create a stir in the hearts of many Iowa anglers with visions of crystal-clear streams flowing over gravel bottoms, fish dimpling the surface of a secluded pool as they feed on insects, and the feel of a strike and ensuing leaps of the hooked fish. This is Iowa trout fishing and anglers are expected to enjoy another fine year in 1988. The action gets into full swing in early April with the first stockings of pan-size rainbow and brown trout. Over

1 9 8 8 FISHING FORECAST

325,000 one-third to one-half pound trout will be distributed in 50 catchable streams in 1988. Some streams will be stocked solely with brown trout, others with rainbows only and the remainder with a mixture of the two species. A few lucky anglers will tie into one of 300 lunker-size trout ranging from 3 to more than 15 pounds scattered in these streams. All the catchable streams will be stocked through October. Late fall stockings have proven popular with anglers, and 12 of the catchable streams will also be stocked in November. Some of the better catchable streams you will want to try this year include North and South Bear, Trout River, Coldwater, Waterloo, French, Bloody Run, Sny Magill, North Cedar, Turkey River, Joy Springs, Grannis, Richmond Springs, Fountain Springs, Little Turkey, Baileys Ford, Big Mill and Swiss Valley.

For the trout angler who wants to get away on a remote stream section and test his or her skills against a large brown trout, the special regulation or put-and-grow streams are just the ticket. Brown trout populations in these streams are maintained with annual plants of brown trout fingerlings. Iowa's waters, as the land, are very productive, and the small browns grow rapidly, often to three or four pounds in just four or five years. There are no special regulations on the put-and-grow streams, but most are on private property, and landowner permission to fish these streams is required. The special regulation stream sections are mostly on public land, have a 14-inch minimum length limit on brown trout and angling is allowed only with artificial lures. Extra effort and patience on these streams may just reward you with the brown trout of a lifetime.

Many people think trout are not very smart because they have been raised in a hatchery. This misconception



WAYNE LONNING

has led to many unsuccessful trout angling trips. The crystal clear water gives trout a distinct visual advantage in detecting the presence of anglers or an improperly presented bait or lure. Avoid stream sections containing numerous anglers. Move quietly, as far back from the stream edge as possible and work your bait or lure in a downstream direction. Use light line — four-pound test is an excellent choice. Also, vary the baits and lures you use until you find the one that works best.

Beginning trout anglers, as well as veterans, find the "Iowa Trout Fishing Guide" a valuable aid. This free brochure is available from DNR offices, county recorders and outlets where trout stamps are sold.

Bluegill

Northeast Iowans catch more bluegills than any other species of fish. No wonder, as bluegills are plentiful, easy to catch and are unexcelled on the dinner table. The Mississippi River is undoubtedly the biggest producer of bluegills; however, several inland lakes will yield their share of "gills" also. Some of the better areas this year will be Sweet Marsh (Bremer County), Lake Meyers (Winneshie County), Volga Lake, Meyer Lake, George Wyth Lake (Black Hawk County) and virtually any of the many backwater areas of the Mississippi River. Fishing for bluegills during the spring spawning season means big fish and lots of fast action. Look for these spawners in the shallow bays, particularly near beds of

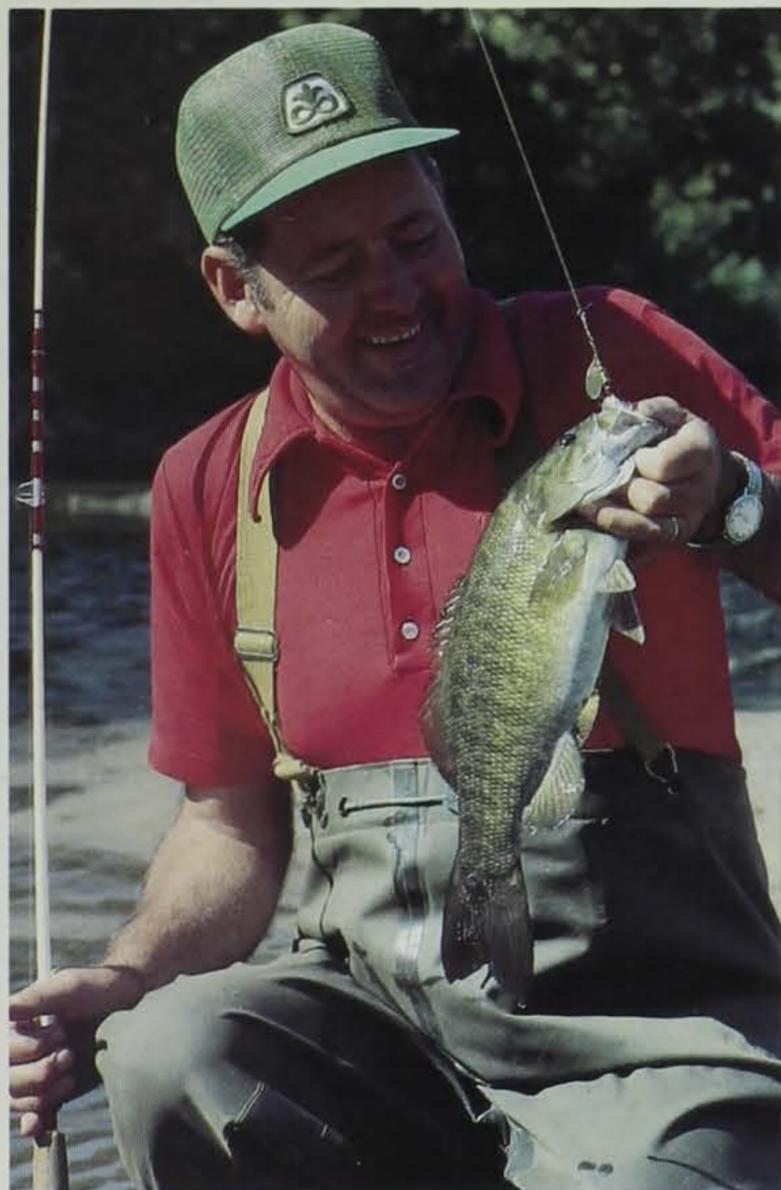
vegetation. During the summer months, drift fishing is an excellent method of locating them on the inland lakes. On the Mississippi, look for "gills" by dropping a chunk of worm among the rocks on wing dams. Garden worms seem to work even better than nitecrawlers during these warm months.

To get the most enjoyment out of bluegill fishing, use ultralight gear or better yet, a fly rod. Bluegills put up a mighty fight for their size and provide the greatest angling excitement when fished with light gear.

Bluegills also provide lots of fun and piles of fillets during the ice-fishing season. With a small amount of inexpensive ice fishing equipment, you can extend your bluegill fishing and eating throughout the entire year.

Channel Catfish

Channel catfish are a readily available and highly sought-after species in northeast Iowa. Periodic surveys on the larger inland rivers continue to show very high catfish populations. Most run between one and three pounds, but "cats" exceeding six pounds are not uncommon. Some of the better catfish rivers include the Maquoketa below Manchester (Delaware, Jones and Jackson Counties), the Wapsipinicon (Buchanan County), the Cedar (Black Hawk, Bremer, Chickasaw and Floyd Counties), the Shell Rock (Butler County), the Turkey and Volga (Clayton County) and the Upper Iowa below the lower dam (Winneshie and Allamakee Counties). A canoe is a



KEN FORMANEK

County), Meyer Lake, George Wyth Lake, Casey Lake, Lake Henricks (Mitchell County) and Lake Meyers. Anglers are reminded that the daily catch limit for catfish is eight from lakes, 15 from inland streams and no catch limit on the Mississippi River. The catfish possession limit for both lakes and inland streams is now 30. There is no possession limit on the Mississippi.

Anglers are encouraged to get out and fish our abundant catfish populations, and in most cases, you will not have to travel far to get into the action. There is nothing better than a skillet full of catfish, rolled in cornmeal and flour and fried golden brown.

real help in fishing the inland rivers. It gets you away from the more heavily fished access areas and allows you to fish many more catfish hotspots. Simply anchor above a deep pool containing lots of snags and brush and slowly drift your bait into or slightly above the pool. You better not lay your rod down unless you want to see it jerked into the river.

Catfishing on the Mississippi has been excellent the past two years and prospects for another fine year look good. The mouths of the tributary streams are often catfish hotspots in the early spring. Most catches of good numbers of large channel cats occur during the early summer along the heavily riprapped banks as catfish get into their spawning period. Later in the summer, fish the big river's wing dams and running cuts and channels.

Catfish rarely reproduce in lakes; thus, large fingerling channel catfish are stocked annually to maintain good populations. Some fine catfishing is available at Volga Lake (Fayette

Smallmouth Bass

Smallmouth bass provide some of the most exciting fishing activity many anglers ever experience. "Smallies" love to attack lures, and when hooked, put on an aerial display matched by no other fish in Iowa. These sporty, hard-fighting fish are found in all the major northeast Iowa inland rivers, as well as some of their better quality tributary streams. The key to catching smallmouth bass lies in locating their preferred habitat — stream sections containing gravel, rocks and boulders. The rocks and boulders not only provide structure which smallmouth bass prefer, but also harbor one of their favorite foods — the crayfish. Because the smallmouth is so aggressive and easy to catch, populations were becoming depleted due to excessive angler harvest. The establishment of a 12-inch minimum length limit on all interior streams and border rivers (except the Mississippi River bordering Wisconsin) several years ago has led to a resurgence in smallmouth bass popu-

lations. On most of the streams expect to catch large numbers of sublegal length smallmouths with a few exceeding the 12-inch limit. Each year streams will yield a few smallmouths up to four pounds.

Some of the better stream sections you will want to try are the Cedar River from Otranto to St. Ansgar and from Mitchell to Floyd; the Yellow River below Volney; the Volga River below Fayette; and the Upper Iowa River from Lime Springs to Kendallville and from Decorah to Highway 76. The Upper Iowa River between Kendallville and Decorah contains excellent populations of smallmouth bass, but during the warm summer months you may encounter high canoe and inner tube traffic that can affect angling success.

Many smallmouth bass enthusiasts will want to fish a portion of the Maquoketa River in Delaware County in 1988 and future years. A four and one-half mile segment of the Maquoketa River from the Lake Delhi Dam to the first county road bridge downstream is now a no-kill stream for black bass. All bass (smallmouth and largemouth) caught in this stream segment must be immediately released. It is anticipated that this bass population will develop good numbers of smallmouths between one and one-half and three pounds and provide lots of fishing action to those anglers who enjoy the thrill of hooking, playing and releasing a real champion — the smallmouth bass.

Largemouth Bass

The Mississippi River backwater lakes and sloughs contain the best largemouth bass populations; however, several inland lakes will provide some fine bass fishing action also. The "Ole Miss" is known for its large number of largemouths ranging between one and two and one-half pounds. Bass above four pounds, however, are quite rare. Some of the better Mississippi River backwaters include the Lansing and New Albin Bottoms in Pool 9; Bagley Bottoms, Sny Magill Bottoms and Harpers Slough in Pool 10; and the Bertom and McCartney Lakes in Pool 11. There is not a minimum size limit on bass in the Iowa-Wisconsin boundary

1 9 8 8 FISHING FORECAST

waters of the Mississippi River listed above; however, there is a 12-inch minimum length limit on black bass on the Iowa-Illinois boundary waters. Some of these better bass backwaters include Frentress, Tippy's and Sunfish Lakes in Pool 12; Densmore and Blake's Lakes in the Green Island area, Lainsville Slough, Browns Lake and the Sabula Bottoms in Pool 13; and Joyce's Slough, Rock Creek area, and the LeClaire Canal in Pool 14.

Several inland lakes will also produce some fine largemouth catches. Lake Meyers (Winneshiek County), Sweet Marsh (Segment B in Bremer County), Lake Hendricks (Howard County) and Meyer Lake (Black Hawk County) are the best bets for 1988. Both Meyer Lake and Lake Meyers are relatively new fisheries with some bass exceeding the 15-inch length limit. Lake Hendricks has an excellent population of bass in the 16- to 18-inch range with a fair number exceeding the four-pound mark. George Wyth Lake (Black Hawk County) annually yields a few lunkers up to eight pounds. Two smaller lakes you might want to try are Airport Lake (Chickasaw County) and Wilson Grove (Bremer County).

The most successful bass fishing periods occur in May and early June when the water temperature warms from 55 to 62 degrees Fahrenheit. The bass are then using shallow water habitats and are generally feeding most actively. Bass almost always seek out structure, so concentrate your effort in those areas containing dead-fall trees, beds of vegetation, stumps, rocky points or riprap banks. Work your bait or lure as close to the structure as possible; if you do not have a few hang-ups, you are not fishing close enough to the structure. Crank baits, spinner baits, plastic worms, pig-and-jig and spoons with a pork rind strip are proven bass lures. Crayfish, nitecrawlers and

large shiners are effective for natural baits.

