MARCH 1981

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Iowa CONSERVATIONIST

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Front Cover — Screech Owls by wildlife artist Jim Landenberger of Cedar Rapids, Iowa.

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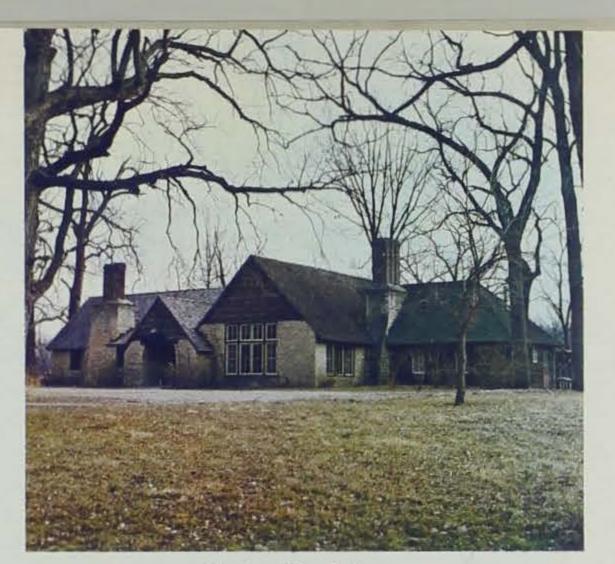
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Walnut Woods Lodge

One of Des Moines' Surprises!

BY KIM YOUNG PARK RANGER Photos by Ron Johnson

IF YOU ARE FAMILIAR with the Des Moines Chamber of Commerce's slogan, "Des Moines the surprising place," you probably will agree that Walnut Woods State Park is one of those many surprises. Located just a few miles to the south and west of Iowa's State Capitol Complex, which is surrounded by the city of Des Moines, this state park is made up of 260 acres of Raccoon River bottom land.

The entire valley of which Walnut Woods is a part is due to the work of the Raccoon River and this meandering stream's influence prevails to this day. The park elevation is not that much higher than the normal river surface and the area within the park boundaries is almost level. Close observation of this area will reveal shallow depressions and small ridges. For example, just south of the shelter house area there is a crescent-shaped depression many yards wide and onehundred yards or more long. These depressions and ridges are scars left by countless floods and river channel changes that have taken place over the years. The river is constantly changing the appearance of Walnut Woods. The most dramatic change can be seen along the south west border of the park, where the Raccoon River channel runs against the western edge of the park. Constant churning and washing take place removing tons of soil, sand, and gravel every year. This washing is even more drastic during flood periods, such as in March of 1979. No matter how alarming this loss of river bank may seem, it is all part of the natural meandering characteristic of the Raccoon River.

Probably the most surprising aspect of Walnut Woods is the fact that, within its timbered boundaries remains the largest surviving natural stand of black walnut trees in North America, hence the name!

Only minutes away from the largest city in the state, the recreational opportunities at Walnut Woods are numerous. Some activities which are favored at this park are: FISHING, the Raccoon River is a very productive catfish stream. PICNICKING, there are approximately 80 acres of beautifully shaded picnic areas. Fireplaces and tables are situated close to all six parking lots. BIRD WATCHING, park personnel have identified over 90 different bird species at Walnut Woods from August 1973 thru August 1976. HIKING & NATURE STUDY, there is a self-guided interpretive trail which can be very helpful for school groups. There also are numerous foot trails along the river and around the perimeter of the park. One activity that has grown in popularity in the past few years is CROSS-COUNTRY SKIING, the entire park including 2.5 miles of trails is open to skiing in the winter.

For those that enjoy spending their free time camping in a primitive setting, Walnut Woods has a 32 unit non-modern camp area with full shade, gravel pads, picnic tables, and fireplaces furnished. Since this park is located near Inter-State 35, we do receive some trailer traffic, but for the most part the park is not congested and one should be able to relax in the natural setting of this camp area.

One thing that Walnut Woods is known for is the majestic stone and rough-cut wood building located in the center of the park. The lodge was constructed during the 1930's, of Anamosa dolomitic limestone brought in from some Eastern Iowa quarry and rough-cut, hand fitted lumber. The quality construction of this building will allow it to endure for many, many years. Since its completion, this facility has been used by the public for a variety of purposes. The most popular activity in recent years has been wedding ceremonies and celebrations. It isn't hard to imagine how beautiful an outdoors ceremony on a warm June afternoon can be. Many couples bring in their own flowers, arches, and decorations. While others prefer to hold their ceremonies next to the natural decoration of a flowering Crabapple tree. Other activities for which the lodge may be used include: family reunions, company picnics, holiday parties, business meetings, and many others.

The lodge is offered on a reservation basis and reservations may be made in person at the park office or by telephone. The Walnut Woods lodge is available from May 1st thru December 25th, seven days a week. Only one reservation is taken per day, this entitles the users to the facility from 10:00 AM until 10:30 PM. Further details may be obtained by calling the park office at: 515-285-4502.

While providing many recreational opportunities for people, Walnut Woods (like all Iowa's State Parks) is also a wildlife refuge area. As was mentioned earlier this park is host to many species of birds and also is the home of several of this state's common mammals. Some of the most routinely observed animals at Walnut Woods are: Whitetailed Deer, Eastern Cottontail Rabbit, Raccoon, and the most plentiful Eastern Fox Squirrel.

We have only scratched the surface of the outdoor recreation opportunities that await you at Walnut Woods. As the seasons change, so do the activities. With rising fuel costs making those long weekend trips a thing of the past, this 260 acre park can be a nice alternative for your family.

ICE BOATING

BY DON OCHS

PHOTOS BY GINGER NIEMANN AND RICK GIETZEN

Three months ago you trolled this shoreline for walleye but, today, a foot of ice blankets the entire lake. Above, a few clouds decorate an otherwise blue sky. The sail on the ice boat beside you makes snapping sounds in the breeze. Settling low in the seat, you pull down the helmet visor, test the steering pedals, and make one last check for the wind. You pull down on the rope, and watch the sail tighten. As the boat accelerates, the skates hum and hiss alongside.

The shoreline that seemed far away only seconds ago races toward you. Again, steadily pulling on the rope, you tilt sideways as the boat gently lifts one skate into the air. The boat gains even more speed. Easing up on the rope and steering into the wind, your airborne skate greets the ice with a slicing "scrunch" and, then, congratulating yourself on your incredible courage, you remember to breathe again. You sail back to the shore so your family can each have their turn.

"Nice work, Dad," your ten-year-old says. "But I tack a whole lot smoother than you do!" he shouts as he zips away from our shoreline bonfire. Ever the calming influence, my wife hands me a hotdog before I begin my usual threat of cutting the rascal's allowance.

Sound far-fetched? Dangerous? Expensive and exclusive? Not at all.

Living in southern Iowa poses dilemmas for families who enjoy outdoor activity in the winter. Downhill skiing usually translates into an expensive all-day trip. Ice-fishing or hunting tend to involve only part of the family. Cross-country skiing, toboganning, and snow-mobiling all require snow — and often, quite often, we don't have any.

Last winter, two of my neighbors were watching me drown waxworms in an ice-fishing hole when an ice boat whisked by.

"Wish we had one of those," Rick said.

"I'll bet you I can build one," Rod replied.

"Too expensive for me," I added, dropping another wax-worm through the ice.

That night, after I tossed an empty stringer on the garage floor, the phone rang.

"Get on over here. We're drawing plans for some ice boats. See you in five minutes."

Ten days later we carried six fully-rigged, home-made ice boats out of Rod's garage. On hand to greet us, were six wives and a dozen children, no longer wondering what we had been doing so many nights after supper. We had spent \$150.00 for each boat and they all were designed to disassemble for easy storing or transporting. That evening, we sailed.

With the sole exception of Rod's welder and grinder none of us had any unusual tools. The frames and skates came from a scrap metal dealer; the masts and booms came from a muffler shop. The owner of a canvas company made our sails and seats. The ropes, pulleys, cables, and paint came from our local hardware store.

None of us had ever sailed ice boats before, but a quick trip to the library for a book on sailing gave us some help. A rope, we learned, is properly called a "sheet" and a cable is a "shroud." We read that if the wind is directly behind us, we would be "running." If the wind were coming from our left or right side we would be "reaching" and if we were zig-zaging at 45 degree angles into the wind we were "tacking." Knowing the words gave us some confidence, but sailing the ice boats gave us our much needed experience.



How does one stop an ice boat? Easily, after some practice. Actually, you steer the boat directly into the wind and loosen the rope on the boom. With no wind in the sail, the boat glides to a halt. Sounds simple and it is — after you practice in gentle winds.

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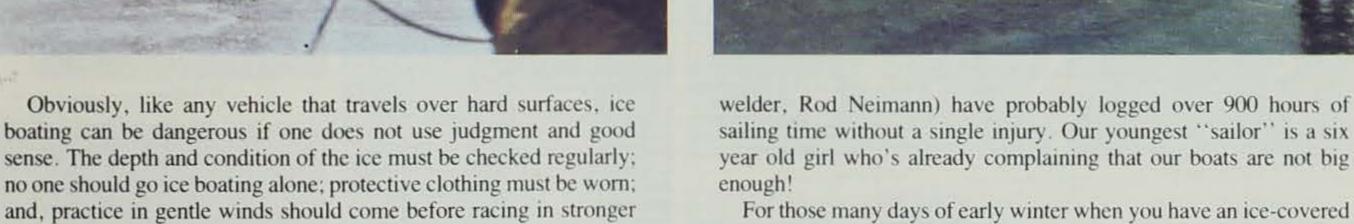
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Just like summertime sailboats, an ice boat sail acts like a large airfoil. The wind inside the sail pushes the boat forward and as the wind swirls around the outer side of the sail it creates a pulling force. The rope and pulley arrangement on the boom allow the driver to "dump" some of the wind and slow down or "hold" more wind and increase the speed of the ice boat.

Our purpose in this article is not to give detailed directions for building ice boats. We make no claim to expertise in the art and craft of boat construction. Rather, we want to encourage others to learn about ice boating and, best of all, sail one.