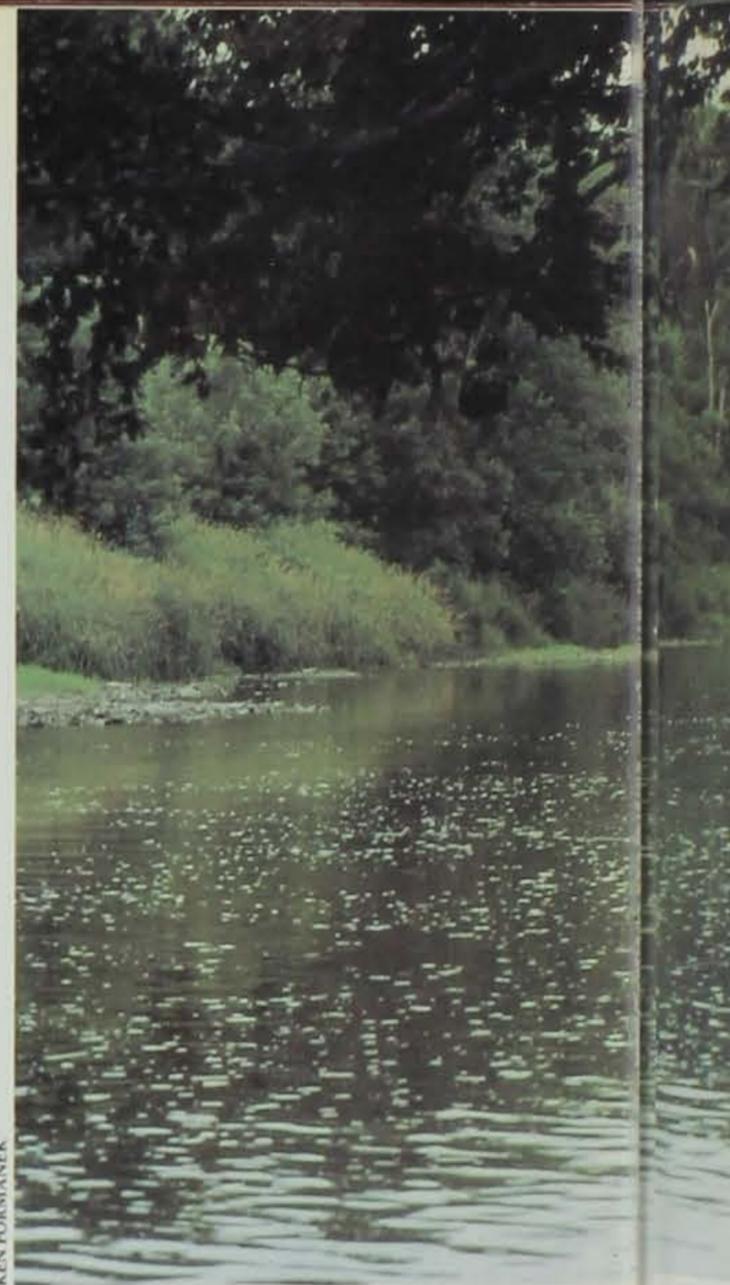
Northern Pike

Fishing for northern pike is definitely gaining popularity among northeast Iowans. Although northern pike are not widespread, there are three river systems that contain fairly good populations. The Mississippi River north of Dubuque harbors a large number of northern pike. Past studies have shown that this sizeable population is greatly underharvested, and most of these northerns do not wind up on a stringer but rather die of natural causes. Most Mississippi River northerns run in the 5- to 8-pound range with an occasional fish up to and over 12 pounds. The Wapsipinicon River (Buchanan, Black Hawk and Bremer Counties) contains large numbers of northern pike; however, few fish exceed five pounds. Many of the Wapsi's tributary streams also contain lots of these smaller northerns. This river system is a good place to introduce a young or beginning angler to the fun and excitement of northern fishing. The Cedar River (Black Hawk and Bremer Counties) contains a small population of northern pike and may include some real trophies. Each year the Cedar gives up quite a few pike up to 20 pounds.

Crappie

The Mississippi contains the only major crappies population in northeast Iowa; however, there are lots of them with good size — most ranging between 9 and 11 inches. The month of May marks the beginning of the open water crappie harvest. Small minnows or jigs fished in relatively deep water around fallen trees and brush will put a lot of slabs in the fish basket. Do not spend too much time in one spot if you are not catching them. Keep moving until you locate an actively feeding school.

October and November is another prime time when the water cools and the crappies school en masse. Fish the deeper, quiet-water snags, submerged trees and eddies below wing dams. Crappies also provide a lot of ice fishing activity on the river backwaters. The same ice jigging methods used for bluegills work equally as well



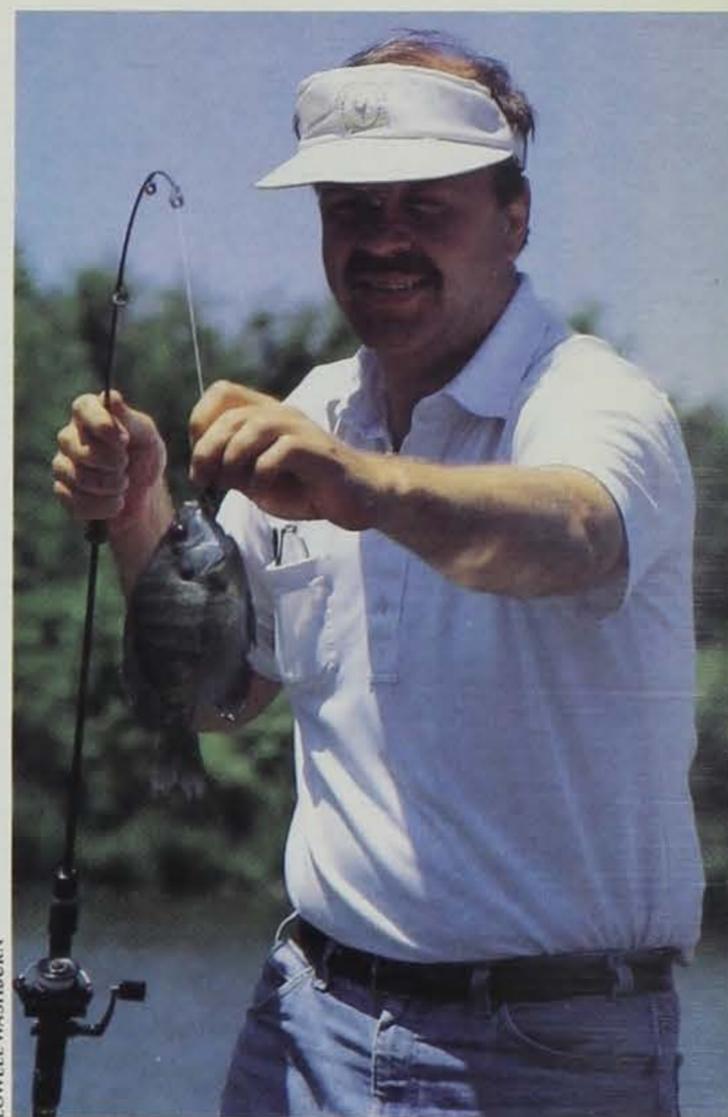
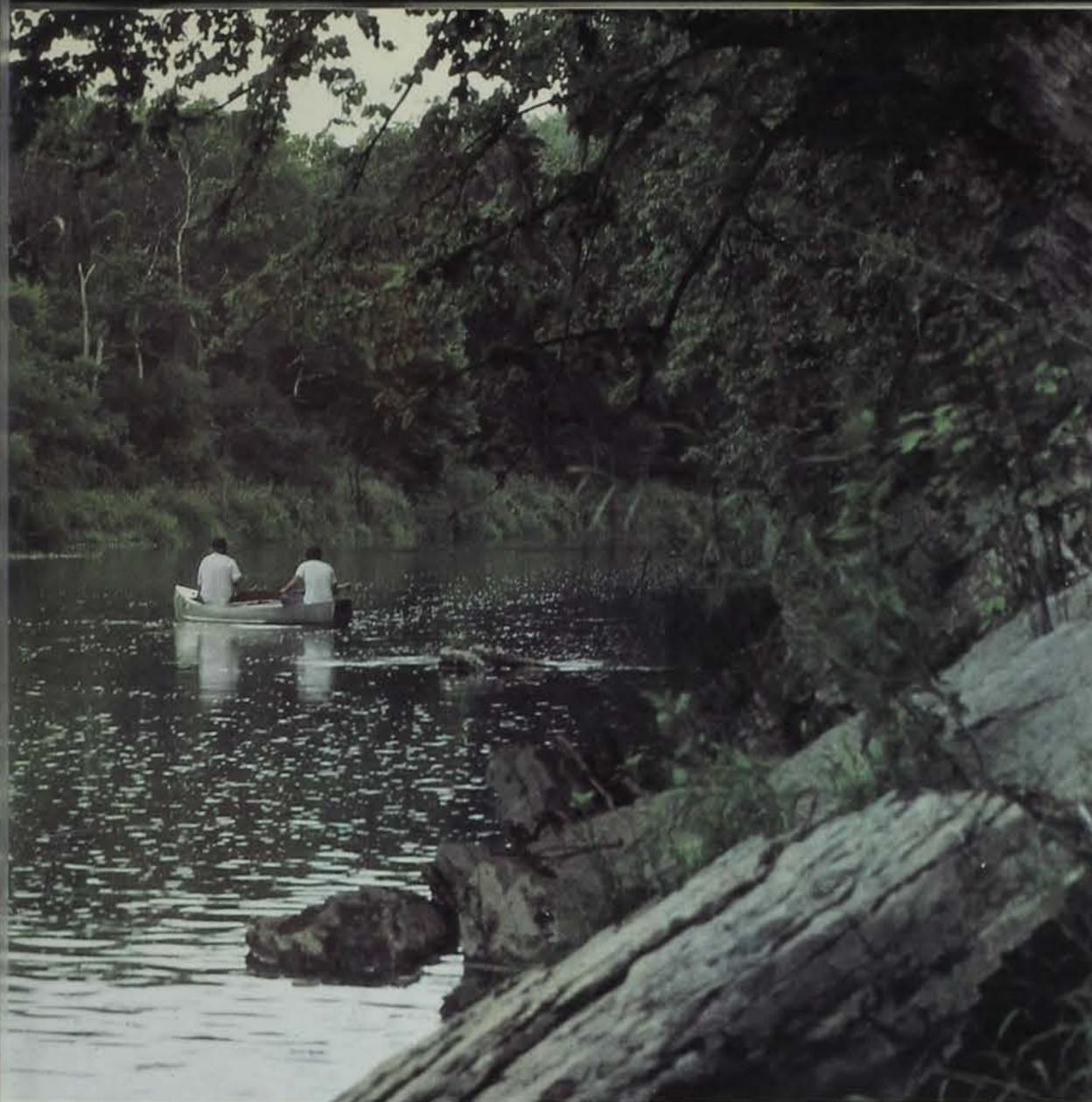
KEN FORMANEK

on crappies and it is common to fill a bucket with a combination of both species.

Other Species

White bass anglers head for the Mississippi River from July through October to pursue the hard-hitting and sporty striper. Look for stripers on the wing dams, spillway areas and riprap banks. Avoid slack water areas as stripers are always associated with flowing water. If you are lucky enough to spot a school of stripers feeding on the surface, you are in for some fast and furious action. Stripers will attack nearly any lure ranging from small jigs to large crank baits.

Freshwater drum is another species that prefers flowing water. Look for sheepshead in the tailwaters, spillways, wing dams and along the borders of the main channel. Their schooling activity, large size and strong fighting abilities combine to provide lots of angling excitement. Crayfish tails, nitecrawlers and small jigs all work well. Sheepshead fillets are boneless, firm and taste good.



LOWELL WASHBURN

A new fish has slowly been coming on the scene in Pools 13 and 15 of the Mississippi River. Since 1984 nearly 200,000 *wipers* have been stocked in Pool 14. The wiper is a hybrid cross between the ocean striped bass and our native white bass. A few of these wipers have been caught by anglers the past two years. A five and one-half-pound wiper was caught in lower Pool 13 last year but most have been taken from the tailwaters of Lock and Dam 14. While they look almost identical to the common white bass, if you catch one over three pounds, it will probably be a wiper. Wipers are expected to get as large as 10 pounds. Can you imagine a 10-pound fish with the fighting ability of our native white bass?

Whether you work hard at fishing or hold a fishing pole as a good excuse to relax in the great outdoors, the beauty of northeast Iowa will surely captivate you.

David Moeller is the northeast district fisheries supervisor located in Manchester.

SOUTHEAST

by Steve Waters

Largemouth Bass

The Mississippi River's 12-inch, minimum-size limit on largemouth bass has meant a greater number and larger size of bass to interest the angler. Fall electrofishing surveys at the Big Timber area showed excellent numbers of 12- to 14-inch fish. Other top-producing areas in Pool 17 include Cleveland Slough, Hidden Acres and Bogus Island. Huron Island and lower Burnt Pocket backwaters in Pool 18, and Burlington Island, riprap shorelines and stream mouths in Pool 19, are also favorite hotspots of bass anglers. Radio tagging studies have shown that backwater bass love structure. Therefore, fish right on top of brush, logs and stumps for great bass action. There are good bass waters off-river as well. Lakes Miami (Monroe County), Odessa (Louisa County), Goede (Henry County), Iowa (Iowa County)

and Coralville (Johnson County) will produce fine catches of 11- to 18-inch fish. Bigger bass are often taken at Lake Rathbun (Appanoose County), Pleasant Creek Lake (Linn County) and Lake Darling (Washington County).

Size limit regulations on black bass species will certainly benefit the angler by protecting more bass and producing higher catch rates and by improving size quality. However, size limits can only help produce desirable predator populations. Releasing some or all of your catch will greatly enhance the fishery and improve your success rate.

Crappie

Last year was a banner year for Rathbun crappie anglers. Creel surveys showed that about 410,000 crappies, 8 to 14 inches, were harvested. It may be hard to repeat the best crappie fishing ever at Lake Rathbun, but 1988 should be a great year.

Coralville Reservoir, Lake Odessa, Lake Darling, Lake Geode, Hannen Lake (Benton County), Lake Macbride (Johnson County), Otter Creek

1 9 8 8 FISHING FORECAST

Lake (Tama County), Lake Miami and Red Haw Lake (Lucas County) will be good bets for 7- to 10-inch fish this year.

Crappie angling on the Mississippi River for 8- to 11-inch fish will be typically good in the same backwaters where good bass fishing can be found. At areas where deep holes exist such as Big Timber, crappies can be caught suspended in open water during the summer months.

Bluegill

Bluegills are an Iowa favorite. More bluegills (24 percent of all fish harvested) are caught by Iowans than any other species. In the spring this delicious tasting, hard-fighting sunfish can be caught in arm-tiring numbers in shallow water and shoreline areas. Drift fishing in open water is an effective summer bluegill angling technique when they move away from the shoreline.

Red Haw Lake has an excellent reputation of producing fine catches of seven- to nine-inch "gills." According to fisheries biologists' surveys, this year should be even better than the average good year.

Lake Odessa is another great bluegill lake. Fish at stump fields and fallen trees throughout Sand Run, Yankee Chute and the main lake areas for seven- to eight-inch fish.

Additional lakes in which six-inch-plus bluegills can be taken are Miami, West-Lake Park areas (Scott County) and Darling. Also, do not forget the Mississippi River.

Channel Catfish

A channel catfish is the fish Iowans most prefer to catch, and southeast Iowa is paradise for channel catfish anglers. The cage catfish and maintenance stocking programs have established excellent catfish populations in almost all public lakes. The following lakes are guaranteed catfish havens: Rathbun (great shortly after ice-out



JIM WAHL

for all sizes including many lunkers), Coralville, Geode, Darling, Miami, Wapello (Davis County), Macbride, Iowa, Pollmiller (Lee County) and Belva Deere (Keokuk County).

Rivers in southeast Iowa are also great places to catch catfish. The Wapsi, Skunk, Cedar, Des Moines and Iowa Rivers all produce channel catfish in a variety of sizes. Perhaps the Mississippi River is the best catfish hole of all. This is reflected in the generous catch limits — all you can carry.

Walleye and Sauger

The Mississippi is an exciting resource which produces some fantastic walleye and sauger angling. The navigation lock and dam habitat produces great catches in late winter, early spring and late fall. Wingdam fishing during late summer and early fall will also produce stimulating action. Try backtrolling crankbaits, or three-way nightcrawler rigs on the upstream side of wingdams or troll slowly on the bottom in the tailwaters with bright-colored jigs tipped with minnows or three-way minnow rigs. Jigging sonars below the navigation dams is an effective technique late fall through early spring.