Many companies manufacture ice boats and most marina owners have the addresses and price-lists. Should you decide to build your own ice boat, we suggest that you go to a marina and see how the various models and styles are actually built. Better yet, visit a lake where ice boaters are sailing and ask to sail one. We made our own design, for example, after looking at and sailing the "Lockley Skimmer" (available from Lockley Manufacturing Co., 310 Grove St., New Castle, PA 16103).





ones — four simple rules that make a difference.

Among our families and dozens of neighborhood families that have joined us on weekends, our six "Flying RN's" (named after our

For those many days of early winter when you have an ice-covered lake nearby, collect the family, rig the ice boat and set sail for the distant shore. No doubt, your own youngster will "show you how its done!"



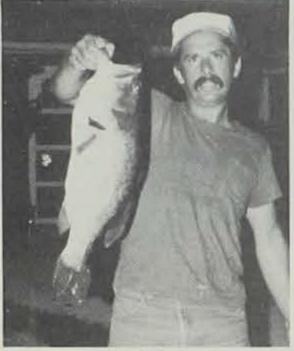
1980 Big Fish Two New Records ...

Two new records were established as Iowa's Big Fish Awards program entered its 20th year. In all, 1980 was a very successful year for anglers despite some strange weather. Big fish awards were sent to 308 lucky anglers who entered qualifying fish during the year.

The two new state records were established by Rexanna Wilson of Drakesville and James D. Schmitt of Toledo. Wilson caught a 4 lb. 8 oz. crappie from a Davis County farm pond. This fish topped the old record by 7 oz. Schmitt landed a 49 lb. 15 oz. buffalo from Cherry Lake in Tama County. The monster beat the old record by 6 lb. 7 oz. and is only 6 lbs. off the world record.

One odd catch that turned up this year was made by Mike McDermott of Dubuque. Can you imagine his surprise when he pulled in a 3½ pound piranha from the Mississippi River. The fish had probably been released by someone who had tired of it in his aquarium. Relax everyone — it was not a flesh eating species.

There were many other exceptional catches made during the year and our congratulations go out to every angler listed below. If you would like to see your name on this list next year get out there more often than you did last year. Good things happen to people who go fishing.

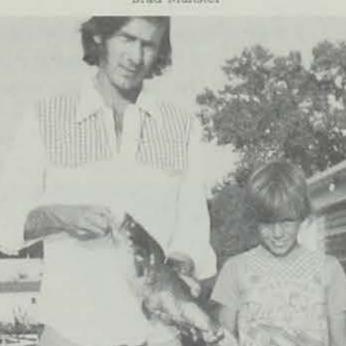


Sam DiBlasi

Simmie J. Hilliard



rari Munster



Dwayne Mulholland



James D. Schmitt





Patrick Broderick

HOW TO ENTER

Any species of fish taken by hook and line and caught in state or boundary waters is eligible. There are, however, minimum qualifying weight limitations as listed below:

| Bass, largemouth | 7 lbs. | Muskellunge 40" or | 15 | lbs |
|---------------------|--|--------------------|------|-----|
| Bass, ocean | | Tiger Musky 40" or | 15 | lbs |
| striped | 5 lbs. | Northern pike | 10 | lbs |
| Bass, rock | l lb. | Paddlefish | 25 | lbs |
| Bass, | | Perch, yellow | 1 | lb. |
| smallmouth | 4 lbs. | Sauger | 21/2 | lbs |
| Bass, white2 | ½ lbs. | Sheepshead | 15 | lbs |
| Bass, yellow | l lb. | Sturgeon, | | |
| Bluegill | l lb. | shovelnose | 3 | lbs |
| Buffalo | 0 lbs. | Sucker (Misc.) | 6 | lbs |
| Bullhead | 21/2 lbs. | Sunfish (Misc.) | 1 | lb. |
| Carp | and the same of th | Trout, brook | 1 | lb. |
| Catfish, blue 2 | 0 lbs. | Trout, brown | 3 | lbs |
| Catfish, channel 1 | | Trout, rainbow | | lbs |
| Catfish, flathead 2 | | Walleye | | lbs |
| Crappie | 200 | | | |
| | | | | |

Any entry must be weighed to the nearest ounce on scales legal for trade. The weighing must be witnessed by two persons.

If there is some doubt in species identification, the angler should contact the nearest Iowa Conservation Commission personnel for verification. Any new all-time record fish must be examined and verified by Iowa Conservation Commission personnel.

The Iowa Conservation Commission will offer free taxidermy work for any new all-time record fish. The only stipulation is the fish will be on public display at the Rathbun Fish Hatchery until the record is broken. Then the fish will be returned to the angler.

The angler must fill out an official entry blank or fascimile and send it and a photo or color slide of the angler and the fish to Official Big Fish Records, Iowa Conservation Commission, Wallace State Office Building, Des Moines, Iowa 50319, by January 1 (photo will be returned). The entry blank includes the name and address, the species of fish, date caught, body of water, county, total length, bait or lure used, and the witnesses' signatures and addresses. Official entry blanks will be included in the annual Fishing Laws Synopsis brochure which will be available to the public wherever fishing licenses are sold. Any fish that surpassed the official state record will be publicized through the Conservation Commission's weekly news release. All state records and annual awards will be published in the March issue of the IOWA CONSERVATIONIST. Iowa Angling Award certificates and shoulder patches will also be sent to qualifying anglers.

ALL-TIME RECORD FISH

| WEIGHT | LENGTH | WHERE CAUGHT | DATE | NAME |
|--------------------|--------|--|--------|-----------------------------------|
| BASS (Largemouth) | | | | |
| 10 lb. 5 oz. | 241/4" | Farm Pond Lee County | 8-70 | Paul Burgund Fort Madison |
| BASS (Smallmouth) | | | | |
| 6 lb. 8 oz. | 2138 | Spirit Lake Dickinson County | 5-79 | Rick Pentland Estherville |
| BASS (Rock) | 12400 | N. 2. 1 1 122 | St 200 | |
| 1 lb. 8 oz. | 101/2" | Mississippi River Dubuque County | 6-73 | Jim Driscoll Dubuque |
| BASS (White) | | | | |
| 3 lb. 14 oz. | 20" | West Okoboji Dickinson County | 5-72 | Bill Born Milford |
| BASS (Yellow) | | | | |
| 1 lb. 5 oz. | 121/2" | Clear Lake Cerro Gordo County | 5-78 | Lowell Washburn Fertile |
| 1 lb. 5 oz. | 13" | Sand Pit Black Hawk County | 6-78 | Timothy Dolan Waterloo |
| BLUEGILL | | | | |
| 2 lb. 5 oz. | 1134" | Farm Pond Jasper County | 4-76 | Mary L. Pool Prairie City |
| BULLHEAD | | (A) 3 | | |
| 4 lb. 8 oz. | 1794" | Farm Pond Taylor County | 4-66 | Dennie Karas Massena |
| 4 lb. 8 oz. | 2212 | Boyer River Harrison County | 8-71 | Ralph Cooney Woodbine |
| BUFFALO | | CONTRACTOR AND | | |
| 49 lb. 15 oz. | 41" | Cherry Lake Tama County | 4-80 | James D. Schmitt Toledo |
| CARP | | | | |
| 50 lb. | 44" | Glenwood Lake Mills County | 5-69 | Fred Houghland Glenwood |
| CATFISH (Blue) | | | | |
| 30 lb. 8 oz. | 40" | Lake Manawa Pottawattamie Co. | 6-79 | Fred Droizscher Council Bluffs |
| CATFISH (Channel) | | | | |
| 30 lb. 4 oz. | 39" | Viking Lake Montgomery County | 8-74 | Glenn Harms Shenandoah |
| CATFISH (Flathead) | | 351 5 | | |
| 62 lb. | 46" | Iowa River Johnson County | 7-65 | Roger Fairchild Coralville |
| CRAPPIE | | | | |
| 4 lb. 8 oz. | 19" | Farm Pond Davis County | 2-80 | Rexanna Wilson Drakesville |

| WEIGHT | LENGTH | WHERE CAUGHT | DATE | NAME |
|------------------|--------|---|-------------|---------------------------------------|
| MUSKELLUNGE | | | | |
| 38 lb. | 521/2" | West Okoboji Dickinson County | 9-75 | Ed Feldhacker Spencer |
| TIGER MUSKY | | | | |
| 20 lb. 10 oz. | 431/2" | West Okoboji Dickinson Co. | 5-78 | Doug Stange Sibley |
| NORTHERN PIKE | | | 70.740 | |
| 25 lb. 5 oz. | 45 | West Okoboji Dickinson County | 2-77 | Allen Forsberg Albert City |
| PADDLEFISH | 2007 | 22 2 | 1.22 | 2 22 1 |
| 83 lb. | 66¾ | DeSoto Bend Harrison County | 5-73 | Lawrence J. Bonham Missouri Valley |
| PERCH (Yellow) | | | | |
| 1 lb. 15 oz. | 1434" | Spirit Lake Dickinson County | 9-74 | John Walz Estherville |
| SAUGER | 001 | Minney Pinney | 10-76 | Mrs. 18/illiam Busse |
| 6 lb. 8 oz. | 25" | Missouri River Woodbury County | 10-76 | Mrs William Buser Sloan |
| SHEEPSHEAD | 22400 | 120000000000000000000000000000000000000 | The same of | |
| 46 lb. | 381/2" | Spirit Lake Dickinson County | 10-62 | R. F. Farran Clarion |
| STURGEON (Shovel | | | 7.04 | n 1 11 |
| 12 lb. | 33" | Des Moines River Van Buren County | 4-74 | Randy Hemm Douds |
| SUCKERS (Misc.) | 211 | | 4 70 | G * P. I |
| 12 lb. 2 oz. | 31" | Iowa River Johnson County | 4-78 | George A. Paulson Cedar Rapids |
| SUNFISH (Misc.) | 10761 | p p l | 0.77 | D. W C |
| 1 lb. 7 oz. | 10% | Farm Pond Des Moines County | 6-77 | Delbert Cover Mediapolis |
| TROUT (Brook) | | | 10/00 | |
| 1 lb. 14 oz. | 16" | Sny Magill Creek Clayton County | 2-75 | John Delleman Davenport |
| 1 lb. 14 oz. | 161/2" | Canoe Creek | 4-78 | DuWayne Rude |
| 1 10. 14 04 | 1072 | Winneshiek County | 4.10 | Decorah |
| TROUT (Brown) | | | | |
| 12 lb. 14 4 oz. | 28" | Elk Creek Delaware County | 11-66 | Billy Lee Marion |
| TROUT (Rainbow) | | | 170000000 | |
| 15 lb. 8 oz. | 301/2" | Turkey River Clayton County | 8-77 | Chuck Greth West Des Moines |
| WALLEYE | 9.35 | | Names | 27 7 200 0 |
| 14 lb. 2 oz. | 311/2" | Spirit Lake Dickinson County | 10-68 | Herbert Aldridge Spirit Lake |



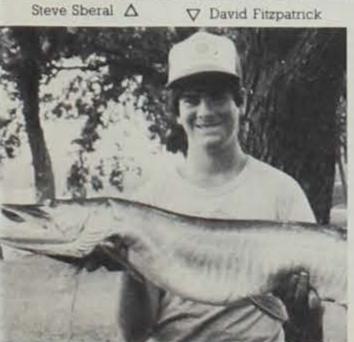
Raymond Miller



Rexanna Wilson



Steve Sberal Δ





Albert Leonard, Jr. Δ ∇ David Edmonds





William Primasing





1980 ENTRIES

| Weight | Length | Where Caught | Date | Name and Addres |
|--|--|--|---------|--|
| BASS (Larger | 13 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | | - | |
| 8 lb. 7 oz. | 23 | Farm Pond Pottawattamie Co | 7-11 | Sam DiBla Council Bluf |
| B lb. | 24 | Farm Pond | 9-21 | Rudy Bole Omaha, Nebrask |
| 7 lb. 11 oz. | 23 | Page Co. Greenbelt Reservoir | 140 | Greg Burk |
| 7 lb. 9 oz. | 22 | Black Hawk Co. Farm Pond | 7-19 | Waterio Joe DiBla |
| 1 10. 3 04. | | Pottawattamie Co | 1.13 | Council Bluf |
| 7 lb. 9 oz. | 23 | Farm Pond Lee County | 7-9 | George L. Marrec West Burlingto |
| 7 lb. 7 oz | 23 | Farm Pond | 7-7 | George L. Marzec |
| 7 lb: 7 oz. | 22 | Lee County Farm Pond | 6-2 | West Burlingto Edgar Wainwrigi |
| | 200 | Taylor Co. | 0-2 | Bedfor |
| 7 lb. 5 oz. | 23 | Farm Pond Bremer Co | 6-2 | Chris E. Fore Waver |
| 7 lb. 4 oz. | 22 | Farm Pond | 4-12 | Jean Anderso |
| 7 lb. 4 oz. | 221/2 | Polk Co Farm Pond | 5-14 | Des Moine Richard Branns |
| * 16 . 0 | | Polk Co | 2000 | Anker |
| 7 lb. 3 oz. | 22/4 | Lake Rathbun Appanoose Co. | 4-30 | George A. Paulso Cedar Rapio |
| 7 lb. 2 oz. | 23 | Farm Pond Lee County | 9-24 | Dale E. Dietso Fort Madiso |
| 7 lb: 1 oz | 2212 | Nine Eagles Lake | 3-21 | Eric W. Johnson |
| 7 lb 1 oz | 221/2 | Decatur Co. Farm Pond | 6-25 | Urbanda Steven E. Klo |
| | 1 | Ida County | | Holste |
| 7 lb. | 2212 | Lake Ahquabi Warren Co. | 4-12 | Richard Lee Kert Norwa |
| BASS (Ocean | Section Laboratories | No Entries | | |
| BASS (Rock) BASS (White | | es | | |
| 2 lb. 14 oz. | 1712 | West Okoboji | 5-3 | Gary Fredrick |
| A 10-14-2 | 107/11 | Dickinson Co. | # ne | Inwoo |
| 2 lb. 14 or | 1874 | West Okoboji Dickinson Co. | 5-25 | Rick Lancaste Osaç |
| 2 lb. 12 oz. | 18 | West Okoboji Dickinson Co | 4-5 | Stan Lelan |
| 2 lb. 10 oz. | 1745 | West Okoboji | 5-9 | Okobo William Goetso |
| | | Dickinson Co | | Spirit Lak |
| BASS (Small: 5 lb. 10 oz. | 22 | West Okoboji | 5-29 | Brad Munst |
| 5 lb 2 oz. | 20" | Dickinson Co West Okoboii | 9-14 | Spirit Lab Donna Friedrichse |
| 5 ID. 2 OZ. | 20 | Dickinson Co | 3-14 | Okobo |
| 4 lb 11 oz. | 20 | West Okoboji Dickinson Co. | 4-23 | George L. Marzeo West Burlingto |
| 4 lb. 9 oz. | 2017 | West Okoboji | 3-25 | R. Barry Day, |
| 4 lb. 9 oz | 19% | Dickinson Co. West Okoboii | 1-21 | Larry D Bendi |
| | | Dickinson Co | | Spence |
| 4 lb. 8 oz. | 20 | West Okoboji Dickinson Co | 2-22 | Alvin Ak Spirit Lak |
| 4 lb. 8 oz. | 20 | Cedar River | 11-2 | Maurice Doo |
| 4 lb 8 oz | 20 | Bremer Co. Middle Raccoon River | 4-26 | Dwain L Swallo |
| | | Dallas | | Redfie |
| 4 lb 6 oz | 1812 | Spirit Lake Dickinson Co | 7-31 | Bill Fen Spirit Lab |
| 4 lb 6 oz | 1812 | West Okoboji | 5-13 | Lester Pa |
| 4 lb. 6 oz. | 1917 | Dickinson Co. West Okoboii | 10-5 | Miltor Tony Tayl |
| 4 lb. 5 oz. | 21 | Dickinson Co. South Bear Creek | 4-22 | Sioux Ci David Campbe |
| 4 10. 5 01. | | Benton Co | 4-20 | Vinto |
| 4 lb 5 oz | 21 | West Okoboji Dickinson Co. | 4-22 | Mrs Eldon Hendrick Rockwell Ci |
| 4 lb. 5 oz. | 1912 | Spirit Lake | 10-8 | E L Jes |
| 4 lb. 4 oz. | 1912 | Dickinson Co West Okoboii | 6-6 | Spirit Lab Alvin Ak |
| | 1137000 | Dickinson Co. | 1000000 | Spirit Lab |
| 4 lb. 4 oz. | 2017 | West Okoboji Dickinson Co | 11-6 | Barry De Sible |
| 4 lb. 3 oz. | 2114 | Quarry | 9-18 | LuBon Hiszczynsk |
| 4 lb. 2 oz. | 181/2 | Webster County Wapsipinicon River | 4-27 | Fort Dodg Bob Marsh |
| | P00000 | Clinton Co. | | Long Gro |
| 4 lb. 1 oz. | 20 | Wapsipinicon River Bremer Co. | 5-5 | Rhonda Mili Tripo |
| 4 lb. l oz. | 2014 | West Okoboji Dickinson Co | 2-3 | Alan Riemenschneid Spirit Lai |
| 4 lb. 1 oz. | 20 | West Okoboji | 4-19 | Steve Weism |
| 4 lb | 1917 | Dickinson Co. | 6.2 | Esthervil Ronald E. Garn |
| • ш | 1972 | Wapsipinicon River Linn | 5-3 | Anamo |
| 4 lb | 20 | West Okoboji Dickinson Co | 5-13 | Don Johnse Spirit Lai |
| 4 lb. | 20 | West Okoboji | 4-17 | Otis Smi |
| BASS (Yellor | w) No Fr | Dickinson Co. | | Sible |
| - CONTRACTOR CONTRACTOR | , 110 61 | a la | | |
| 2 lb. | 121/2 | Farm Pond | 4-16 | Simmie J. Hillia |
| 116. 14 | Va- | Polk Co. | E 20 | Des Moin |
| 1 lb. 14 oz. | 12 | Farm Pond Linn County | 6-30 | William R. Silfie Spring Valley, Illino |
| 1 lb. 7 oz. | 111/2 | Spirit Lake Dickinson Co. | 5-28 | Rachel Colwe Spirit Lai |
| 1 lb. 7 oz. | 10 | Farm Pond | 5-11 | Rev Steven Wainwrig |
| 1 lb 6 oz. | 11" | Guthrie Co. Sand Pit | 4-21 | Baya Steve McGove |
| | | Muscatine Co. | 11077 | Muscati |
| 1 lb. 4 oz | 10 | Farm Pond Marshall Co | 5-19 | Dan Barte Marshalltov |
| 1 lb. 4 oz. | 10 | Spirit Lake | 6-14 | Mike Bradle |
| lib 4 oz | 10% | Dickinson Co. Farm Pond | 5-29 | Esthervi Darwin Campbe |
| | | Ringgold Co | | Shazinon Ci |
| 1 lb 4 oz | 10 | Lake Darling Washington Co | 5-9 | John Math Muscati |
| 1 lb. 4 oz. | 10 | Farm Pond | 5-14 | Erma Thiess |
| 1 lb. 4 oz. | 10 | Cass County Farm Pond | 6-19 | Atlant Tim Wee |
| A 70 To 10 | | Jasper Co. | | Le Gra |
| 1 lb. 4 oz. | 110 | West Okoboji Dickinson Co | 7-10 | Dave Wig Audub |
| 1 lb 314 oz | 10% | Farm Pond | 4-6 | Don Malve |
| | 117 | Pottawattamie Co. Farm Pond | 5-9 | Council Blu Larry Fo |
| 1 lb 3 oz | 117 | | | |
| 12002 | | Green County | 81000 | Jeffers Dan Dun |
| i lb. 3 oz i lb. 2 oz. i lb. 2 oz. | 11 | Green County Farm Pond Ringgold Co. | 1-27 | Jeffers Dan Dun Keilert |