Lake Macbride and Rathbun Reservoir are also good areas to catch walleye. An effective walleye stocking

program has significantly increased walleye numbers at Rathbun, and 1988 should produce good catches of 14- to 18-inch fish.

Other Species

Although several of southeast Iowa's lakes have received *tiger muskie* stockings, Hawthorn (Mahaska County) and Rathbun have the best populations. Creel clerks at Hawthorn and walleye brood netting crews at Rathbun both report good numbers of trophy-sized fish.

Bullhead enthusiasts will want to include trips to Lake Darling for six- to nine-inch fish, Odessa for 8- to 12-inch fish as well as river backwater areas.

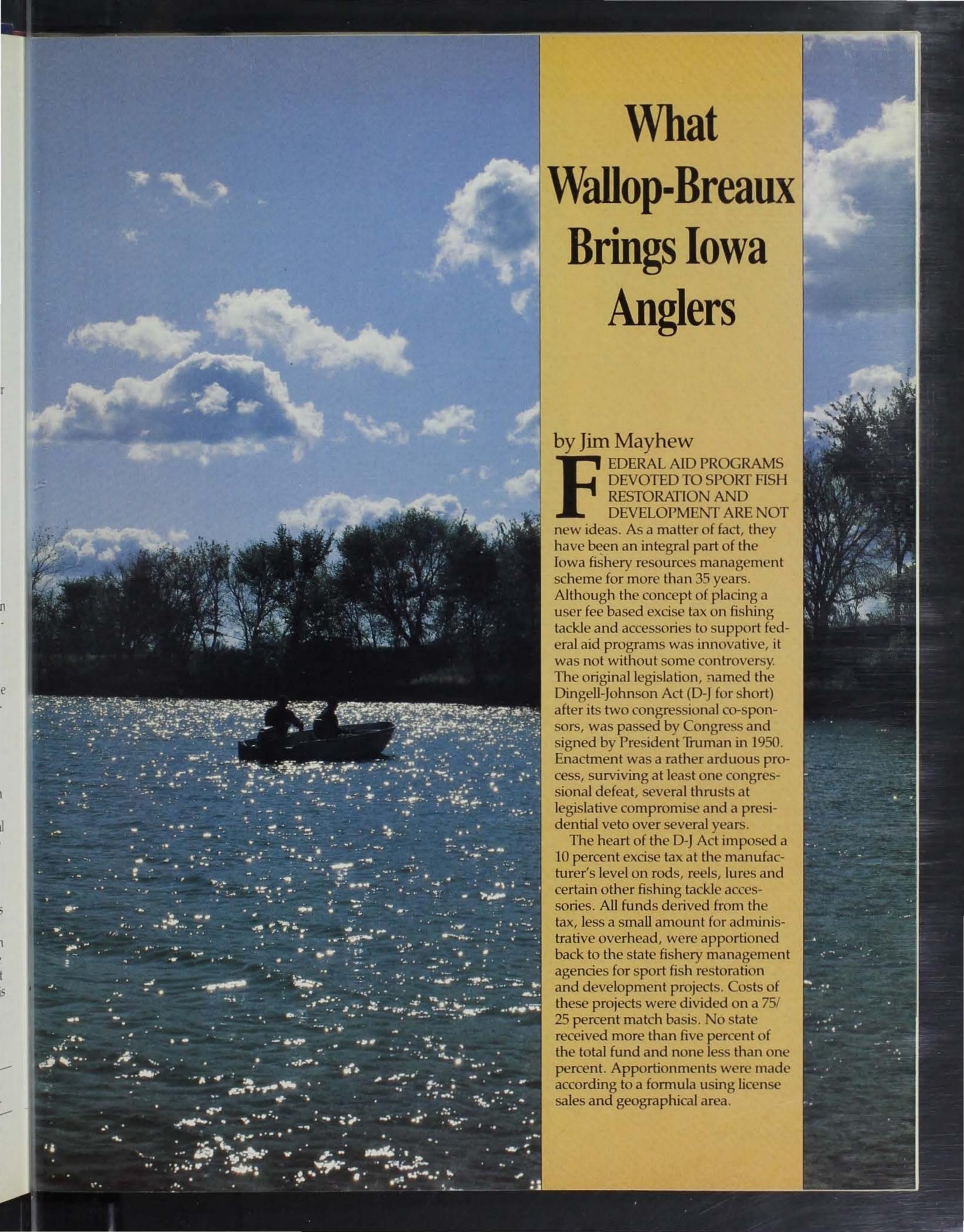
The Skunk (Keokuk, Washington, Jefferson, Henry and Des Moines Counties), Iowa (Louisa County), Cedar (Louisa County) and Wapsipinicon (Clinton and Scott Counties) Rivers are favorites for *flathead catfish* anglers. Large six- to eight-inch dead chubs or a gob of worms work well. Fish deep holes in the summer and fall and look for trophy fish around bridge pilings.

Carp angling is a growing fishery in southeast Iowa. This species is popular because it will take a variety of baits, attains a large size, is a powerful fighter and has a palatable flesh. All rivers have carp populations. The best choices for lake angling are Darling, Odessa, Rathbun and Coralville.

Farm Ponds

Farm pond fishing for largemouth bass, bluegills and channel catfish is so productive that it warrants special attention. These mini-lakes produce more trophy-sized fish than any other water area. Because of their small size, they are the first areas to warm up; thus, they are great places to begin the new fishing season. Keep in mind, you will be fishing on private property, which requires the owner's permission, and the utmost respect is due the landowner and his property.

Steve Waters is the southeast district fisheries supervisor located in Brighton.



What Wallop-Breaux Brings Iowa Anglers

by Jim Mayhew

FEDERAL AID PROGRAMS DEVOTED TO SPORT FISH RESTORATION AND DEVELOPMENT ARE NOT

new ideas. As a matter of fact, they have been an integral part of the Iowa fishery resources management scheme for more than 35 years.

Although the concept of placing a user fee based excise tax on fishing tackle and accessories to support federal aid programs was innovative, it was not without some controversy. The original legislation, named the Dingell-Johnson Act (D-J for short) after its two congressional co-sponsors, was passed by Congress and signed by President Truman in 1950. Enactment was a rather arduous process, surviving at least one congressional defeat, several thrusts at legislative compromise and a presidential veto over several years.

The heart of the D-J Act imposed a 10 percent excise tax at the manufacturer's level on rods, reels, lures and certain other fishing tackle accessories. All funds derived from the tax, less a small amount for administrative overhead, were apportioned back to the state fishery management agencies for sport fish restoration and development projects. Costs of these projects were divided on a 75/25 percent match basis. No state received more than five percent of the total fund and none less than one percent. Apportionments were made according to a formula using license sales and geographical area.

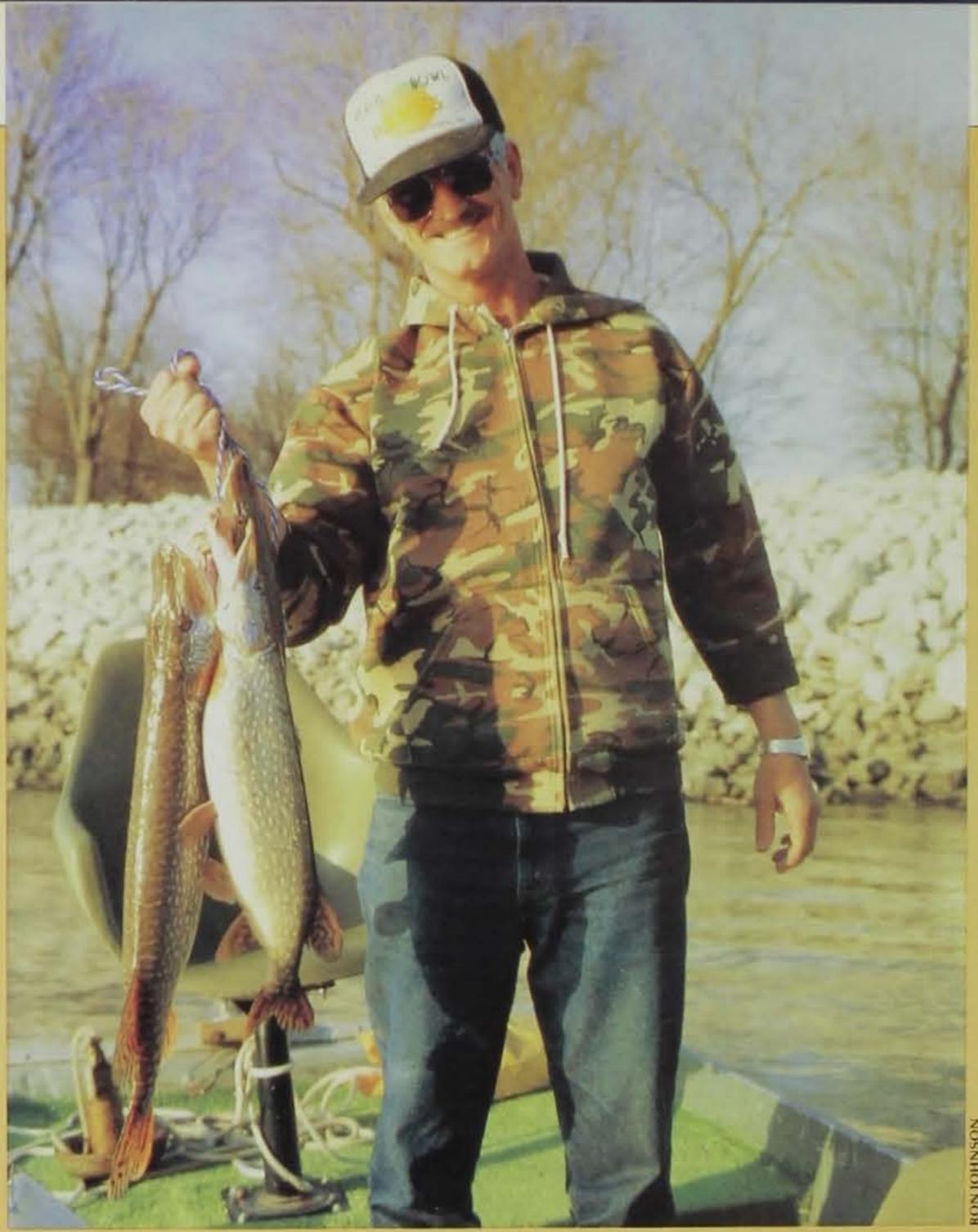


JIM WAHL

The Wallop-Breaux Amendment has nearly tripled the funding for programs such as aquatic resource education.

OVER THE NEXT ENSUING THREE AND ONE-HALF DECADES, THE DINGELL-JOHNSON program gained recognition as the most significant legislation for the advancement of sport fishing in America. Achievements in sport fishing were immensely popular with anglers who directly supported the funding. In Iowa the program dedicated more than \$14 million to fishery projects. To mention a few: fishing lakes were constructed, trout stream lands were acquired and facilities developed, a comprehensive research program paramount to the scientific basis of fishery resource management was implemented, numerous public access sites to our waters were acquired and developed, and fish habitats were enhanced at many locations.

Even with the outstanding success of the D-J program, it became obvious in the mid-1970s that a monetary shortfall was imminent, and in the near future the goal of satisfying demands for public fishing for increasing angler numbers would be unattainable. The need for strengthening the program through increased funding was indeed apparent and an expansion effort was initiated.



RON JOHNSON

The thrust for expansion began with a resolution of the American Fisheries Society at its meeting in Detroit during 1976. After several delays, intensive lobbying and compromise, Senator Wallop (Wyoming) and Congressman Breaux (Louisiana) co-sponsored the amendment, and on April 13, 1984, despite the fact it was a Friday, the proposal was passed by congress. The new legislation, known as the Wallop-Breaux Amendment, roughly tripled the funding for sport fish restoration, boating safety and access development, and aquatic resources education programs. Again, benefits from the program went directly to the users who pay the taxes.

Some time in 1988, Wallop-Breaux is due for congressional reauthorization and will, in the very near future, undergo oversight hearings by selected committees. The thrust of

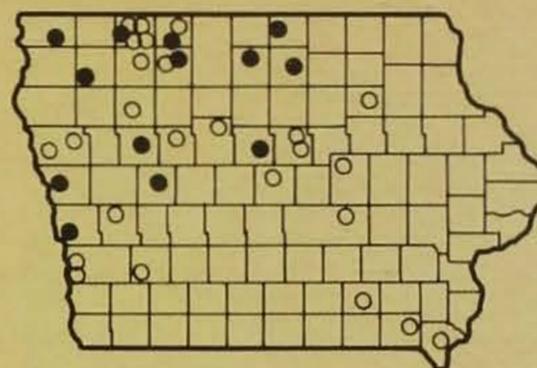
these hearings will be primarily to determine if the program has fulfilled its objectives. It is enormously important that both anglers and boaters who use the facilities provided by the program support it.

The Department of Natural Resources received an annual apportionment of around \$500,000 prior to expansion. With the approval of the Wallop-Breaux Amendment, that amount increased to nearly \$2 million. In the following series of articles, *Iowa CONSERVATIONIST* readers can familiarize themselves with some of the projects that have been recently initiated or those that will be completed with W-B funding in the near future. Many anglers and boaters will be very pleased.

Jim Mayhew is the chief of the department's fisheries bureau.



JERRY LEONARD



Locations of lakes with existing ● or having potential for ○ winter aeration systems.

Devastating winterkills have been eliminated at problem lakes through research and development of winter aeration systems. Through the aeration program more than 8,000 acres of manageable fishing waters have been added to Iowa's aquatic resource.

Improvements Through Research

by Don Bonneau

THE DINGELL-JOHNSON ACT WAS PLACED INTO LAW MORE THAN 35 YEARS AGO. FOR STATE agencies such as the Iowa Department of Natural Resources this means stable funding that could be devoted to fishery research programs. Giving this scientific basis to fish management has improved fishing over these 35 years. Prior to this time, all too many practices were relegated to trial-and-error with little regard for achievement or cost. D-J project requirements spelled out in simple terms that activities without scientific credentials would not be approved. In the long run this meant a scientific approach to the programs that led to enormous advancements in fishery resource management nationwide. Some of the most suc-

cessful research projects in Iowa in recent years and some of those for future consideration are described in light of the benefits they have provided for Iowa anglers. They represent only part of the diligence that has significantly improved fishing success in this state.

Shallow natural lakes in the northwest part of Iowa produced poor angling in the past because of chronic and devastating winterkills of fish. Water samples taken throughout the winter indicate that the quantity of life-giving dissolved oxygen decreased as ice thickness and snow cover increased. During severe winters too little oxygen was present to support most game-fish species.