| 1 lb 2 oz. | 10/4 | Farm Pond Delaware Co. | 6-14 | Rick Robinson Dundee |
|---------------------------|--------|---------------------------------------|-------|--------------------------------------|
| 1 lb 2 oz. | 974 | Farm Pond Guthrie Co. | 5-10 | Rev. Steven Wainwright Bayard |
| i ib i oz. | 1014 | Farm Pond Mahaska Co | 7-4 | Harold DeBruin |
| l lb. l oz. | 1214 | Spirit Lake Dickinson Co. | 10-10 | LeRoy Morton Milford |
| 1 lb 1 oz | 10 | Farm Pond Woodbury Co. | 6-1 | J. D. Phillips Sioux City |
| i ib. i oz. | 1094 | Sandpit Muscatine Co. | 5-18 | Robert R. Stanton Muscatine |
| 1 lb 1 oz. | 974 | Farm Pond Guthrie Co | 5-10 | Rev Steven Wainwright Bayard |
| l lb | 10 | Farm Pond Lee Co. | 8-22 | Jason Martinez Ft. Madison |
| i lb. | 914" | Farm Pond Louisa Co | 5-11 | Sheila Ramim Wapello |
| BUFFALO '49 lb. 15 oz. | 41" | | 4-12 | James D. Schmitt |
| 33 lbs | 38 | Cherry Lake Tama Co Lake Manawa | 2000 | Toledo Douglas K Buswell |
| BULLHEAD | 30 | Pottawattamie Co | | Council Bluffs |
| 4 lb. 1 oz. | 16 | Farm Pond Warren Co | 7-23 | Dwayne Mulholland Cedar Rapids |
| 3 lb. 8 oz. | 1614 | Farm Pond | 6-19 | John A. Shaw |
| 3 lb. 4 oz. | 16% | Wapello Co Farm Pond | 6-7 | Offumwa Sherman Russell |
| 3 lb. 4 oz. | 1794 | Wayne Co. Farm Pond | 5-6 | Rod Siefering |
| 3 lb. | 17 | Taylor Co Farm Pond | 5-19 | Bedford Rod Siefering |
| 2 lb. 14 oz. | 16% | Taylor Co. Farm Pond | 5-6 | Bedford Rod Siefering |
| CARP | | Taylor Co | | Bedford |
| 25 lb. 3 oz. | 28 | Black Hawk Co. | 3-30 | Greg Burke Waterioo |
| CATTISH (Bh | 36 V2 | Hallet's | 5-26 | Raymond Miller |
| CATFISH (Ch | annel) | Sac County | | Carroll |
| 22 lb | 33 | Cedar River Floyd Co | 5-9 | Steve Sheral Mason City |
| 21 lb. 8 oz. | 35 | Des Moines River Humboldt Co | 5-26 | Jim Thoden Humboldt |
| 20 lb. 8 oz. | 341% | Plum Creek Kossuth Co | 6-4 | Jim Monson Whittemore |
| 19 lb. 9 oz. | 33 | Spirit Lake Dickinson Co. | 6-8 | Dave Kinnard Estherville |
| 19 lb 5 oz. | 36 | Viking Lake Montgomery Co. | 5-3 | Paul M. Nadler Red Oak |
| 17 lb 12 oz | 31 | Des Moines River Van Buren Co. | 6-12 | Gregory G. Smith Farmington |
| 17 lb. 9 oz. | 33" | Iowa River Johnson Co | 8-19 | Steve Vincent Iowa City |
| 16 lb. 11 oz. | 321/2° | Viking Lake Montgomery Co. | 10-5 | Donald E. Briggs Red Oak |
| 16 lb. 3 oz. | 33 | Lake Minnewashta Dickinson Co | 6-21 | Jim Young Sioux City |
| 16 lb. | 32 | Farm Pond Marshall Co | 5-28 | Dennis Pauley Marshalltown |
| 15 lb. 14 oz. | 32 | Viking Lake Montgomery Co. | 9-18 | Donald E. Briggs Red Oak |
| 15 lb. 2 oz. | 33 | Liesure Lake Dubuque Co | 4-26 | Bill G. McCarthy Cascade |
| 15 lb 1 oz. | 32 | East Okoboji Dickinson Co. | 5-3 | Steven G Adams So Sioux City, Neb |
| CATTISH (FL | | | | 2002 2 120 |
| 40 lb | 4014 | Des Moines River Polk County | 8-2 | Patrick Broderick Des Moines |
| 39 lb | 417 | Johnson Co | 6-8 | Jack L. Dvorsky Solon |
| 35 lb. 7 oz. | 411/2 | Skunk River Henry Co. | 6-8 | Tom Tory Ft. Madison |
| 32 lb 12 oz. | 38" | Des Moines River Polk County | 2-26 | Tim Crawford Des Moines |
| 32 lb | 417 | Des Moines River Van Buren Co | 6-2 | Tom Marsh Bonaparte |
| 26 lb. 3 oz. | 38 | Des Moines River Marion Co | 1-15 | Ray Budrevich Des Moines |
| 21 lb. 5 oz. | 361/2 | Cedar River Linn County | 5-11 | Herbert W. Griffin Cedar Rapids |
| 20 lb. 4 oz. | 39 | Raccoon River Polk County | 5-14 | Ben Thompson Des Moines |
| *4 lb. 8 oz. | 197 | Farm Pond | 2-10 | Rexanna Wilson |
| 4 lb. 5 oz. | 1712 | Davis Co. Sandpit | 4-26 | Drakesville Sam McAhern |
| 4 lb. | 1712 | Black Hawk Co Wiese Slough | 5-23 | Waterloo Lisa Johnson |
| 3 lb. 9 oz. | 17 | Muscatine Co. Farm Pond | 3-22 | Davenport Lemoyne Berry Shambaugh |
| 3 lb. 4 oz. | 19 | Page Co. Farm Pond Marshall Co. | 1-12 | Roger Kirkeng Denver |
| 3 lb. | 1644 | Diamond Lake | 5-19 | Larry Alexander Dexter |
| 3 lb. | 1712 | Outhrie Co Dale Mofint Reservoir | 5-25 | Randy Moore Des Moines |
| 2 lb. 12 oz. | 1614 | Polk County Farm Pond | 12-31 | Steve Haack Mt Vernon |
| 2 lb. 10 oz. | 16 | Linn Co. Decatur Lake Monona Co. | 5-8 | Craig Kennedy Sioux City |
| 2 lb 8 oz. | 1612 | Farm Pond Crawford Co. | 8-6 | Greg Swanson Denison |
| 2 lb. 7 oz. | 151/2 | Peterson Pit Story Co | 4-25 | Russ Amundson Story City |
| 2 lb. 7 oz. | 1614 | Farm Pond Clay County | 5-13 | Bonnie Lanagan Spencer |
| 2 lb. 6 oz. | 1614 | Farm Pond Monona Co | 5-11 | Rene Haindfield Sloan |
| 2 lb. 4 oz. | 15 | Farm Pond Taylor Co. | 7-16 | Rene Epperson Conway |
| 2 lb. 4 oz. | 16 | Farm Pond Marshall Co | 5-27 | Timothy McMahon Marshalltown |
| 2 lb. 3 oz. | 1614 | Nine Eagles Lake Decatur Co. | 5-7 | Dwight Milliken Ankeny |
| 2 lb. 3 oz. | 15 | Farm Pond Taylor | 4-22 | Jim Wymore New Market |
| 2 lb. 2 oz. | 1374 | Mississippi River Clayton Co. | 5-2 | Robert E. Cigrand Cascade |
| 2 lb 2 oz | 14" | Wapsipinicon River Scott Co. | 4-2 | Daniel W Schneider Long Grove |
| 2 lb. 2 oz. | 1574 | Mississippi River Jackson Co. | 5-4 | Greg Spencer Naporville, III. |
| 2 lb 2 or | 15 | Farm Pond Warren Co. | 4-31 | Ben Thompson Des Moines |
| 2 lb. 2 oz. | 1514 | Farm Pond Warren Co. | 5-3 | Rich Weeks Milo |
| | | | | |