After winterkill occurred, fish populations were replenished with hatchery-reared fish. The stocked fish grew rapidly but in the next cycle they perished again. Soon the entire fishery in the lake was dominated by rough fish species that are more tolerant of low oxygen conditions. Finally, the quality of fishing deteriorated to the point where anglers showed little interest in fishing these lakes.

Methods of supplying oxygen to ice-covered lakes were unsuccessful until the 1970s. After many different schemes were tried, two types of de-icing apparatus using water circulation — the helixor and the axial flow pump — were developed. Black Hawk Lake near Lake View where winterkill occurred at a frequency of about two in five years, was the experimental lake.

Careful research over an eight-year period showed clearly that these newly developed systems would improve dissolved oxygen levels in shallow lakes and prevent winterkill of fish at reasonable costs. Since installation of experimental aeration, no fish winterkills have occurred and the quality of angling has changed from very poor to good. To date, similar systems have been further refined and installed in 13 other winterkill lakes without a single occurrence of fish loss.

Recent studies strongly indicate that our man-made lakes may benefit from summer aeration. This seasonal aeration may prevent thermal and chemical stratification, and promote improved fishing and water quality.



RON JOHNSON



RON JOHNSON

Research on man-made diets for hatchery-reared fish has helped put larger, healthier walleyes, muskies and bass into Iowa's lakes.

This technique is currently under investigation and is being evaluated at several sites.

To satisfy the ever-increasing number of anglers and increased fishing effort, new lakes are frequently constructed. Several new waters for fishing and boating are planned for Iowa in the near future.

In the past 50 years more than 100 lakes have been constructed in the state. Too often though, the selection of lake sites have been haphazard, with little thought given to the quality of fishing and the associated recreation. It soon became apparent that improvements of fish habitat and basin characteristics produce the best fishing over the longest period of time.

Studies began in the mid-1960s to use research information from these lakes to develop techniques that would permit the selection of only the best basins in the state for lake sites. These investigations were some of the first in the nation to link the quality of fishing with characteristics of the watershed. Today, it is common practice to predict fish population quality and future angling success long before construction of the impoundment begins.

The artificial propagation of game-fish species forms the basis of many fisheries programs in Iowa. It is also one of the most costly programs. Without it, however, some heavily fished species would decline to near nonexistence.

For several years, the DNR has pursued a fish culture research program through D-J funding. The program provides fish for stocking at the most beneficial cost. Some of the more active advances have been:

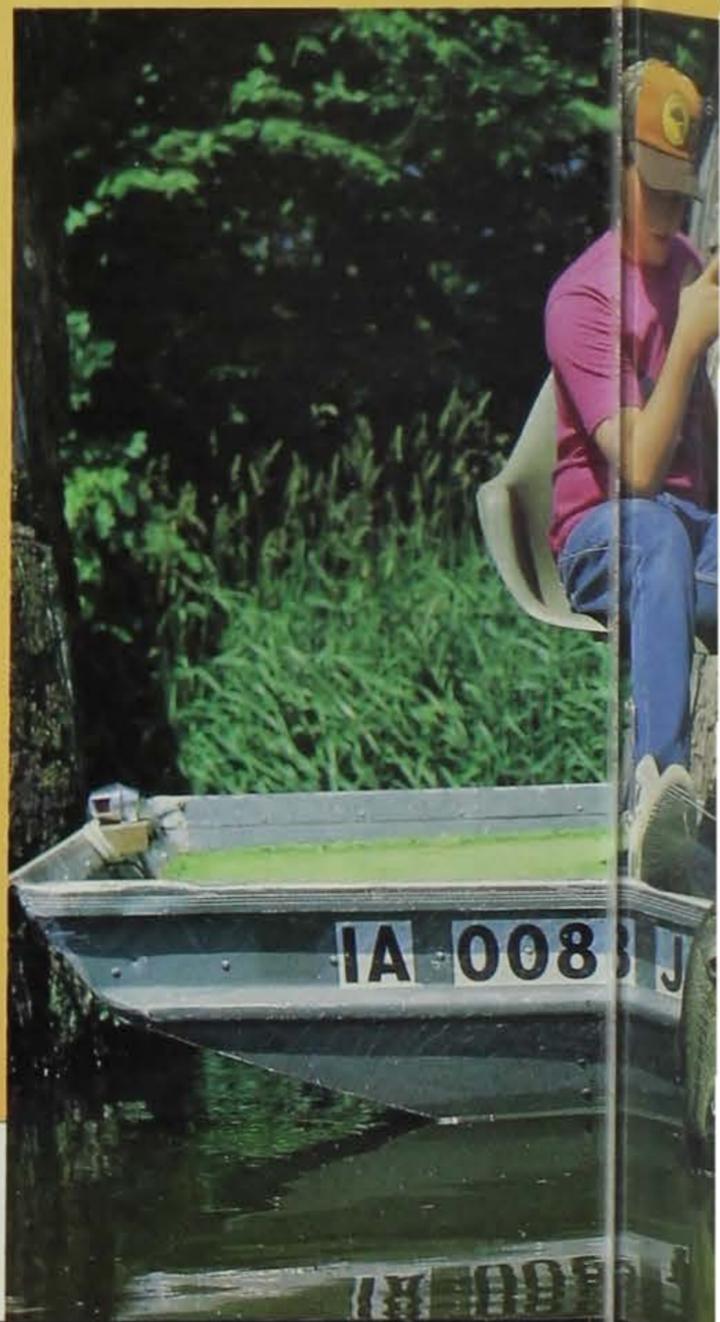
- Cryopreservation (storage by freezing) of fish sperm and ovum for use at optimum times for viability and culture success.
- Use of hatching jar techniques for channel catfish culture instead of the time-tested trough method.
- Development of vaccines for

the prevention of diseases that are common in hatchery confinement.

- Rearing of predatory game-fish species, such as walleye, muskellunge, tiger muskie and largemouth bass, on supplemental man-made diets in hatchery confinement.

New research breakthroughs on the identification of discreet genetic strains of fish show promising applications to fish culture and stocking success. Efficient transportation of fish to stock in our waters needs improvement. And last, but not least, the aquaculture of fish for human consumption opens a brand new diversification for Iowa as the national leader in food production.

Don Bonneau is the supervisor of the department's fish research section.



Acquisition and Development

by Marion Conover

PERHAPS THE CENTERPIECE OF THE NEW EFFORT RESULTING FROM THE INCREASED federal aid cost-share dollars is a new ambitious recreational lakes program. The objective of this long-range program is to provide additional high quality lakes for fishing and boating near Iowa population centers lacking current sites. Watershed, lake size and depth, and basin slope criteria are used to select potential lake sites within these needed geographic areas. Using these criteria guarantee that first class lakes will result, providing the highest level of fishing and boating

opportunities indefinitely, regardless of surrounding land use changes.

Already five sites have been selected for lake construction. The acquisition of approximately 5,200 acres from willing sellers is now underway. Lands have been acquired in Dallas County just north of Dexter to begin construction of the first and smallest lake. Construction of 34-acre Beaver Lake will begin in the late summer, with lake and boating facility formation and fish stocking slated for 1989. Other lakes to be built include Deer Creek Lake, 44 acres in Plymouth County; Whitewater Lake, 112 acres in Dubuque County; Lost Grove Lake, 350 acres in Scott County; and Lake Shawtee, 347 acres in Fremont County.

One of the most important steps in fish management is the protection and maintenance of high water quality in existing lakes. Silt entering lake basins from the watershed is the single most important threat to

sustained water quality and recreational use. Unfortunately good land stewardship is not practiced by all landowners. Expanded D-J dollars have been used to construct silt retention dams on the main tributary to Little River Lake in Decatur County and three dams on each tributary to Lake Icaria in Adams County. Silt retention structures are also planned for Lake Wapello in Davis County.

Shoreline access development is a top priority at 66 public lakes. Nearly 200 fishing jetties and piers are planned in the program, 40 of which will provide full handicap accessibility. Sixty-five percent of the fishing trips taken by licensed Iowa anglers are by shore fishers. Rock and other materials associated with jetty and pier construction also provide valuable habitat. Increased federal aid cost-shared dollars have been used to construct 21 jetties and four piers at Spirit Lake, Dickinson County;



Locations of new lakes.



Little River Lake is evidence of the effectiveness of silt retention dams in maintaining high water quality.



RON JOHNSON
RON JOHNSON



JIM WAHL

Through Wallop-Breaux funding, fish cleaning stations such as the one above are being built on 79 lakes and streams in Iowa. Nearly 200 jetties and piers are planned and additional boat ramps will be constructed and maintained with federal aid money.



KEN FORMANER

Green Valley Lake, Union County; Lake Icaria, Adams County; Lake Cornelia, Wright County; Upper Pine Lake, Hardin County; Big Creek Lake, Polk County; Bob White Lake, Wayne County; and Mormon Trail Lake, Adair County. Look for similar shoreline fishing improvements within two years at Black Hawk Lake, Sac County; Lake Macbride, Johnson County; George Wyth Lake, Black Hawk County; Crystal Lake, Hancock County; Meadow Lake, Adair County; Lake Darling, Washington County; and Lake Wapello, Davis County.

Federal aid money is presently being used to maintain and develop 65 motorboat access areas on lakes and rivers. In this program river ramps are cleaned of silt, signs maintained and road rock placed. Many additional ramp sites will be constructed in the near future.

The aeration of shallow winterkill lakes has been nearly completed. As mentioned earlier, this program has protected 13 lakes totaling over 8,000 acres from devastating losses of fish due to oxygen depletion in winter. Fishing opportunities have been greatly improved at Clear Lake, Cerro Gordo County; Crystal Lake, Hancock County; Ingham Lake, Emmet County; Five Island Lake, Palo Alto County; Little Wall Lake, Hamilton County; Black Hawk Lake, Sac County; Blue Lake, Monona County; Lake Pahoja, Lyon County,

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and the three Silver Lakes in Delaware, Dickinson and Palo Alto Counties. (See map, page 19.)

Summer aeration is used to destratify lakes and improve fish growth. Systems are planned for 55 lakes in this state. Lake Geode in Henry County and Lacey-Keosauqua in Van Buren County will receive aeration units in 1988. Summer aeration is planned within two years for Hawthorn Lake, Mahaska County; Walnut Creek Marsh, Ringgold County; Viking Lake, Montgomery County; and Lake Wapello, Davis County.

Fish cleaning stations are programmed for 83 sites at 79 lakes and streams. These facilities are being provided in priority order where large numbers of fish are caught by great numbers of anglers. The first stations to be constructed this year are located at the Marble Beach on Spirit Lake, Dickinson County; Big Creek Lake, Polk County; and Lake Macbride, Johnson County. The facilities will include a roofed cleaning table with running water, electricity and waste disposal.

Expanded D-J dollars have ensured the continued purchase of desirable land tracts from willing sellers along coldwater streams in northeast Iowa. Nearly 16,000 acres of land containing 71 miles of trout waters is identified for purchase along 34 streams. This popular program is the best way to improve in-stream habitat for trout and more importantly guarantees continued public access.

Many other projects to enhance Iowa fisheries for our anglers and boaters are being explored for inclusion into this program. New projects, as with existing projects, will be accomplished in priority order using expanded federal aid dollars first where benefits to the users are greatest.

Marion Conover is the supervisor of the department's fish management section.



KEN FORMANEK

A New Decorah Hatchery

by Terry Jennings

CONSTRUCTION OF THE DECORAH TROUT HATCHERY, WHICH IS LOCATED AT THE magnificent Siever's Spring on Trout Run, began in 1930 and was completed six years later. For 51 years this scenic hatchery has supplied fish for Iowa's trout stocking program. In more recent years, the facility has been producing about 95,000 catchable-size trout each season for

anglers who fish the coldwater streams in the Decorah area.

After more than a half-century of exposure to harsh northeastern Iowa winter weather, this majestic hatchery is showing its age and is in need of renovation. The one thing most visitors notice is the crumbling concrete raceway walls. Visitors do not see the rusting and rotting, yes rotting (some are wooden), water supply and drain lines that are in dire need of replacement.

Because the Decorah hatchery is an important part of the trout program in this state, and due to the fact that the trout program continues to expand faster than any other type of fishing in Iowa, the decision was



KEN FORMANEK

Siever's Spring at Decorah hatchery

made last year to completely reconstruct the hatchery using Wallop-Breaux funds. In 1986 a consulting firm that specializes in fish hatchery construction was awarded a contract by the DNR to design a new facility and provide the necessary documents for construction to begin. Preliminary work has been completed and construction will begin this spring taking about nine months to complete.

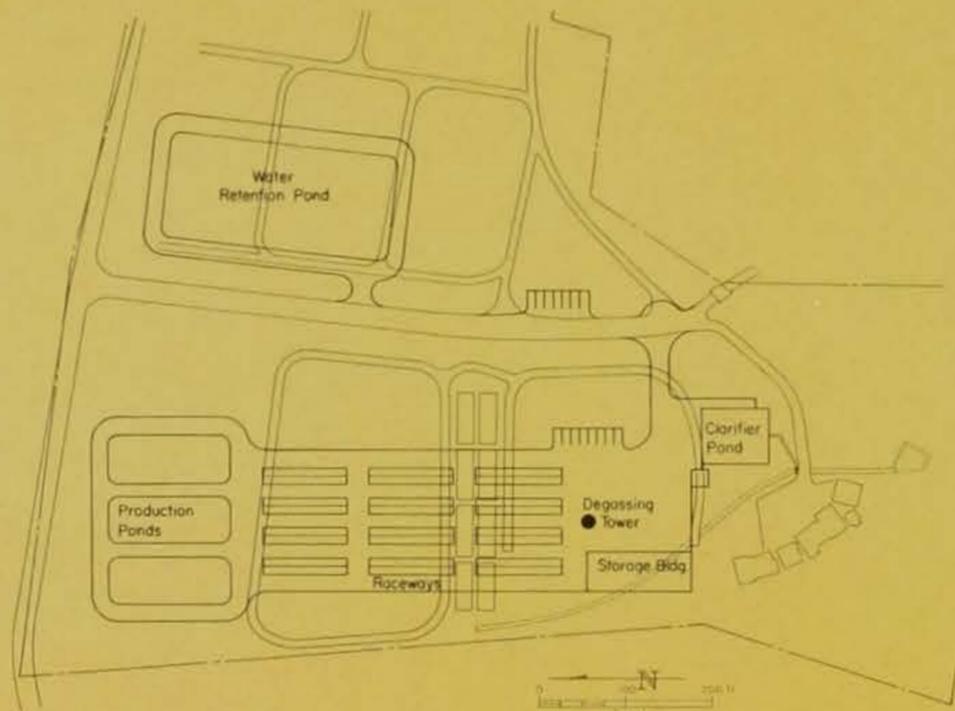
Plans call for the complete removal of all existing structures, except the stone office and service buildings, and start rebuilding the hatchery. The new facility will include 24 concrete

raceways, three earthen ponds and related support structures — such as a water quality control tower and maintenance building. The new hatchery will be a state-of-the-art trout production facility capable of rearing 125,000 trout to catchable-size each season. Increased production capability at Decorah may not immediately mean more trout for anglers, but it will mean far less crowded conditions for fish at the Big Spring and Manchester hatcheries. The less-crowded conditions at these facilities will mean much improved rearing conditions.

During the construction period no trout will be produced at Decorah. However, approximately the same number of fish will be stocked this year and anglers' success will be similar to last year. Temporary fish holding tanks have been installed at the site so streams in this region can be stocked on a regular schedule.

Cost of this project will be slightly more than two million dollars. Like all federal aid projects, one-fourth of this sum will come from the sale of fishing licenses and trout stamps. The most important factor is that the project will ensure a bright future for the Decorah trout hatchery and fishing for our trout anglers.

Terry Jennings is the supervisor of the department's fish culture section.



Improvements in the hatchery at Decorah include a new clarifier pond, degassing tower, 24 raceways, three ponds, a water retention pond and new storage building.

Original Decorah hatchery facilities, shortly after construction in the early 1930s. Both stone structures will remain through the present renovation.



DNR PHOTO

Putting *Life* Back in Wildlife

by Richard A. Bishop

For Iowans, the Conservation Reserve Program (CRP) may be the best agricultural program we have seen in 30 years. The program is part of the 1985 Food Security Act, or more simply put, the 1985 Farm Bill. The CRP is a 10-year program that allows farmers to seed down or plant trees on highly erodible crop land in return for government payments. For 10 years, this land will provide protection from erosion and will serve as good habitat for wildlife, as well as help clean up our water. All Iowans benefit from this agricultural program. It reduces the glut of grain which has lowered farm prices, and it still provides money to farmers and consequently, money into the Iowa economy. It will help protect our valuable topsoil at least until the time we really need to use the land for production. By retarding erosion, our water system will be less polluted by silt and chemicals. This program provides a more diverse-looking landscape, and to a lot of people, a more pleasing-looking countryside is important. However, to sportsmen and wildlife enthusiasts, the major advantage of CRP is its benefit to many species of wildlife.

Iowa landowners have enrolled 1.4 million acres in the CRP and another sign up is taking place during the printing of this magazine. I certainly hope to see participation top two million acres in Iowa. The importance of CRP to wildlife should be obvious,

but it warrants a closer look. From the game species side of things, the ring-necked pheasant will be the major recipient of this government program. The CRP may actually be *CPR* for Iowa's pheasant population.

The 1960s saw soil bank lands, idle grass areas, shrub patches and marshes converted to row crops to meet the demand of an expanding

would quickly bounce back to high numbers as they had in the past. This did not happen because critical habitat had been lost. Pheasant numbers did not come back to previous high levels but instead maintained much lower population levels which fluctuated annually. Both safe winter and nesting habitats were reduced below the level needed to sustain



export market. The loss of vital nesting and winter cover from increased row crop production was not emphasized until the March 1965 blizzard. The severe blizzard reduced the pheasant population in northern Iowa by significant proportions. Biologists thought bird populations

high bird numbers. As was noted in the late '60s and early '70s, the major problem with pheasants today is the lack of safe nesting habitat. The CRP has provided an avenue to replenish this needed cover. Table 1 shows the number of acres of CRP land by county.

Establishing a good vegetative cover is important. With the use of a seed drill, a warm-season native grass, such as switchgrass, can be started.



RON JOHNSON

Table 1. Iowa CRP sign up data, as of July 1987.

County	Total CRP sign up	County	Total CRP sign up
Adair	19407	Jefferson	10616
Adams	27392	Johnson	8001
Allamakee	24083	Jones	11072
Appanoose	18461	Keokuk	21100
Audubon	28570	Kossuth	11274
Benton	6842	Lee	3987
Black Hawk	1243	Linn	5333
Boone	3928	Louisa	4619
Bremer	4758	Lucas	25777
Buchanan	3380	Lyon	4666
Buena Vista	2826	Madison	17526
Butler	16020	Mahaska	17978
Calhoun	3404	Marion	20039
Carroll	4800	Marshall	25026
Cass	15582	Mills	7676
Cedar	8104	Mitchell	11057
Cerro Gordo	12010	Monona	19967
Cherokee	2931	Monroe	17605
Chickasaw	18867	Montgomery	13072
Clarke	26001	Muscatine	2759
Clay	6760	O'Brien	413
Clayton	33358	Osceola	1158
Clinton	16789	Page	13033
Crawford	20389	Palo Alto	16540
Dallas	10182	Plymouth	18819
Davis	27861	Pocahontas	1932
Decatur	32145	Polk	3345
Delaware	7456	E. Pottawattamie	4330
Des Moines	3603	W. Pottawattamie	4740
Dickinson	11727	Poweshiek	21696
Dubuque	14516	Ringgold	49921
Emmet	11582	Sac	4242
Fayette	17889	Scott	937
Floyd	16668	Shelby	7867
Franklin	8640	Sioux	6231
Fremont	10509	Story	3170
Greene	4294	Tama	16318
Grundy	621	Taylor	53586
Guthrie	26715	Union	23785
Hamilton	4133	VanBuren	24879
Hancock	9882	Wapello	10200
Hardin	4011	Warren	7942
Harrison	12856	Washington	9778
Henry	8805	Wayne	55466
Howard	30780	Webster	2081
Humboldt	987	Winnebago	19505
Ida	10187	Winneshiek	36321
Iowa	16519	Woodbury	47056
Jackson	25370	Worth	16859
Jasper	19440	Wright	5358
State total			1,419,941

While this article deals mainly with the Conservation Reserve Program, all references to wildlife take into consideration the bigger annual set-aside program. The CRP is contracted for 10 years; however, the annual set-aside option requires every farmer signing up for government crop support payments to idle free, 20 percent of the farm's corn base. Statewide, this is a significant acreage. Due to it being a year-by-year program, it is not predictable and much of the set-aside land is seeded late in the spring or not seeded at all. Limited wildlife benefits are realized. Nonetheless, due to the large amount of land in annual set-aside, it does provide positive benefits to nesting birds and fits hand-in-hand on an annual basis with the CRP.

(The day before I wrote this article, I spent the wintery January day in northern Iowa walking a CRP field and a corn-sorghum food plot. There were a number of pheasants, and we flushed 12 coveys of gray partridge in less than a section of land around the CRP field and food plot.)

The Iowa Department of Natural Resources expects to see pheasant populations increase statewide. The CRP and annual set-aside will provide a large block of good nesting cover that should allow pheasant populations to increase greatly. Iowa traditionally harvested 1.25 to 1.6 million pheasants annually, with harvests as high as two million birds, in the early 1960s. I would expect harvests to climb from the 800,000 level experienced in 1986 to 1.5 million by 1990. If mild winters prevail, and we experience a series of warm, dry springs, that harvest could return to the two million bird mark. But no matter how you look at it, pheasant numbers and hunter opportunities are going to improve significantly unless severe winter storms reduce the breeding population.

To help offset this threat, the Department of Natural Resources has reserved \$80,000 from habitat stamp funds to reimburse farmers for planting three- to five-acre winter food plots next to farm groves in counties north or bisected by U.S. Highway 30. Food plots serve to increase the size and depth of winter cover the same year as they are

planted, and provide food at the same time. If enough of these areas were developed, we could winter sufficient birds to repopulate the surrounding areas. We have also set aside \$40,000 to cost-share the establishment of major windbreaks around farmsteads. This is a long-term program to provide vital winter cover. For more information on these programs, contact your local wildlife biologist.

Deer and turkeys will benefit less. However, CRP near timber will provide undisturbed nesting cover for turkeys, and deer will use it to drop their fawns. CRP fields will also provide feeding areas for deer and young turkeys. Farmers experiencing heavy crop depredation could place crop fields with heavy losses into CRP land and reduce their financial loss. If deer move across the CRP land to other corn or soybean fields, the farmer could plant corn food plots on the CRP to buffer regular crop fields. The Iowa DNR considers this a real benefit of the CRP. Deer and turkeys may benefit the most if landowners would plant considerable CRP acreage to trees. We would like to see a major effort to reestablish forest lands in Iowa.

Rabbits and songbirds will benefit greatly also. Cottontail rabbits will use this undisturbed grassland for raising young and for protective cover throughout the rest of the year. We could see cottontail numbers increase in the areas adjacent to secure cover. In the northern half of the state, jack rabbits will benefit where large acreages of CRP and annual set-aside exist. Research shows songbirds use undisturbed grasslands for nesting and feeding. From meadowlarks and field sparrows to bobolinks and short-eared owls, a wide variety of birds use these grasslands for production. By sheer numbers, songbirds will benefit more than any other group.

One species that will receive mixed benefits is the bobwhite quail. If small CRP fields were interspersed with crop fields, quail would respond favorably. However, if large acreages of crop land in the southern half of the state were seeded, the very food supply that quail depend upon in tough winters will be reduced or eliminated. While quail will move to

find food, serious snowstorms could catch quail a long distance from food, and they may not survive. We fully expect to see quail populations decline locally where large acreages are placed in the CRP. Quail hunters may have to search out areas where crop fields exist to find quail.

One answer to the quail problem is food plots. Regulations governing the CRP allow farmers to plant food plots on CRP or on annual set-aside land. The use of food plots will provide food for quail as well as other wildlife species. I urge farmers to plant food plots on part of these acres. Sportsmen could also help by paying food plot planting costs on land they hunt. Food plots in specific areas may be as important to quail as good nesting cover is to pheasants. Anyone interested in planting food plots should contact their SCS or ASCS offices.

Iowans should see big advantages in the form of soil saving, water quality, more wildlife and better farm prices if the land placed into the CRP is managed properly. Initial establishment of a good vegetative cover is paramount. If proper care is taken, a good cover crop of alfalfa, bromo-orchard grass can be established. Mowing the year of establishment should be done if foxtail or broadleaf weeds threaten seedling growth. The most important aspects to consider is the management of this land during the nine years after establishment. First of all, no haying or grazing should be allowed. Burning warm-season grasses is a good management tool to keep native grasses in top productivity. Secondly, weed control should be limited to spot spraying or mowing of noxious weeds only. County ASCS offices should stress that mowing be used to control only noxious weeds and not a general maintenance practice. Mowing annually will reduce wildlife benefits.

Since everyone stands to gain from CRP through recreation and hard dollars in our economy, everyone should be concerned with the successful management of CRP lands. The only thing left to do is encourage more people to participate.

Richard A. Bishop is the chief of the department's wildlife bureau.

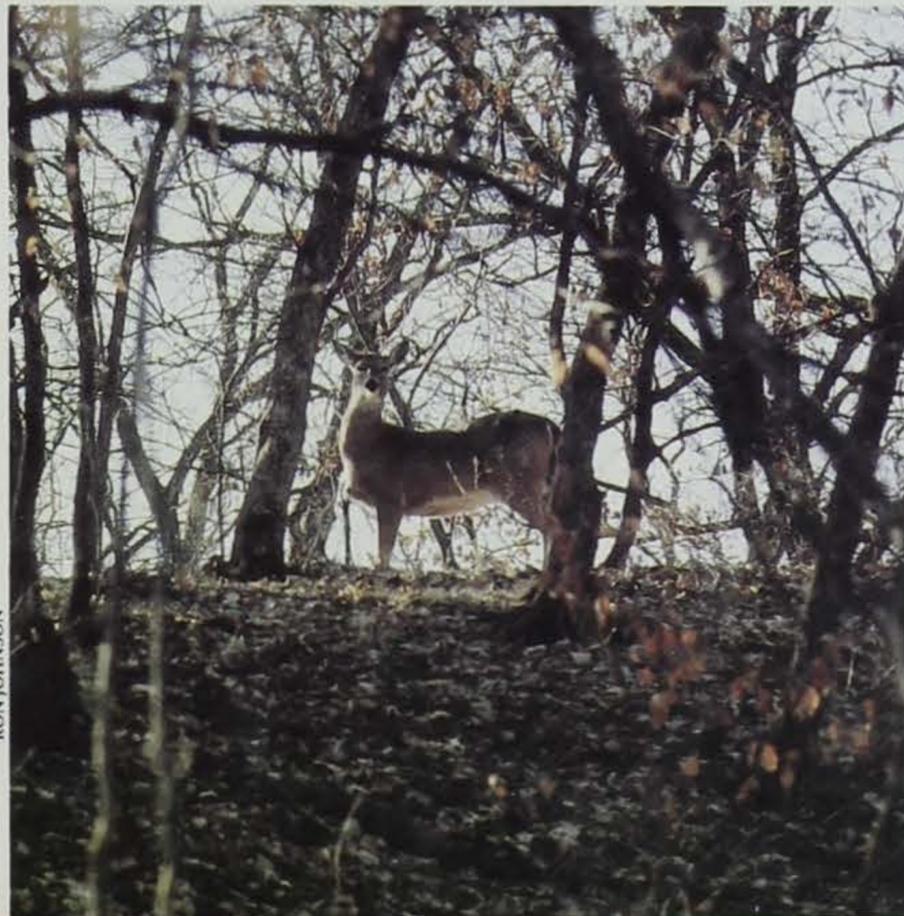


DNR PHOTO

Properly managed CRP land will provide excellent cover for pheasants as well as other wildlife.



DNR PHOTO



RON JOHNSON

NESTLED IN THE SOUTHWEST CORNER OF IOWA ON THE OUTSKIRTS OF THE Council Bluffs-Omaha area is beautiful Lake Manawa State Park. The park lies on the shores of 670-acre natural Lake Manawa, which was formed by the historic 1881 Missouri River flood. Since the beginning, Lake Manawa has been a popular outdoor recreation spot for people from Iowa and from across the United States. Travelers driving from coast to coast on nearby Interstate 80 often

stop to enjoy what Lake Manawa has to offer.

By the early 1970s, the Iowa Conservation Commission (now the Department of Natural Resources) was well aware of the need to provide better outdoor recreation facilities to meet the demands of Lake Manawa's one million annual visitors. A master plan was prepared to guide park development. As a result, additional land was purchased and

new roads, parking facilities and utility systems were built. The lake was dredged in order to enhance water quality and outdoor recreation opportunities. However, since the late 1970s, facility construction was "on hold" due to a lack of funding. No shelters or modern sanitary facilities were available.

In 1985, legislation creating the Iowa Lottery was passed. Since then, lottery funding, supplemented by cost-sharing from the National Park Service, has made possible the completion of extensive facility development at Lake Manawa. Two modern rest rooms, a modern shower and rest room building for the campground, 10 open public shelters, a new park office and maintenance center have been built.

Further improvements at Lake Manawa will continue in 1988. The beach will be relocated to the lake's south side and a modern beach concession building will be constructed.