| 2 lb. 2 oz. | 1514 |
|---|--|
| 2 lb. | 15 |
| 2 lb | 1512 |
| 2 lb | 1494 |
| "MUSKELL | |
| 20 lb. B oz. | 42 |
| 19 lb. 12 oz. | 45 |
| 19 lb. 2 oz | 40 |
| | 42 |
| | 43 |
| | 41 |
| 18 lb. 11 oz | 4215 |
| 17 lb. 14 oz | 41 |
| 17 lb. 8 oz. | 40 |
| 17 lb. 4 oz. | 43 |
| 17 lb. 3 oz | 40 |
| 16 lb 11 oz | 39 |
| 16 lb. 9 oz. | 4014 |
| 16 lb. 8 oz. | 40 |
| 16 lb. 4 oz | 40 |
| TIGER MUSI | |
| 18 lb. 8 oz | 39 |
| NORTHERN | PIKE |
| 18 lb. 8 oz. | |
| 16 lb. 1 oz. | |
| 16 lb. | 41 |
| 16 lb. | 361 |
| 15 lb 15 oz. | 40 |
| 15 lb 8 oz. | 40: |
| 15 lb 3 oz. | 3614 |
| 15 Ib | 3912 |
| 107.00 | |
| 14 lb 12 oz | 3414 |
| 14 lb. 12 oz. | 3474 |
| 14 lb. 12 oz. 14 lb. 14 lb. | |
| 14 lb. | 391 |
| 14 lb. | 39° 40° |
| 14 lb: 14 lb: 13 lb: 10 oz. | 39° 40° 37½ |
| 14 lb. 14 lb. 13 lb. 10 oz. 13 lb. 9 oz. | 39' 40' 37'- 37' 37'- |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. | 39' 40' 37'- 37' 37'- |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. 12 lb: 5 oz. | 39 40 3747 37 3742 3842 |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. 12 lb: 5 oz. 11 lb: 13 oz. | 39° 40° 374° 37 374° 384° 36 |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. 12 lb: 5 oz. 11 lb: 13 oz. 11 lb: 12 oz. | 39° 40° 374° 37 374° 384° 36 37 |
| 14 lb. 14 lb. 13 lb. 10 oz. 13 lb. 9 oz. 12 lb. 6 oz. 12 lb. 5 oz. 11 lb. 13 oz. 11 lb. 12 oz. 11 lb. 7 oz. | 39° 40° 374° 37 374° 384° 36 37 3244 36° |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. 12 lb: 5 oz. 11 lb: 13 oz. 11 lb: 7 oz. 11 lb: 5 vz. | 39° 40° 374° 37 374° 384° 36 37 3244 36 |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. 12 lb: 5 oz. 11 lb: 13 oz. 11 lb: 7 oz. 11 lb: 5½ oz. 11 lb: 2 oz. 11 lb: 3 oz. 11 lb: 10 oz. | 39' 40' 37'4' 37'4' 38'4' 36' 37' 32'4' 36' 35' 34' |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. 12 lb: 5 oz. 11 lb: 13 oz. 11 lb: 12 oz. 11 lb: 7 oz. 11 lb: 5\\2 oz. 11 lb: 2 oz. 11 lb: 10 oz. 10 lb: 9 oz. | 39' 40' 37' 37' 35'2' 36' 37' 32'4' 36' 35' 34' 34' |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. 12 lb: 5 oz. 11 lb: 13 oz. 11 lb: 12 oz. 11 lb: 7 oz. 11 lb: 2 oz. 11 lb: 2 oz. 11 lb: 10 oz. 10 lb: 9 oz. 10 lb: 7 oz. | 39' 40' 37' 37' 38'2' 36' 37' 32'4' 36' 35' 34' 34' |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. 12 lb: 5 oz. 11 lb: 13 oz. 11 lb: 12 oz. 11 lb: 7 oz. 11 lb: 2 oz. 11 lb: 10 oz. 10 lb: 9 oz. 10 lb: 7 oz. 10 lb: 7 oz. | 39' 40' 37' 37' 38'2' 36' 37' 32'4' 36' 35' 34' 34' 34' 34'2 |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. 12 lb: 5 oz. 11 lb: 13 oz. 11 lb: 12 oz. 11 lb: 7 oz. 11 lb: 2 oz. 11 lb: 2 oz. 11 lb: 10 oz. 10 lb: 9 oz. 10 lb: 7 oz. | 39' 40' 37' 37' 38'2' 36' 37' 32'4' 36' 35' 34' 34' 34' 34'2 |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. 12 lb: 5 oz. 11 lb: 13 oz. 11 lb: 12 oz. 11 lb: 7 oz. 11 lb: 2 oz. 11 lb: 9 oz. 10 lb: 9 oz. 10 lb: 7 oz. 10 lb: 7 oz. | 39' 40' 37' 37' 37' 38' 36' 37' 32' 36' 37' 32' 36' 34' 34' 34' 34' 34' 34' |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. 12 lb: 5 oz. 11 lb: 13 oz. 11 lb: 12 oz. 11 lb: 7 oz. 11 lb: 5½ oz. 11 lb: 9 oz. 10 lb: 9 oz. 10 lb: 7 oz. 10 lb: 7 oz. 10 lb: 7 oz. | 39' 40' 37' 37' 37' 38' 36' 37' 32' 36' 37' 32' 36' 34' 34' 34' 34' 34' 34' 34' |
| 14 lb. 14 lb. 13 lb. 10 oz. 13 lb. 9 oz. 12 lb. 6 oz. 12 lb. 5 oz. 11 lb. 13 oz. 11 lb. 12 oz. 11 lb. 7 oz. 11 lb. 2 oz. 11 lb. 9 oz. 10 lb. 9 oz. 10 lb. 7 oz. 10 lb. 8 oz. 50 lb. | 39' 40' 37' 37' 37' 35' 36' 37' 32' 36' 35' 34' 34' 34' 34' 34' 64' 60' |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. 12 lb: 5 oz. 11 lb: 13 oz. 11 lb: 12 oz. 11 lb: 7 oz. 11 lb: 2 oz. 11 lb: 3 oz. 11 lb: 10 lb: 10 oz. 10 lb: 9 oz. 10 lb: 7 oz. 10 lb: 7 oz. 10 lb: 7 oz. 10 lb: 8 oz. 50 lb: 46 lb: 8 oz. | 39' 40' 37' 37' 37' 35' 36' 37' 32' 36' 37' 32' 36' 34' 34' 34' 34' 34' 56' 58' |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. 12 lb: 5 oz. 11 lb: 13 oz. 11 lb: 12 oz. 11 lb: 7 oz. 11 lb: 5\\2 oz. 11 lb: 9 oz. 11 lb: 10 lc: 10 lb: 9 oz. 10 lb: 7 oz. 10 lb: 7 oz. 10 lb: 7 oz. 10 lb: 8 oz. 50 lb: 46 lb: 8 oz. 43 lb: 8 oz. | 39' 40' 37' 37' 37' 35' 36' 37' 32' 36' 37' 32' 36' 37' 32' 36' 37' 32' 36' 37' 32' 36' 37' 32' 36' 37' 32' 36' 37' 32' 36' 37' 32' 36' 36' 37' 32' 36' 36' 37' 38' 36' 36' 36' 36' 36' 36' 37' 38' 38' 38' 38' 38' 38' 38' 38' 38' 38 |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. 12 lb: 5 oz. 11 lb: 13 oz. 11 lb: 12 oz. 11 lb: 7 oz. 11 lb: 5½ oz. 11 lb: 9 oz. 10 lb: 9 oz. 10 lb: 7 oz. 10 lb PADDLEFISE 61 lb: 8 oz. 50 lb. 46 lb: 8 oz. 43 lb: 8 oz. 41 lb: 5 oz. | 39' 40' 37' 37' 38' 36' 37' 32' 36' 37' 32' 36' 34' 34' 34' 34' 34' 64' 60' 58' 63' 60' 60' |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. 12 lb: 5 oz. 11 lb: 13 oz. 11 lb: 12 oz. 11 lb: 7 oz. 11 lb: 5 vz oz. 11 lb: 9 oz. 10 lb: 9 oz. 10 lb: 7 oz. 10 lb: 9 oz. 10 lb: 7 oz. 10 lb: 9 oz. 40 lb: 8 oz. 43 lb: 8 oz. 41 lb: 5 oz. 40 lb: 6 oz. | 39' 40' 37' 37' 37' 38' 36' 37' 32' 36' 37' 32' 36' 34' 34' 34' 34' 34' 60' 68' 63' 60' 60' 60' 60' 60' 60' 60' 60' 60' 60 |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. 12 lb: 5 oz. 11 lb: 13 oz. 11 lb: 12 oz. 11 lb: 7 oz. 11 lb: 5 vz. 2 li lb: 9 oz. 10 lb: 9 oz. 10 lb: 7 oz. 10 lb: 7 oz. 10 lb: 7 oz. 10 lb: 8 oz. 43 lb: 8 oz. 43 lb: 8 oz. 40 lb: 6 oz. 39 lb: | 39' 40' 37' 37' 37' 38' 36' 37' 32' 36' 37' 32' 36' 34' 34' 34' 34' 34' 56' 60' 58' 63' 60'2' 56'2' |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. 12 lb: 5 oz. 11 lb: 13 oz. 11 lb: 12 oz. 11 lb: 7 oz. 11 lb: 5 vz. 2 l1 lb: 3 oz. 11 lb: 9 oz. 10 lb: 9 oz. 10 lb: 7 oz. 10 lb: 7 oz. 10 lb: 8 oz. 50 lb. 46 lb: 8 oz. 43 lb: 8 oz. 43 lb: 8 oz. 40 lb: 6 oz. 39 lb. 36 lb: 9 oz. | 39' 40' 37' 37' 37' 35' 36' 37' 32' 36' 35' 34' 34' 34' 34' 34' 56' 60' 58' 60' 56' 56' |
| 14 lb. 14 lb. 13 lb. 10 oz. 13 lb. 9 oz. 12 lb. 6 oz. 12 lb. 5 oz. 11 lb. 13 oz. 11 lb. 12 oz. 11 lb. 2 oz. 11 lb. 2 oz. 11 lb. 7 oz. 11 lb. 9 oz. 10 lb. 9 oz. 10 lb. 7 oz. 10 lb. 7 oz. 10 lb. 8 oz. 40 lb. 8 oz. 41 lb. 5 oz. 40 lb. 6 oz. 39 lb. 36 lb. 9 oz. 35 lb. 10 oz. | 39' 40' 37' 37' 37' 35' 36' 37' 32' 36' 35' 34' 34' 34' 34' 54' 60' 58' 63' 60' 56' 60' 56' 60' 56' |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. 12 lb: 5 oz. 11 lb: 13 oz. 11 lb: 12 oz. 11 lb: 7 oz. 11 lb: 2 oz. 11 lb: 3 oz. 11 lb: 7 oz. 11 lb: 10 lb: 9 oz. 10 lb: 9 oz. 10 lb: 7 oz. 10 lb: 8 oz. 40 lb: 8 oz. 41 lb: 5 oz. 40 lb: 6 oz. 39 lb: 36 lb: 9 oz. 35 lb: 10 oz. 32 lb: | 39' 40' 37' 37' 37' 36' 37' 38' 36' 37' 32' 36' 35' 34' 34' 34' 34' 56' 60' 58' 60' 56' 56' 56' 56' 56' 56' 56' |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. 12 lb: 5 oz. 11 lb: 13 oz. 11 lb: 12 oz. 11 lb: 7 oz. 11 lb: 5½ oz. 11 lb: 9 oz. 10 lb: 9 oz. 10 lb: 7 oz. 10 lb PADDLEFISE 61 lb: 8 oz. 50 lb. 46 lb: 8 oz. 43 lb: 8 oz. 41 lb: 5 oz. 40 lb: 6 oz. 39 lb. 36 lb: 9 oz. 35 lb: 10 oz. 32 lb: 8 oz. | 39' 40' 37' 37' 37' 36' 37' 38' 36' 37' 32' 36' 35' 34' 34' 34' 34' 56' 60' 58' 60' 56' 56' 56' 56' 56' 56' 56' |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. 12 lb: 5 oz. 11 lb: 13 oz. 11 lb: 12 oz. 11 lb: 7 oz. 11 lb: 5½ oz. 11 lb: 9 oz. 10 lb: 9 oz. 10 lb: 7 oz. 10 lb PADDLEFISE 61 lb: 8 oz. 50 lb. 46 lb: 8 oz. 43 lb: 8 oz. 43 lb: 6 oz. 39 lb. 36 lb: 9 oz. 35 lb: 10 oz. 32 lb: 27 lb: 8 oz. PERCH | 39' 40' 37' 37' 37' 38' 36' 37' 32' 36' 37' 32' 36' 34' 34' 34' 34' 34' 56' 58' 60' 58' 56' 60' 49' 49' 49' |
| 14 lb: 14 lb: 13 lb: 10 oz. 13 lb: 9 oz. 12 lb: 6 oz. 12 lb: 5 oz. 11 lb: 13 oz. 11 lb: 12 oz. 11 lb: 7 oz. 11 lb: 9 oz. 11 lb: 9 oz. 10 lb: 9 oz. 10 lb: 7 oz. 10 lb PADDLEFISE 61 lb: 8 oz. 43 lb: 8 oz. 43 lb: 8 oz. 43 lb: 6 oz. 39 lb. 36 lb: 9 oz. 35 lb: 10 oz. 32 lb. 27 lb: 8 oz. PERCB 1 lb: 7 oz. | 39' 40' 37' 37' 37' 38' 36' 37' 32' 36' 37' 32' 36' 34' 34' 34' 34' 34' 56' 58' 60' 58' 60' 56' 56' 56' 56' 49' 14' 14' 14' 14' 14' 14' 14' 14' 14' 14 |

NGE 42 45 40 42 43 4215 43 39" 40 39 IKE Saylorville 13 Red Rock Mississip Mississip 1 Wapsipini : Cerro G Des Mos Dickin Wapsipin 1 Black Hi Mississi Mississii Dub Mississii Clayto Mississip Clayto Mississi I a lelloy h Mississie | Mississif Mississif Mississi Mississip 12 Mississi | 2 Briggs W. Hamuli Trumbl Clay Trumbi Clay Trumbl 120 Briggs We Hamil 1 lb 4 oz 13 121/2 1 lb. 4 oz

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Manu Iowa Frank West 0

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1 lb. 2 oz.

| Fac | 1 | Jeff Wood |
|-----------------------|-------|---|
| E III | 114 | Clearfield Terri Lynn Dillon |
| Oat | 1 | Guthrie Center Roger R. Janes |
| You Fan | 7 | Sioux Ciry Thomas Tushia |
| Bim | | Correctionville |
| West Dicks | 13 | David Fitzpatrick St. Joseph. Mo. |
| West Dicts | 10 | Don Johnson Spirit Lake |
| Nes Dick | 11 | Pete Ver Mulm Sioux Center |
| West Dicks | 30 | Don Idso Milford |
| First Dicks | 2 | Carl F Lilienthal Spirit Lake |
| West Dich | 31 | Carl F. Lilienthal Spirit Lake |
| Wes | -4 | Bud Caquelin Webster City |
| Wes | 37 | Conroy Johnson Spirit Lake |
| Wer Dick | 30 | Edward Dykstra Iowa City |
| Wes Dich | 7 | Brian Stevens Spencer |
| West Dicks | 14 | Dean Hagedorn Royal |
| Wes Dick | 12 | Bill Poulson Council Bluffs |
| \$1 001 | 30 | E L Jeub Spint Lake |
| Ties Dict | 15 | Rick Kimball Spirit Lake |
| Wei Dock | 14 | Steve Crary Sioux City |
| Wet . | 28 | Albert Leonard, Jr |
| Ddi. | | Quimby |
| No. | 37 | David Edmonds |
| ortati ortati | 30 | Spencer John R. Lekwa |
| Fell Boothie Ma | 15 | Story City Lloyd W Kroeger Gladbrook |
| ion Free | 19 | Dean Lycke Alden |
| Wet | 37 | Richard Alien Spencer |
| Di Di | 14 | Bill Ward Ottumwa |
| Bot | 23 | R. J. Freitag, Jr. Readlyn |
| Drahi Drahi | 27 | Jason N. Krapfi Dubuque E. Iverson, Jr |
| Dell Stell | 30 | Waverly Terry Marsh |
| Uan Wei | 13 | Anamosa Alvin Akin |
| Dicks pspl* | -8 | Spirit Lake Glenn W. Hedrick |
| Cit | 31 | Steve A. Clough |
| Wes | 13 | Waterloo Leon R. Hight Cherokee |
| Dick West Dicks | 29 | William Funnemark Algona |
| S M | 19 | Gary E. Rhead Marshalltown |
| 祖田 | .9 | Larry Nemmers Bellevue |
| Well Dicks | -12 | Beryl Gray Lake City Joe Riley |
| DOE: | 30 | Fort Dodge David E. Kresnicka |
| Dis. | 20 | Marion David P Brown |
| aci less | -6 | Washburn Frank Williams |
| Not. | 20 | Cedar Falls Joyce Fahlenkamp |
| Dick! Essat | 23 | Joe Krier Dubuque |
| NE DE | 19 | Craig Faber Inwood |
| Dick Dick | 16 | Dave Sangi Spirit Lake |
| 1853 | -1 | Kevin Ashline |
| Cal | 1-5 | Littleport Mike Zearley |
| CH | -28 | Garber LeRoy Richards, Sr |
| MSE MSE | 28 | Fayette Pat Huff |
| Wood | -10 | Salix LeRoy Richards, St. |
| lack dasss | 29 | Payette Daniel Konen |
| 40 553 | -28 | Cedar Rapids Leslie Boyles Center Point |
| Jack MSS | 28 | Jay Hoth Salix |
| MS | 12 | Clerus R. Gerardy Maquoketa |
| 143 5558 | 27 | Larry Warth Sperry |
| Des B | -22 | Shirley Riffey Urbana |
| 103 | 44 | Grant Balsley |
| SPA FEE | 1-22 | Webster City Dennis Roberts |
| Sign . | 1-1 | Dickens Willard Plagman |
| CO. | -28 | Spencer Wayne Tibbetts |
| THO KE | 7.000 | Lincoln. Neb George Caggiano |
| Det | 3-1 | Webster City Tracy Crippen |
| DO DO | 2-28 | Cherokee Scott D. Johnson |
| R.O.H | 9-1 | Albert City Vugil Bremer |
| 200 | | Ocheyedan |
| | | |