Two open shelters, a modern rest room, play-

ground equipment

and fishing pier will be built on the north side of the park. The end result will be a reborn Lake Manawa State Park, better able to serve its visitors.

Iowa lottery funds are helping to provide Lake Manawa with quality facilities. No one should ever feel that their lottery ticket is anything but a "winner" in Iowa.

Donald DeLong is the park ranger at Lake Manawa State Park.

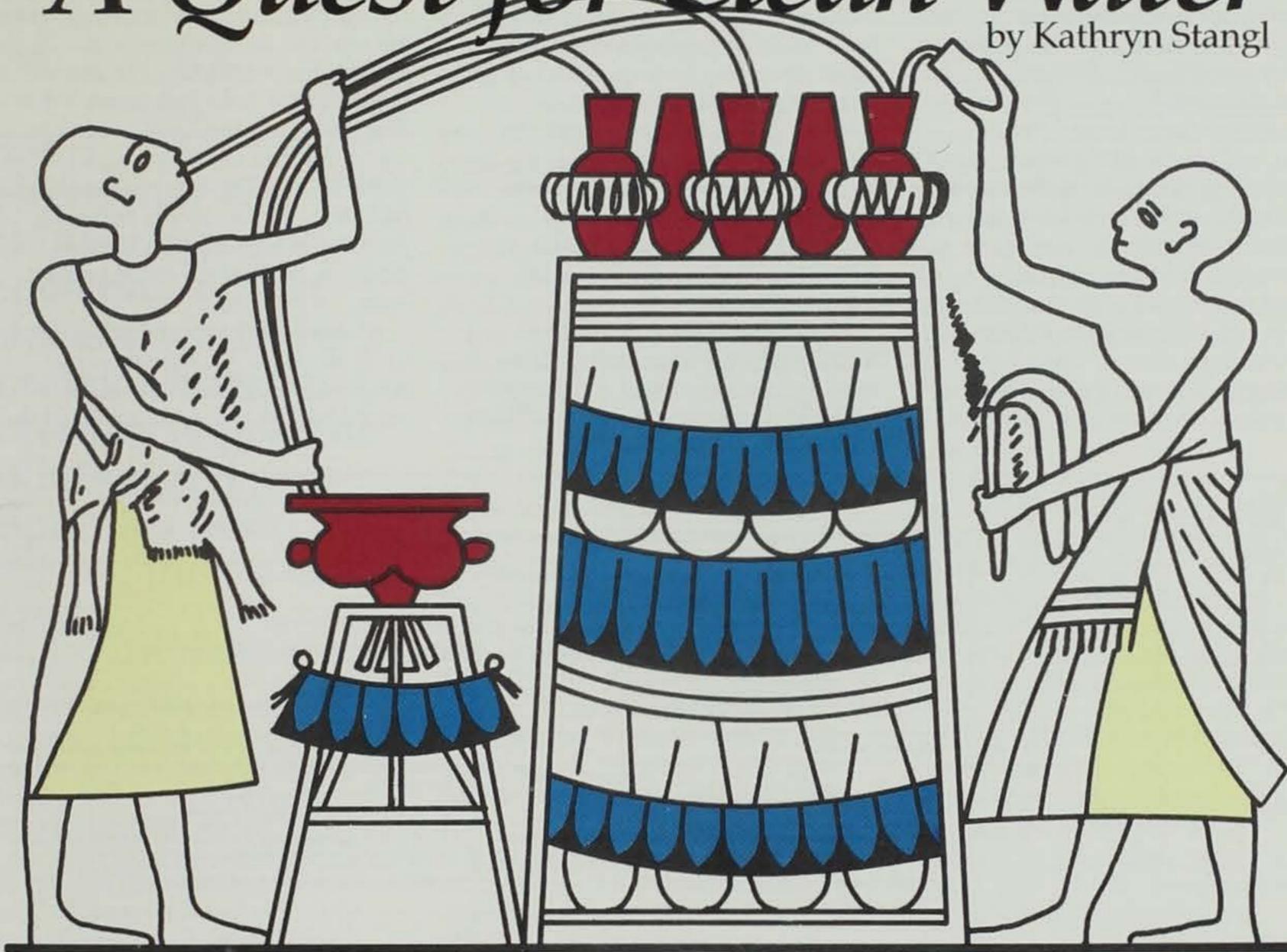


Lottery Money for Lake MANAWA

by Donald DeLong

A Quest for Clean Water

by Kathryn Stangl



Most of us turn on the tap and expect a never-ending supply of clean, fresh, pure, potable water. Water has been one of our least expensive utilities and one that many of us have taken for granted. But the time may be fast approaching when the price of clean, safe water may skyrocket. We may have to ask some hard questions on what is done to treat our water and how much and when we are willing to pay for it.

Clear, clean, available water has been a priority item for humanity since long before water-borne diseases were known. Records of early Sanskrit medical lore show knowledge of water treatment, as do ancient Egyptian inscriptions. Pictures dating back to 1500 B.C., found on Egyptian walls show an apparatus used to clarify liquids (both water

and wine). The boiling of water, the use of wick siphons, filtration through porous vessels and even filtration with sand and gravel have been prescribed for thousands of years as methods to purify water.

Public water supplies have used many of these same methods to treat water and provide water of "uniform" quality to large numbers of people. Today, different variations of the "sand filtration" method shown on that Egyptian wall serve to remove many of the impurities from our treated water.

Let us cover some of the possible treatment steps your water goes through if you receive your water from a public water system. A public water system may be either publicly or privately owned under the EPA definition and terms of the Safe

Drinking Water Act (SDWA) of 1974 and its amended version of 1986. The SDWA regulates public water supplies to provide a reasonable assurance that water that comes from the tap will not cause any health problems now or in the future.

A public water system provides piped water for human consumption. This water system has at least 15 service connections or serves an average of at least 25 individuals daily, at least 60 days out of the year. That designation is further divided into community and noncommunity water systems.

A community water system has at least 15 service connections used by year-round residents or serves at least 25 year-round residents. A non-community water system has at least 15 service connections used by travel-

Illustration of Egyptians syphoning off water or wine clarified by sedimentation. This picture is from the wall of the tomb of Amenophis II at Thebes, 1450 B.C. (From Wilkinson's Manners and Customs of the Ancient Egyptians, 1879)

ers or transients or serves 25 or more people daily.

The testing and treatment of water before it reaches you depends in some measure on which designation fits your water supply. Water is treated and tested for many contaminants (some examples are shown below). It is also treated to remove particulate matter, bacteria, iron and objectionable taste and odor. Taste, odor and other aesthetic considerations remain an important part of finished water treatment. An individual's spontaneous facial expression after drinking a glass of water has long been a measure of that individual's verdict of the taste and odor and

by extension the underlying quality of the water. While it is increasingly important to monitor and remove the many unsafe, unseen and untasted contaminants in our water, aesthetics continue to play an important part in finished water treatment.

Water from a large metropolitan area such as Des Moines goes through many steps. The water in Des Moines, for example, is as much of a "blend" or mix made under carefully controlled conditions as are some fine wines.

As water is taken into the Des Moines system, chemicals such as alum, ground-activated carbon and potassium permanganate are added

to the "blend" of river waters. The water is gently stirred causing the particles to "floc," or clump together, so that the suspended particles settle out and can then be removed. The activated carbon acts to remove objectionable taste and odors. Powdered lime is added as a softening agent. Further agitation causes more particles, the minerals responsible for hardness, contaminants and solid particles to settle out and form a sludge at the bottom of the settling basin.

At the next point carbon dioxide, CO₂, the same gas that gives carbonated beverages their fizz, is added back to the water to adjust the

SELECTED CONTAMINANTS	MCL (mg/L)	MCLG (mg/L)	PRINCIPAL HEALTH EFFECTS	SOURCES OF CONTAMINATION
Microbiologicals				
Total coliforms	1 per 100 milliliters	*0	indicate the presence of organisms which cause gastro-enteric infections, dysentery, hepatitis, typhoid fever, cholera	human, animal fecal matter
<i>Giardia lamblia</i>	—	*0	gastro-enteric disease, giardiasis	human, animal fecal matter
Viruses	—	*0	gastro-enteric and other disease	human body fluids; human, animal fecal matter
Inorganics				
Arsenic	0.05	*0.050	dermal and nervous system toxicity effects, possible cancer	geological sources, pesticides residues, smelting operations, and industrial waste
Asbestos	—	*7.1 mil fibers/L	possible cancer	corroding asbestos-cement pipes in distribution systems, production of cement products, floor tiles, paper products, paint and caulking
Cadmium	0.010	*0.005	kidney effects	geological sources; mining and smelting
Lead	0.05	*0.020	brain and nerve damage, kidney effects; highly toxic to infants and pregnant women	leaching from lead pipes and lead soldered pipe joints, disposal of used storage batteries and other products
Nitrate	10	*10 for nitrate *1 for nitrite	methemoglobinemia ("blue baby syndrome")	fertilizers, sewage, feedlots, geological sources
Organics				
Alachlor	—	*0	possible cancer	agricultural use; primarily on corn, soybeans and peanuts
Aldicarb	—	*0.009	impaired central nervous system	agricultural use; to control insects, mites, nematodes, primarily on citrus fruits and potatoes
Benzene	*0.005	0	cancer	leaking fuel tanks; industrial effluents; solvent in the manufacture of pesticides, dyes, plastics, paints and pharmaceuticals
Carbon tetrachloride	*0.005	0	possible cancer	industrial wastes from manufacture of coolants, aerosol propellants and cleaning agents
Chlordane	—	*0	liver and nerve damage, possible cancer	pesticide used for control of termites (since 1977, banned for agricultural and home garden use)
Dibromochloropropane (DBCP)	—	*0	possible cancer, anti-fertility effects	agricultural use (until recent cancellation); to control nematodes on crops
Ethylene dibromide (EDB)	—	*0	possible cancer, central nervous system effects, reproductive toxicity	agricultural use; as a pesticide and as a soil and stores grain fumigant (most uses cancelled in 1984); leaded gasoline additive
Trichloroethylene (TCE)	*0.005	0	central system damage; possible cancer	industrial effluent; waste from disposal of dry cleaning materials and manufacture of pesticides, waxes, paints and varnishes; metal degreasing; paint stripping
2, 4-D	—	*0.07	liver and kidney effects	herbicide use; to control broadleaf weeds in agriculture, forestry, on range and pasture lands, and in gardens, to control aquatic weeds
Vinyl chloride	*0.001	0	cancer	polyvinylchloride (PVC) pipes and solvent used to join them; industrial waste from the manufacture of plastics and synthetic rubber
Radionuclides				
Radon-222	no standard set; proposed standard will probably be 0		cancer	decay of naturally occurring uranium
*proposed				Sources: <i>EW Journal</i> , September 1986 <i>Federal Register</i> , November 13, 1985, Parts III and IV

MCL — Maximum Contaminant Level
MCLG — Maximum Contaminant Level Goal

Reprint from *Drinking Water — A Community Action Guide* by Concern Inc.

pH. The lime added as a softening agent has raised the pH and is neutralized by passing CO₂ through the water. After another short period of settling and the addition of polyphosphate for stabilization, the

Lowans may find that altering some industrial, agricultural and waste disposal practices are necessary to prevent pollution and impurities from entering the water supply.

water is ready for filtration. The water flows through layers of rock, gravel, pea gravel and ever finer layers of sand to remove the finely divided material which did not settle as sludge in the treatment basin. This fine material clogs the filters after a period of operation and previously filtered water is forced up through the filters or backwashed to clean them. In Des Moines, approximately 100,000 gallons of water is required to backwash one filter after 35 hours of use.

Following filtration, sodium fluoride is added to the water as recommended by public health officials to assist in prevention of tooth decay. Chlorine is added as a final disinfectant. Chlorination is one of the most significant advances in water treatment and has provided a cheap reproducible method of ensuring the bacteriological quality of water. Chlorination is also the most commonly used water treatment. A small system such as Granger, for example, pumps water to its customers after "simple" chlorination to control bacteria. Even this simple treatment requires testing and monitoring.

The finished water is a far cry from the water that entered the plant. Along the way, chemicals and treatments have been added to affect

the turbidity (clarity), taste, odor, hardness and sanitary level of the water. Various tests have been performed to detect contaminants such as those previously listed in the chart.

Other communities throughout Iowa have to deal with various contaminants that require individual treatments. For example, communities with high levels of radionuclides have to remove the contaminant or find a new source of drinking water.

Many communities (as well as individual well owners) have to deal with high levels of nitrates in the water. High nitrate levels could be dangerous for pregnant women and young children. In babies, high nitrate levels can cause methemoglobinemia, the "blue-baby syndrome," which can prove fatal. Methemoglobinemia is a condition which limits the supply of oxygen to the tissues, but it is not the only health concern linked to high nitrate levels. Cardiovascular disorders, hypertension, increased cancer rates and congenital malformations have been tentatively linked to high nitrate levels.

Experimental methods to remove nitrates from the water on a large scale, such as a municipal processing plant, are another step and an additional cost to the price of finished available water. One method, which has been installed in Lewis, Iowa, is another variation of the old home (ion) exchange softener method that also includes the use of resins. This method is being considered for Des Moines. Initial results look promising, but the process is expensive in terms of both time and money.

The application of advanced methods of analysis has widened our knowledge of the trace impurities in water much faster than we have accumulated knowledge about the toxicity of these impurities. As detection levels improve and research links health-related effects with small amounts of these contaminants, ways will have to be found to prevent them from entering the water if it is to remain available as a drinking water supply.

Traces of synthetic organic chemicals, industrial solvents, pesticides and high nitrate levels are already

being found in drinking water and in groundwater supplies, and Iowa is a state that relies heavily on groundwater for its drinking water supply.

Ways are going to have to be found to deal with these impurities, and that means the cost of water will rise once again. Lowans may find that altering some industrial, agricultural and waste disposal practices are necessary to prevent pollution and impurities from entering the water supply. And, this may prove to be a more efficient and cost-effective way of protecting and providing clean water.

If you want to learn more about your public water supply, you can start by finding out what is the source of your supply (lake, river or aquifer). You can learn what testing is required of your system and whether your utility monitors unregulated contaminants, particularly those which are likely to be a problem in your area. And, you can learn what the history of investment is in maintaining the water system and what were the most recent expenditures for new treatment equipment. This information can be obtained by contacting your local water utility.

If you have your own well or water supply, you can and should have it routinely tested for bacteria and nitrates. You may also wish to have it tested for synthetic organic compounds and pesticides. Monitoring and testing for these man-made compounds can be expensive but is crucial to providing a continuing safe water supply.

In our industrialized, chemical-additive world, humanity's continual search for clean pure water has taken on a new meaning. Where once water was considered pure if it was free of debris, sediment, odor and taste, that is no longer strictly the case. We have found that what we cannot see may indeed hurt us and make our quest for clean safe water even more urgent and expensive. Preventing the contamination of our water supply makes that quest much easier and clean safe water more available.