SERVIS TARCH 1981

| 1 lb. 2 oz. | 1214 | Spirit Lake | 5-24 | Marvin Hasenbank |
|-----------------------|-------------|------------------------------------|-------|--|
| 1 lb 1 oz | 1212 | Dubuque Co. Mississippi River | 10-30 | Sioux Falls So Dak Donald L Colvin |
| 1 lb 1 Wor | 1212 | Allamakee Co Clear Lake | 2-8 | Roy Rathbone |
| | | Cerro Gordo Co | | Clear Lake Roy Rathbone |
| 1 lb. 1 oz | 12" | Clear Lake Cerro Gordo Co | 2-8 | Clear Lake |
| i lb | 12 | Spirit Lake Dickinson Co | 14 | Bill Ferns Spirit Lake |
| SAUGER 4 lb. 8 oz. | 2114 | Mississippi River | 4-2 | Brian DeCook |
| | | Clayton County | 11-3 | Guttenberg |
| 4 lb. 7 oz | 23 | Missouri River Monona Co. | | LeRoy Davis Onawa |
| 4 lb | 21 | Missouri River Woodbury Co. | 10-15 | Larry Leigh Sloux City |
| 4 lb | 2174 | Mississippi River Dubuque Co | 12-28 | John L. Peil Dubuque |
| 3 lb. 2 oz. | 20 | Mississippi River | 10-26 | Torri Alshouse |
| 2 lb 10 oz | 18" | Clayton Co. Mississippi River | 4-12 | Arlington Kenneth Biretz, Sr |
| STURGEON (| Shovelno | Allamakee Co se) | | Waterloo |
| 716 | 30 | Mississippi River Clayton Co. | 5-3 | Andy Swanson McGregor |
| SHEEPSHEAD | | | | A Secretary of |
| 19 lb 12 oz | 34 | Mississippi River Clayton Co | 5-24 | Charles F. Brooks McGregor |
| SUCKER (Mi | sc.) 24% | Mississippi River | 7-26 | Bob Hansen |
| | 072111 | Allamakee Co. | 10.00 | Cedar Falls |
| SUNFISH (Re | 107% | Red Haw Lake | 5-19 | Bob Lister |
| 1 lb 4 oz | 10990 | Lucas Co Red Haw Lake | 5-26 | Newton Bob Lister |
| TROUT (Broo | ole) | Lucas Co | | Newton |
| 2 lb. 4 oz. | 1794 | Canoe Creek | 5-10 | James Hanson |
| I lb 8½ oz | 1414 | Winneshiek Co Richmond Springs | 4.8 | Decorah Jim Jandik |
| 1 lb. 612 oz. | 1579 | Delaware Co Big Mill Creek | 4.4 | Cedar Rapids Robert E. Mulien |
| | | Jackson Co. | | Davenport |
| 1 lb 8 oz | 1474 | Swiss Valley Dubuque Co | 5-7 | Joseph Schollmeyer Dubuque |
| 1 lb 6 oz | 14/4 | Swiss Valley Dubuque Co | 5-7 | Bernice Knockle Duboque |
| 1 lb. 5 oz. | 1510 | Swiss Valley Dubuque Co | 5-21 | F. J. Vaughn Duboque |
| 1 lb 5 oz | 14" | Brush Creek | 4-22 | Kim M Strunk |
| 1 lb 1 oz | 1215 | Jackson Co. Swiss Valley | 5-10 | New Liberty Gary Frederick |
| TROUT (Brow | wm) | Dubuque Co | | Dubuque |
| 11 lb. 2½ oz | 291/2 | Sny MaGill | 9-2 | Virgil R. Larson Praine Du Chien, Wis |
| 9 lb. 4 oz. | 27 | Clayton Co. Swiss Valley | 5-28 | Berruce Knockle |
| 8 lb 12 oz | 2612 | Dubuque Co Joy Springs | 7.2 | Dubuque Lewis A Fry |
| | | Clayton Co. | | Cedar Rapids Dave D Scherff |
| В 1Ь | 25 | Paint Creek Aliamakee Co | 5-8 | Fort Dodge |
| 6 lb 11 oz | 22/2 | Richmond Springs Delaware Co | 8-20 | Erik Ransom Van Horne |
| 5 lb 15 oz | 2312 | Spring Branch Delaware Co | 3-22 | Dan Gilbert Amana |
| 5 lb 14 1 oz | 23 | Little Turkey | 5-16 | LeRoy P Ruden |
| 5 lb 8 oz | 23 | Delaware Co Grannis Creek | 5-16 | Dyersville Frank A. Miller |
| 5 lb 3 oz. | 23 | Fayette Co. Yellow River | 7.3 | Fayette Wally Sersland |
| | | Allamakee Co. | 5-11 | Monona Mark T Lee |
| 4 lb 912 oz | 21+2 | North Bear Creek Winneshiek Co | | Ames |
| 4 lb 6 oz. | 22 | French Creek Allamakee Co | 7.3 | Fred Daugs Minneapolis Minn |
| 4 lb. 412 oz | 22 | Bloody Run Creek Clayton Co | 7-8 | Jim Frederick Dubuque |
| 4 lb. 4 oz | 22 | Waterloo Creek | 7.7 | Fred Daugs |
| 4 lb 2 oz | 2012 | Allamakee Co Waterloo Creek | 3-23 | Minneapolis, Minn Steve Stouterberg |
| 4 lb 2 oz | 24 | Allamakee Co. Wexford Creek | 8-14 | Des Moines Ervin Van Sprecken |
| 3 lb 12 oz | 2012 | Allamakee Co Swiss Valley | 5.18 | Olin Ted Davidsaver |
| | | Dubuque Co | | Dubuque |
| 3 lb 10 oz | 2014 | Ensign Hollow Clayton Co | 4-19 | Robert D. Michael Oskaloosa |
| 3 lb 8 cz. | 19 | North Bear Creek Winneshiek Co | 12:30 | Duane Clark Shell Rock |
| 3 lb 8 oz. | 1814 | Spring Branch Delaware Co | 3-19 | Steve Pelley Marion |
| 3 lb 7 oz | 20 | Big Paint Creek | 4-24 | Douglas A. Blunt |
| 3 lb 5 oz. | 17 | Allamakee Co Little Mill Creek | 4-30 | Charles City Allen L Bures |
| 3 lb 5 oz | 18 | Jackson Co Spring Branch | 3-8 | Dubuque Herbert W. Griffin |
| | | Delaware Co | | Cedar Rapids Roger Ruden |
| 3 lb. 5 oz | 1912 | Swiss Valley Dubuque Co | 4-7 | Dubuque |
| 3 lb. 4 oz. | 20 | Little Mill Creek Jackson Co | 6-3 | Jim Jansen Sherrill |
| 3 lb. 2 oz | 18% | Swiss Valley Dubuque | 4-7 | Roger Ruden Dubuque |
| TROUT (Rai | nbow) | Big Mill Creek | 5-11 | loe Krier |
| | | Jackson Co | | Dubuque |
| 10 lb 1 oz. | 2715 | Richmond Springs Delaware Co | 8-29 | Dan Brenner Dubuque |
| 10 lb | 261 | Joy Springs Clayton Co | 5-27 | Wilfred Werning Van Home |
| 9 lb 12 4 oz | 2611 | Joy Springs Clayton Co | 6-13 | Erik Ransom Van Horne |
| 9 lb. 12 oz. | 2911 | French Creek Allamakee Co | 6-20 | Joe Marley Milwaukee, Wo |
| 9 lb. 9 oz. | 291 | Turkey River | 5-22 | John S Lucas |
| 9 lb | 2712 | Clayton Co Otter Creek | 5-17 | Bellevue Dan Davis |
| 8 lb 11 oz | 261 | Fayette Co Joy Springs | 6-20 | Hiawatha Tom Tedore |
| | | Clayton Co | | Cedar Falls |
| 8 lb 10 oz | 2511 | Little Paint Creek Allamakee Co | 6-26 | David R Spinner Davenport |
| 8 lb. 5 oz. | 25 | Joy Springs Clayton Co | 7-15 | Enk Ransom Van Horne |
| 8 lb 2 oz | 2714 | Baileys Ford Delaware Co. | 5.16 | Gus Giersberg Marion |
| 7 lb. 5 oz. | 24" | Joy Springs | 7-6- | Doug Kuch |
| 7 lb. 5 cz. | 25 | Clayton Co Swiss Valley | 5-14 | Cedar Rapids Richard E Walton |
| | | Dubuque Co | | Dubuque |

| Wayne Meyer |
|-------------------------------------|
| |
| New Vienna Robert Ayers |
| Marquette Mike Majewski |
| Charles City George Wessels |
| Belmond Ray Muller |
| Cedar Falls Erik Ransom |
| Van Horne W. Allen Bozarth |
| orpus Christi, Texas Jun Edwards |
| Marion Dick Miller |
| Fayette Erik Ransom |
| Van Horne Dennis Lee Sieg |
| Monona Kenneth L Smith |
| Springville Dan Hayes |
| Bettendorf Erik Ransom |
| Van Horne Mark A. Schuyler |
| Clear Lake Joe: Dresel |
| Ames Tim L Feldpouch |
| Guttenberg Joseph Schmadeke |
| Waterloo Bill Guhl |
| Des Moines Terry Hanson |
| Sherrill Tom H Botlaug |
| Lawler Ron L. Uhlenhopp |
| Cedar Falls Mike Johnson |
| Mason City Erik Ransom |
| Van Horne Robbie Michael |
| Waterloo |
| Clarence Kulish |
| Waterloo Larry R. Eastman |
| Cedar Falls Dewey G. Olson |
| Arnolds Park Vaughn W Therell |
| Curtis L Cooper |
| John Englert |
| Royal Alvin Aluens |
| Thornton Ed Beener |
| Des Moines Paul C Burgess |
| Joe E Shuck |
| Arnolds Park Gary Kilpatrick |
| Spencer Robert Balizet |
| Spencer Niel Funkhouser |
| Whiting Fred Warren Norwalk |
| Chuck Pack |
| Spencer Orville Belken |
| Spencer Harold Bendlin |
| Spencer Greg R Dana Waverly |
| Roger Hough |
| John Weiser, Jr. Ankeny |
| Joe O Stones Cedar Rapids |
| Doug Stange Sibley |
| John Mohiis Waverly |
| Jim Nielson Arnolds Park |
| Richard Roe Esterville |
| Ronald E Scheve Des Moines |
| Charlotte Lang Marshalltown |
| Doug Stange Subley |
| Shawn D Elsbernd Ottumwa |
| Dave Fink Osage |
| Jon F. Kruse Storm Lake |
| Clarence Bendlin Arnolds Park |
| Barney Langel Luxemburg |
| Dennie Roberts Dickens |
| Richard Roe Estherville |
| Joe Mortenson Terri |
| |
| David B Novick |
| Perry |
| Mike McDermott Dubuque |
| |

^{*}New State Record
**Minimum weight to qualify is 15 lb. or 30" in length.



day. Marine biologists in Mississippi and Louisiana are concerned with habitat changes caused by increasing deposits in the coastal fishing areas around the Mississippi River delta. Some of Iowa's soil ends up a long way from home.

Not all of this topsoil loss is due to direct water erosion. Fall plowing, light winter snowfall, and spring winds account for additional losses. Much of this soil also ends up in various bodies of water.

The Iowa Department of Soil Conservation is well aware of these problems and has continuously worked to encourage farmers to use soil conservation techniques. The Iowa legislature in 1979 allowed the DSC to offer incentive payments for conservation tillage. Thus the "Iowa Till" program was born. To enter the program, a farmer must sign an agreement promising to maintain a specified acreage in conservation tillage for five years.

Under the terms of the agreement, a minimum of 55 percent of the land surface must be covered by crop residue after planting. District technicians check fields after planting each spring to assure continuing compliance. After the fields check out the first year, the farmer is paid \$30 for every acre he has enrolled in the program. The payment is made in one lump sum. If he doesn't comply for all five years, he must pay back the entire amount.

It is easy to see that a farmer cannot moldboard plow in the fall and comply with this program. He can, however, use chisel plows or disks as long as he is careful not to overwork the soil and disrupt the residue. This can usually be done by tilling no deeper than four inches and going over the ground only once.

There are also special planters which disturb the ground only where the seed is planted. They use a smooth or slightly fluted coulter (a blade which makes a veritical cut) to make a slot for the seed.

This program is new and how it will be accepted in the coming years is unknown, but early results are promising. There are more reasons to switch to conservation tillage besides "Iowa Till" payments. It has been shown that farmers who have changed from conventional methods to conservation methods have reduced their fuel use by as much as 80 percent. This is due to the fact that fewer trips are made over the field, less horsepower is needed, and less equipment is pulled. The increases in cost of fuel over the last few years make these savings an important consideration.

Where Do We Stand Now?

ONLY ABOUT ONE-THIRD of Iowa's cropland is adequately protected by conservation practices. If nothing more is done, Iowa will cease to be a major agricultural area in less than a century. Even with the current rate of generation of new programs, the problems will outrun the solutions two to one. The DSC estimates that of Iowa's 27 million crop acres, 18 million are either washing or blowing away. They go on to say that if farmers left 55 percent of crop residue on the surface (Iowa Till), it would adequately control 60 percent of Iowa's erosion. The remaining 40 percent could be greatly reduced through the use of permanent practices such as terracing.

In the meantime, the number of Iowa farmers trying reduced till methods has steadily increased. USDA Soil Conservation Service studies show that 1,459 farmers used no-till on a total of 111,600 acres in 1980. In 1979, the figures were 801 farmers and 74,900 acres.

If we combine all types of reduced-tillage methods, it is estimated that about 13.1 million acres of corn and beans were planted without the use of the moldboard plow in 1980. Since Iowa has about 27 million crop acres, these figures indicate that two-thirds of Iowa farmers are doing less tillage on nearly half of the acres available for cultivation. Although this does not mean that the acreage was totally protected against erosion, it does represent a great change in farmer attitude over the last decade.