Kathryn Stangl is an information specialist located in Des Moines.

CONSERVATION UPDATE

TREE CITY USA

by Bill Farris, state forester

When you think about it, every community in the state is a mini-forest. All you have to do is fly across the state and when viewed from the air, the scattered trees of a community look like a true forest — full canopy of trees more or less regularly punctuated by buildings and roads. A community must have a definite tree care program to enjoy

the full benefits of its urban forest. Too often the "forest" is not being managed as well as it could be. Trees are planted haphazardly, diseased trees are not removed, and new trees are not planted or cared for. Usually, about half of all the trees are on public property — along streets, in parks and around public buildings.

It is important that well-defined community programs of tree planting, tree maintenance and tree removal be initiated to ensure healthy and attractive urban landscapes. Even communities without forestry departments or paid staffs can benefit from plans which spell out tree care standards for city employees and volunteer workers. Guidance and assistance is available from Forestry Extension at Iowa State University, the Iowa Urban Foresters Association and the Forests and Forestry Division of the Department of Natural Resources.

The National Arbor Day Foundation has developed a program — *Tree City USA* — to recognize

communities that are effectively managing their tree resources. This program is carried out in cooperation with the National Association of State Foresters, U.S. Forest Service, the U.S. Conference of Mayors and the National League of Cities.

Community recognition as a *Tree City USA* is contingent on meeting four standards. These include the formation of a locally constituted municipal tree board and adoption of a tree city ordinance. They also include the establishment of a comprehensive community tree program and an annual Arbor Day observance.

Coordination of a community tree program is best accomplished by a recognizable group with authority to make decisions and implement planned activities. A legally constituted tree board would have this authority. In large towns, city forestry departments with salaried employees often are feasible. In smaller towns, city tree boards might not only plan the program, but also physically carry it out.

Adoption of a local tree ordinance promotes the continuity of the local program. Such an ordinance should designate the department or board responsible for managing the city's trees. It should contain recommendations concerning species of trees to be planted and tree maintenance policies. Sample tree ordinances may be obtained from the Arbor Day Foundation or the Forests and Forestry Division of the DNR.

Evidence of a complete program is documented in the financial support given to the tree program. Communities must document a minimum program expenditure of one dollar per capita to qualify for the *Tree City USA* recognition. Meeting this expenditure criterion is fairly easy, considering all the tree-related expenses which qualify. Expenses such as tree planting, tree trimming and removing obviously qualify. Other expenses which qualify include administrative overhead, tree inventories, construction and maintenance of barriers to protect trees and treatment for insect and disease problems.

An official community observance of Arbor Day is the fourth standard which must be met. Arbor Day focuses the community's attention of the value and impact of trees on the local environment and to the local economy. In Iowa, Arbor Day is celebrated on the last Friday in April.

Iowa communities receiving the *Tree City USA* award for their efforts in 1987 and the number of consecutive years they have received the award are:

Ames	4 years
Boone	1 year
Cedar Falls	8 years
Cedar Rapids	10 years
Council Bluffs	1 year
Davenport	8 years
Elk Run Heights	1 year
Fort Dodge	6 years
Harlan	1 year
Iowa City	8 years
Maquoketa	1 year
Onawa	1 year
Waterloo	4 years



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BALD EAGLE POSTER A SUCCESS

The Symbol of Freedom bald eagle poster could be a symbol of salvation for the Nongame Program.

The response to the poster has been overwhelming. By the end of January more than 600 tax preparers had requested 12,425 eagle posters for their clients. Last year, only 448 tax preparers had requested posters and less than 7,000 posters were distributed via tax offices.

"I hope this reflects not only a response to the poster but also a genuine reflection of people's concern with the Nongame Program," said Laura Jackson, nongame/urban biologist with the DNR. "We've been honest with people this year and have had to tell them that the Nongame Program is beginning to go under because of decreased contributions."

The Nongame Program is responsible for monitoring, researching and

managing Iowa's 439 nonhunted species of animals. The program is funded only by contributions and does not receive any license or habitat stamp money. Contributions began with nearly \$240,000 in 1982 but have continued to decrease about 10 percent each year.

Meanwhile, the program has expanded and purchased land for wildlife preservation, reintroduced river otters, coordinated a kestrel and bluebird nest box program, and erected bald eagle platforms. Research on raptors, wildlife response to landscaping, breeding birds of Iowa, winter birds and piping plovers has also been possible because of the program.

There is still time to support the Nongame Program and to get the Symbol of Freedom poster. Those who donate to the program should ask their tax preparer for a poster. If you do your own taxes and have contributed to the program, send \$2.50 for postage and handling and write to the Nongame Program. Also, you can send a direct donation, plus postage, if you missed the Fish and Wildlife Protection Fund this year on your taxes. Send your requests to:

NONGAME PROGRAM

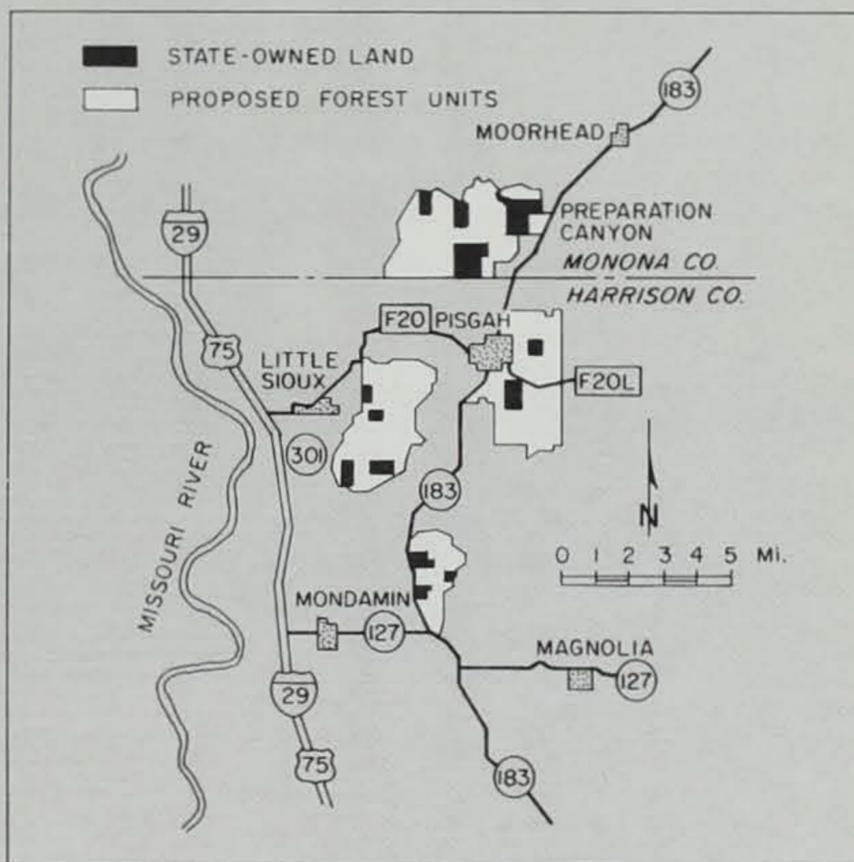
Department of Natural Resources
Wildlife Research Station
Rt. 1, Ledges Road
Boone, IA 50036

LOESS HILLS PIONEER STATE FOREST

Since 1986, the Iowa Department of Natural Resources has been in the process of purchasing land for the Loess Hills Pioneer State Forest in Monona

owned by the state.

Many management problems come with an acreage this size, especially because the separate tracts are spread over a wide area. Management problems include boundary posting, fencing, weed control and administering a wildlife habitat program.



and Harrison Counties in western Iowa. When completed, the area will encompass 17,190 acres and will protect a portion of Iowa's valuable forestry resource as well as provide substantial outdoor recreational opportunities.

At the present time, 2,755 acres have been purchased from 13 individuals. Because the areas were acquired from separate owners, the present land ownership pattern is fragmented. Future acquisition criteria will give weight to acquiring land that joins tracts already

Some management challenges are being met through a leasing system by which area farmers rent cropping rights on part of the land. This tends to keep the land in good condition, controls weeds and provides improved wildlife habitat. Only the best conservation farming practices are allowed.

If you would like to make a contribution towards the purchase of land, write: State Forester, Iowa Department of Natural Resources, Wallace State Office Building, Des Moines, Iowa 50319-0034.

AWARENESS URGED AS FLOODING SEASON APPROACHES

During the coming months, the potential for flooding from rainfall and melting snow will increase. Floods now rank as major killers and destroyers among weather-related disasters in the nation. In addition to contributing to our nation's death tolls, floods

near rivers, streams or dry creek beds which catch the overflow water resulting from rain and melting snow.

"Many Iowans are unaware they live in a flood plain," said Bill Cappuccio, an engineer with the Department of Natural Resources. "Some of Iowa's flood plains have flooded frequently, are well known and may be protected to a degree by flood control works. But other flood plains, which may not have flooded in



cause more property damage — more than \$3 billion annually — than all other natural disasters combined.

Flood plains — or flood hazard areas — are the only areas where floods occur. According to the federal government, 491 of Iowa's incorporated communities contain flood plains, which cover about eight percent of Iowa's land. These areas are naturally occurring, low-lying tracts of land

recent years, are no less vulnerable to disaster. It is important to understand that because of their natural function in nature, all flood plains are potentially dangerous if inhabited by man."

One major defense against flooding is to not occupy these areas, which are best left in their natural state. If flood plains are developed, buildings, roads and utilities should be protected from flooding at the time of

construction.

Unfortunately, many flood plain areas have already been developed improperly. It is estimated that there are over 50,000 flood-prone structures statewide. A potential tragedy exists in the fact that only about 4,000 of these structures are covered by flood insurance. This is due in part to a simple lack of understanding of insurance coverage. Flood insurance is not provided by basic homeowners' policies. Disaster assistance, if available, provides limited assistance to individual property owners and consists mostly of low-interest loans for repair and reconstruction.

Flood insurance is available to most home and business owners as well as renters through the National Flood Insurance Program, which was established by Congress in 1968. Coverage through the program can be obtained from any insurance agent but only if the community in which the property is located has joined the National Flood Insurance Program. For property in unincorporated areas, the county must join the program.

For information on flooding in your community or the National Flood Insurance Program, contact Bill Cappuccio, Iowa Department of Natural Resources, Wallace State Office Building, Des Moines, Iowa 50319-0034, (515)281-8942 or Herman Skaggs, National Flood Insurance Program, at (816)228-6903.

CLASSROOM CORNER

by Robert P. Rye

Iowa has some of the most productive land in America, with more than 90 percent of its land in agriculture. Test your knowledge of an Iowa soil — Tama soil — with the following questions:

1. Name the soil that virtually all other soils are compared to.
2. Where is the "type location" of the Tama soil?
3. Name the general type of plant cover which helped the Tama soil to form.
4. How many acres of Tama soil are found in Iowa?
5. From what parent materials is Tama soil derived?
6. What is the major land use of Tama soils?
7. How does the Tama soil rate when considering erosion?
8. What is the color of the Tama soil?
9. How does the Tama soil rate for available water capacity?
10. What is the approximate amount of clay in Tama soils?

Answers:

1. Tama soil. 2. Tama County near Gladbrook.
3. Prairie grasses. 4. 700,000 acres. 5. Loess. 6. Row crops of corn and beans. 7. 5 to 14 percent slopes severe loss — a major Iowa problem. 8. Dark. 9. High. 10. 33 percent.

Finding Wood from Afar

by Patricia L. Rensink

Reprint from the Iowa Energy Bulletin



ILLUSTRATION BY LARRY POOL

Landsat Satellite Imagery is helping to provide the "big picture" of potential energy opportunities in Iowa. The Department of Natural Resources' geological survey bureau has recently used the satellite imagery for forest inventory assessment in 17 eastern Iowa counties.

Remote sensing techniques documented current wood availability and the data was compared to wood acreage results of the 1974 U.S. Forest Service (USFS) study and the 1967 Soil Conservation Service Conservation Needs Inventory (CNI). The USFS study gathered data from aerial photographs and the CNI inventory used field sampling analysis.

Imagery used for the forest inventory came from the thematic mapper scanner, a device located on the Landsat Satellite. This thematic mapper electronically scans the land as the satellite moves overhead. Data from the scanner is then organized

into scenes. Two scenes were needed to cover the eastern Iowa region and two maps were produced at a 1:250,000 scale.

Results showed a high degree of consistency between the Landsat acreage and the 1974 USFS study. The most significant difference was shown in the counties along the Mississippi River where Landsat scenes showed an increase in forest acreage.

The Landsat forest inventory is part of an extensive evaluation of wood as an energy resource in existing forests. The DNR will evaluate all data and identify areas for potential energy use. Of particular interest are the Fort Madison and Anamosa sites because of the state facilities located there. The DNR's energy bureau is considering recommending that the boiler units in these state facilities be converted to use biomass fuels. The boiler conversion would economically benefit Iowa by keeping energy

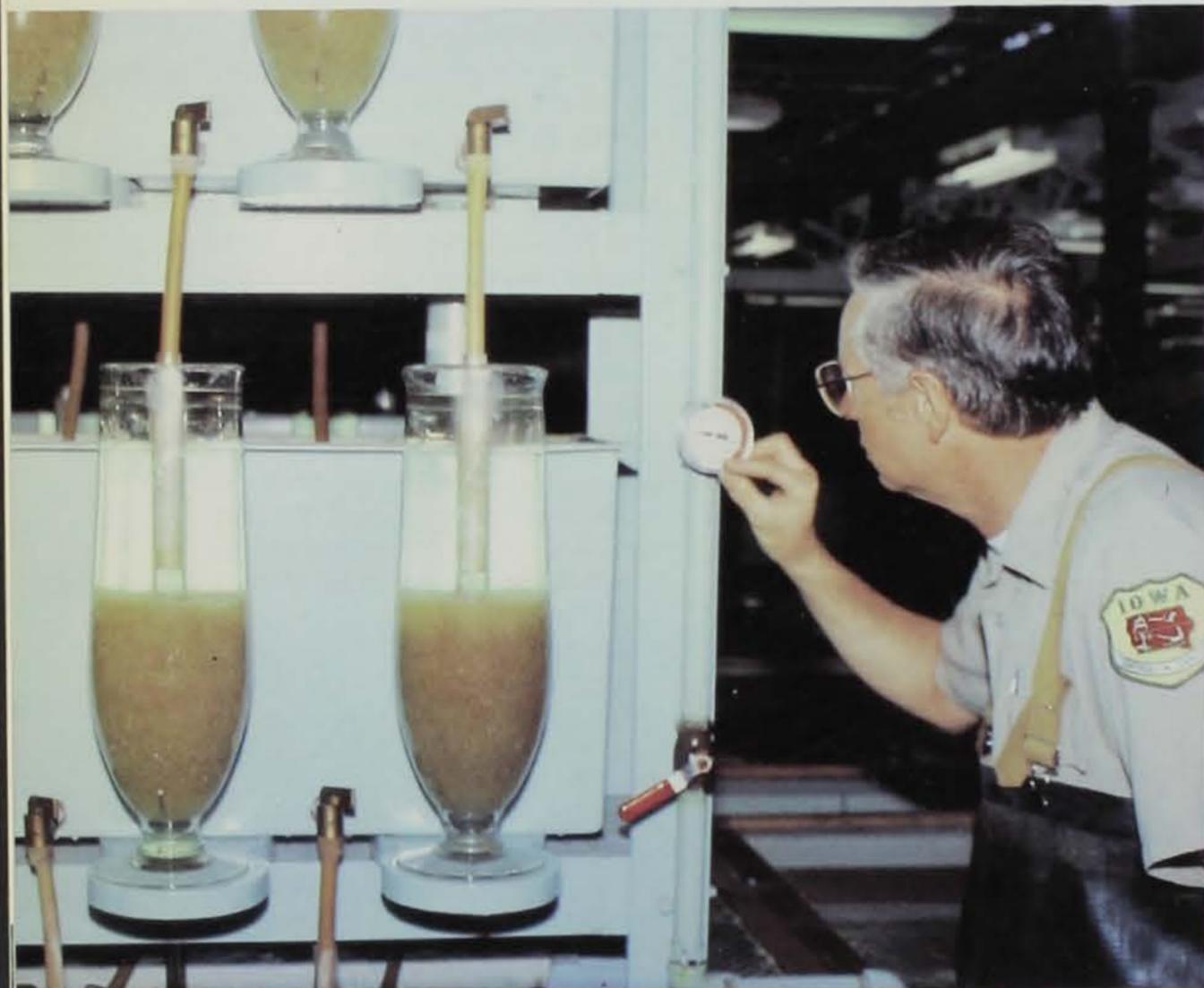
dollars within the state.

A related wood study conducted by Iowa State University is also helping to identify areas of potential energy use. This study entitled "Marketability of Wood for Energy," has shown that a 143,000-acre wood supply or approximately 71,000 to 107,000 cords of wood could be harvested annually in eastern Iowa, if properly managed. The report identified Short Rotation Intensive Culture (SRIC) tree plantations as the most reliable long-term source of wood for energy. Promoting SRIC systems as a wood energy supply would reduce any marginal competition for wood products, if existing forestland is the only source of wood for energy. An additional benefit of developing a market for low quality wood may be the improvement of existing forest stands, thereby producing a stand of higher value for the woodland owner. Should this occur it would also mean an increase in the supply of sawtimber in the state, which in turn could attract more forest industry.

It has been shown that high volume wood industries have not significantly impacted the forest resource over the past 30 years. Jim Bulman, state forest management bureau chief, stated that the cattle market has a greater effect on timber management than the eastern Iowa wood industries. As cattle prices go up, more of the timber is grazed or cleared for pasture.

Satellite imagery is a technique which can quickly and efficiently extract forest acreage information from anywhere in Iowa. At any time the land cover or land use can be identified from the satellite. According to James Giglierano, DNR research geologist for the Landsat project, there are other applications for Landsat in addition to forestry such as crop reports or water resource identification. Landsat offers a way of gathering statistics and reporting on them in a systematic way. It may become a significant evaluation tool of the future.

Patricia L. Rensink is a student at Drake University and is serving an internship with the department's energy bureau.



Out of the Cool Waters of Iowa's Hatcheries

Text and Photos by Lowell Washburn



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APRIL MARKS THE MONTH WHEN MANY IOWA ANGLERS FIRST BEGIN TO PLY THE waters of a brand new season. It is also a month of unstable weather conditions that are fully capable of inflicting the outdoor enthusiast with a full gammet of extremes ranging from ice-choked rod tips one week to sunburn the next. Most anglers, however, will tell you that the rewards are well worth the effort; for



this is the time when the season's first gamefish come all sleek and firm from ice-cold waters.

But to Iowa Department of Natural Resources fisheries personnel, the month of April has yet another meaning — this is when the state's cool-water hatcheries earn their keep. In Iowa, these facilities deal with the production of walleye, muskellunge, tiger muskie and northern pike — with the walleye serving, far and away, as the backbone species. Elusive to catch and a delight to eat, the walleye is popular wherever it occurs. Unfortunately, the natural reproduction of this fish in Iowa's interior lakes is extremely limited and even under the best of conditions can produce only a small fraction of the populations needed to support a viable fishery. Consequently, this

important resource is largely dependent upon artificial fish culture.

Iowa's two walleye factories are located at Spirit Lake and Rathbun Reservoir. Collection of brood fish begins within a day or two of ice-out in the north, and when water temperatures reach the low 40s in the south. Adult walleyes are captured during nighttime netting efforts that are conducted over shallow, rock and gravel spawning areas. Live trucks then deliver the fish to the hatchery where they are placed into large concrete holding tanks.

Female fish are examined daily for readiness to release their eggs. And when a walleye becomes ripe, her eggs are stripped into a pan where they are immediately fertilized with the milt of male fish. Walleye eggs measure around 150,000 per quart, and a five-pound female will produce around one pint of eggs. The eggs are then placed into a suspension of clay water to keep them from sticking together and suffocating, and after hardening for several hours are placed into hatching jars and put up in batteries. The fry will emerge in 18 to 21 days depending on water temperature. Most walleye are stocked as newly hatched fry. The demand for stockings is great, and this spring the DNR plans to hatch at least 119 million walleye.

All of the state's muskellunge begin life at the Spirit Lake hatchery, and around 18,000 pure-strain muskies will be produced during 1988. However, instead of being stocked as fry, these fish will be reared to the five- or six-inch fingerling stage to be released in August. In addition to this about 100,000 tiger muskies (muskellunge/northern pike hybrids) will also be produced at Spirit Lake and then shipped to Rathbun for rearing to the fingerling stage.

Although northern pike spawn naturally across Iowa, these populations are supplemented with northern pike produced at the Guttenburg fish hatchery, located on the Mississippi River. During 1988, around eight million northern pike will be produced.

Iowa's fish hatchery operations are funded entirely by sportsmen through the sale of fishing licenses and through Wallop-Breaux money which is derived from the sale of fishing equipment.

The demand for stockings is great, and this spring the DNR plans to hatch at least 119 million walleye.



The result of a successful cool-water hatchery program.

Fishing Re

WHEN I WAS DOWN BONEFISHING OFF THE FLORIDA KEYS WITH TED

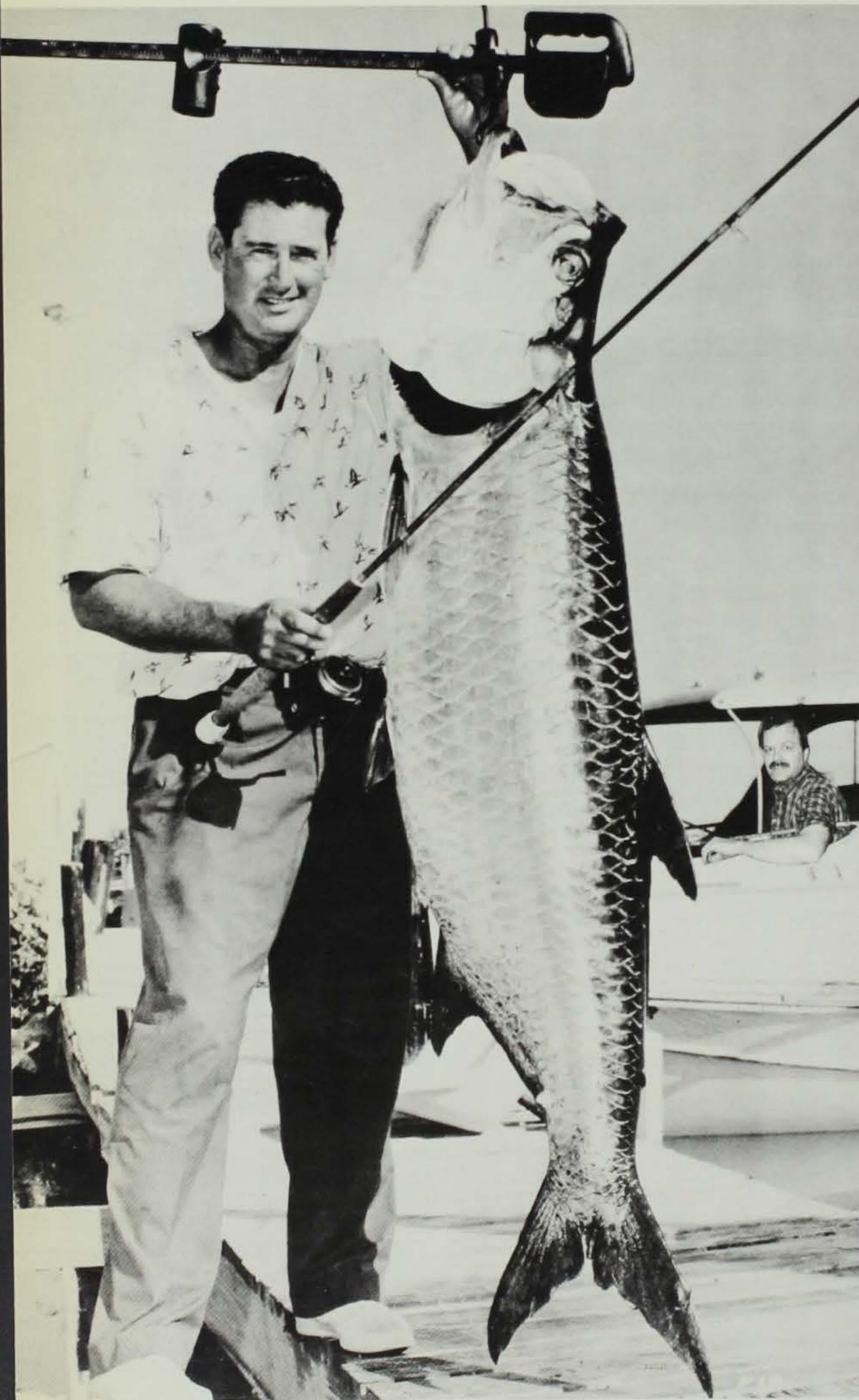
Williams, we got to talking about world fishing records and the stories behind them.

The "Splinter" and I were arm weary from a great day on the flats and had just drifted into a quiet bay to relax. Luckily the ice in the cooler had lasted longer than our arms. I never called Williams "Teddy Ball Game" because I figured he hated the name. Paul Hornung called him that one day when we were hunting geese in Texas. Williams stared him down cold and Hornung was a football player no less. At the other end of the blind, Yogi Berra and I just looked at the floor. You could have heard a pin feather drop.

But that day Ted was in a good mood, and we got to talking about these world fishing records. Between the two of us, we had fished with a lot of these guys and it's really time that some of the facts got out.

Like George Perry, the guy who caught that large bass in Georgia. I met him in Colorado trout fishing. He was old even then but sharp as a tack and a pretty decent fly fisherman. Seems he moved to the mountains just to get away from that bass story. I like to trout fish with Woody Allen and he was along when we met Perry. Woody loves to gamble on fish, and I was down \$10 when this old hermit came through the willows. We got him in on the bet and Allen starts acting goofy, making Perry laugh. I was fishing hard and together got the old man for \$80. Woody still tells the story around New York.

Anyway the truth comes out about that 22-pound, 4-ounce bass. Perry caught the fish out of a horse tank, not some lake. A farm kid had been raising it as a pet. The kid kept Perry broke for years just paying to keep his mouth shut. Now this kid is a U.S. senator from some southern state.



Ted Williams weighs in Runge's record tarpon as Bob relaxes in the boat.

Records and Big-Time Stories

by R. Runge

Williams brought up the story about this muskie from New York which he found out about. He knew it would make me happy because Hubert Humphrey and I used to fish the Chip up in Wisconsin with Louie Spray and Cal Johnson. Forget that stuff about those two being big rivals. They were great friends and the best muskie fishermen on the planet. Hubert and I had to troll suckers to keep up with them and then we only out-fished them a few times. Hubert used to like to bring George Burns along in our boat, and I think that slowed us down. Burns never fished, but he got a big kick out of luring gulls in with bread and then throwing them cigars. One day he went through a whole box of Cubans laughing his head off, but I never saw the humor in it.

Anyway this Lawton fellow that claimed the 69-pound, 15-ounce muskie kept a dental surgeon busy for two weeks fixing up this huge barracuda he'd bought live down in Florida. The fish croaked when they spray painted it and Lawton had to rush it to the scales. He was always angry about it because when he bought the fish it went over 70 pounds. He got the record just the same.

Perhaps you've heard that Ernest Hemmingway once held a line-class record for Marlin. Well, that's a different story too. I used to fish off the keys with Hemmingway and his buddy Roy Rogers. A lot of people didn't know Rogers used to hang around with Hemmingway and that was because he never wore the western stuff down in the Keys. He used to love to dress as a bus driver so nobody would recognize him. On the back of his jacket it said "Greyhound" and on the front it said "Al." Hemmingway went along with Rogers and called him Al, except late at night when Hemmingway couldn't remember anything. Another odd thing I recall is that Rogers always slept on the floor.

Anyway that Marlin never had a

hook in its mouth. Hemmingway shot it with a machine gun. They filled the holes with window putty and 10 minutes after the photo, the fish fell into seven pieces. I never saw anybody laugh so hard and when it was over, the crusty writer walked away and never spoke of the incident again.

Williams' favorite though was the 25-pound walleye this Harper caught down in Tennessee. The fish never even existed.

Sonny Liston and I were up in Louisville enjoying the Churchill Downs meet, and we were supposed to meet Williams and Bobby Kennedy for some fishing on Old Hickory down in Tennessee. But Liston and I were stuck big and we couldn't leave. Don't believe what you hear about Liston. He was really a mild-mannered guy, even the jockeys started pushing him around. If I hadn't hit a

lucky streak we would never have gotten out of there. Anyway Williams and Kennedy are down there after Harper supposedly caught this walleye. Well Kennedy is just warming up to take on Hoffa, and he starts investigating the story. It comes out that Harper and his buddies knew a blind guy that ran a meat market. One day they brought in a pet poodle smeared with fish oil, threw him on the scale and told the blind guy it was a walleye. It took a lot of nerve but they got the record.

So there you have it. They say records are made to be broken; however, you always have the right to be suspicious. Everything I've told you is the truth but the next guy might be lying.

R. Runge is an information specialist located in Des Moines.

Former President Hoover loved to fish Iowa trout streams as he and Runge discussed international politics.





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