One Step Forward — One Back

GIVEN THE INDIVIDUALITY of the Iowa farmer, unlegislated changes will be gradual. Much of this is caused by habit patterns developed over the years. Area conservationists estimated there was 25 to 30 percent more 1980 fall plowing in north-central Iowa than the year before. The good fall weather had a lot to do with the increase. Farmers hate to sit around if their neighbor is out in the field. Another reason may have been the farmer's concern over what fuel prices would be in the spring. Whatever the reason, this year's activity set back recent trends toward greater use of reduced tillage.

There was an increase in fall plowing in western Iowa as well, but a little less moldboard plowing. Farmers in this area are becoming more and more interested in terracing, which will help a great deal on the types of land under cultivation in the western counties.

A general increase in fall plowing was also noted by area conservationists in northwest, northeast, south and central Iowa. Southeast Iowa leads the state in trends toward conservation tillage. It has been estimated by area experts that two-thirds of the cropland in this area benefit from some form of residue management.

The stage has been set for a real problem in 1981 — a relatively dry 1980 season leading to barely adequate soil moisture carryover, increased fall plowing, and very little 80/81 snowfall. A windy and dry spring followed by a dry summer could be disastrous not only to new crop corn and beans but to the entire resource.

No Till — The Problems

WITH THE RISING COSTS OF ENERGY attracting more farmers to reduced tillage, the U.S. Department of Agriculture conducted a three-year study on plant growth, leaf development, and yield factors of corn. It was generally determined that yield results showed greater fluctuation under reduced till although it was not known why. Plowed and disked plots produced more in one of the three years while in the other two years the methods produced similar results. One theory is that young corn plants are affected more by soil temperature than by air temperature. The soil temperature is usually lower with reduced till and no-till than with conventional tillage. The quicker the young plant leafs out, the more sun it can absorb. This factor is known as leaf-area duration or the total time the plant's leaf area is exposed to the sun. It is therefore fair to say that under certain conditions no-till can lead to lower yields, but that these figures would probably average out over several seasons. Reduced till would average somewhat higher than no-till, but again other factors can cause fluctuations in yields.

In other studies, the USDA came to the conclusion that growing crops continuously with no-till farming may inhibit recharging of the soil with water during heavy rainstorms. The residue left from no-till did reduce the potential for erosion and evaporation but during heavy rains water infiltration was poor both before and after runoff started. It was concluded that occasional tillage may be required to maintain the desirable surface structure for rapid water infiltration.

In fields where reduced tillage was used, water infiltration was better than no-till. Water infiltration was, of course, high in fields which were tilled by conventional methods but these were also the ones open to erosion problems. In other words, just as there is no all-purpose hunting dog, there is no all-purpose tillage method.

Perhaps the best answer is a continually changing program combining some crop rotation (grass sod or alfalfa) and a reduced till technique similar to the "Iowa Till" plan offered by the Iowa DSC. It may be hard for some farmers to adopt these ideas, but time will show that neither continuous plowing nor continuous no-till are acceptable if we are to continue growing bumper crops and protect the invaluable resource our soil provides us.

TO BUILD A TRAIL

BY ROGER SPARKS

Who said a few folks can't build a snowmobile trail? Members of the Rathbun Snow Riders snowmobile club, with the cooperation of several government agencies, have done just that. After getting all the proper blessings and outlining the details, some 15 to 20 club members rolled up their sleeves and went to work. When the dust (and later the ice) had settled, the Snow Riders had created a trail from Honey Creek State Park to the Rathbun marina on Buck Creek. That comes to about 12 miles of scenic snowmobiling; not too difficult for the average operator and not too simple for the more experienced operator to negotiate.

The trail is open to the public and features vehicle parking and unloading spaces at each end. Honey Creek has a winter campground and heated restrooms. The marina restaurant at Buck Creek is privately operated and is open most winter days.

Club President Gene Paris was instrumental in getting the project going. Permission to develop the trail on U.S. Army Corps of Engineers property was necessary. That meant the idea first had to be sold to the Corps area manager and later to district officials. State Waters Officer Ed Nelson, who is in charge of enforcing snowmobile laws and promoting the snowmobile safety program in the area was called on for assistance. After meetings with Conservation Commis-

sion wildlife officials and the Appanoose County Conservation Board and Board of Supervisors, things began taking shape. The County opened a road to snowmobiling, to be incorporated into the trail plan.

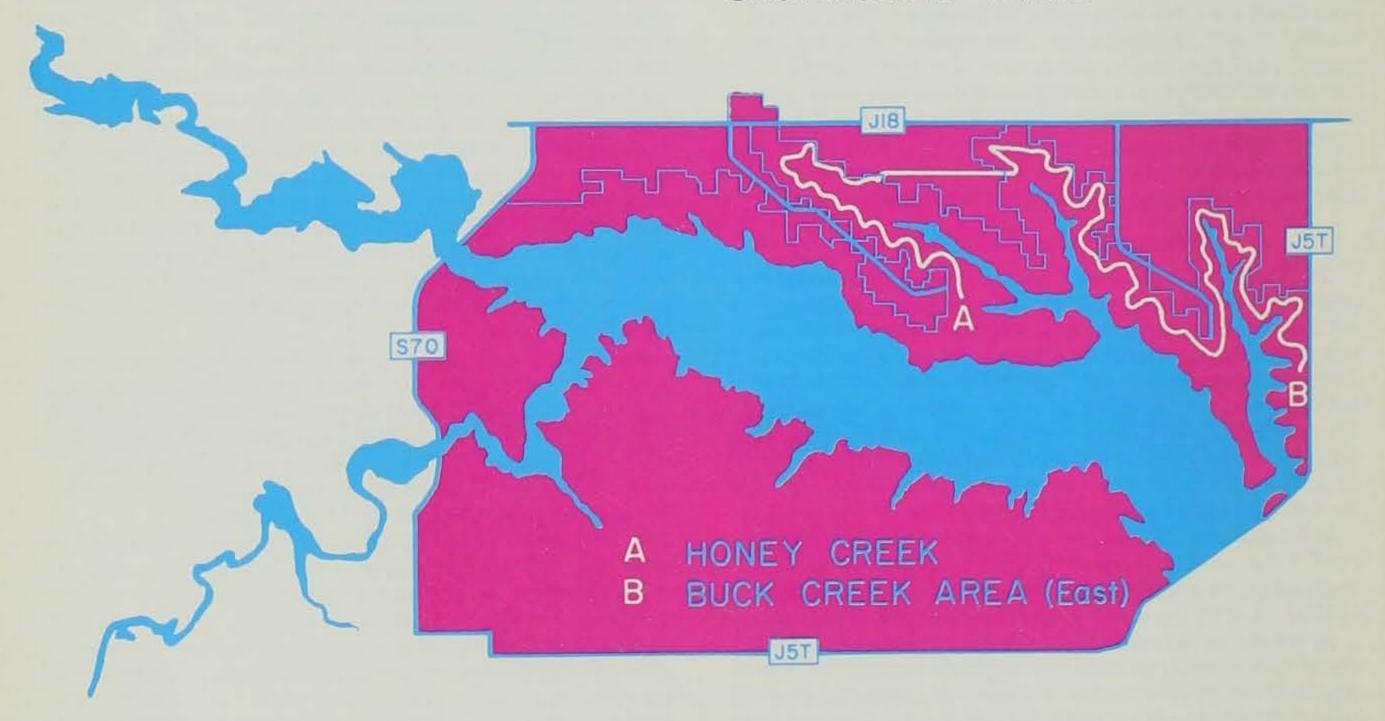
The trail area had to be walked and marked for construction. Since water crossings would be too dangerous and bridges would be too expensive, ravine crossings had to be chosen carefully. In several spots the state-owned bulldozer was called upon for minor dirt work. The 12-mile route was mapped at roughly four feet above normal pool elevation. The map was sent to Corps headquarters for final approval, which was granted, and the project was underway.

While dozer work was handled by the Conservation Commission, much of the trail development was the responsibility of the club. A tractor, brush cutter, chainsaws and fuel as well as the labor to operate the equipment came from a handful of snowmobile enthusiasts. Although lack of snow kept use down this year, maybe next winter will see the trail used a great deal.

"It took a lot of hard work, but everyone in the club including the children helped," Paris said. "The assistance and cooperation of agencies on all levels was excellent."

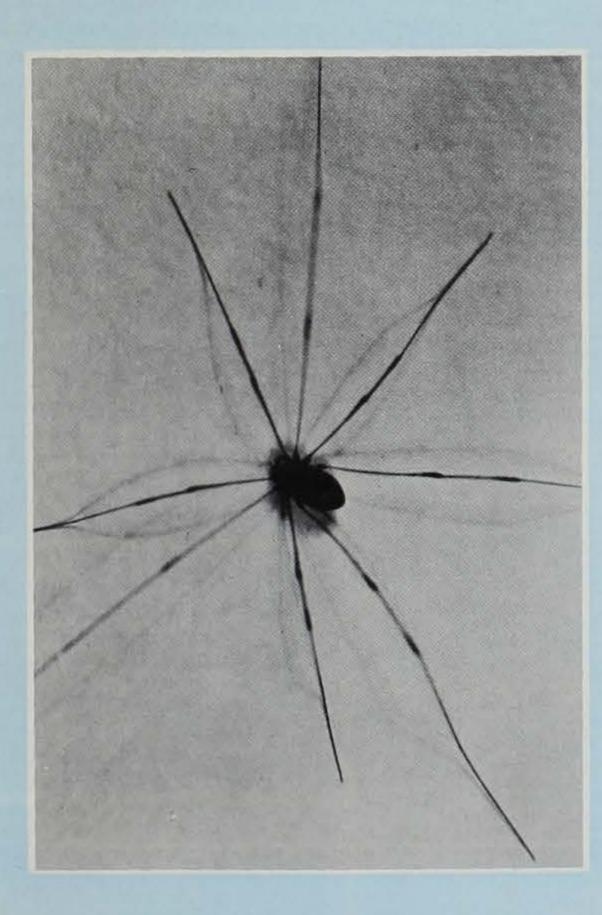
Gene Paris and the Rathbun Snow Riders are already talking about extending the trail to the South Fork marina. Who knows, with those people at the controls, the Rathbun trail may never have an end.

SNOWMOBILE TRAIL



Map drawing by Larry Pool

CIASROM CORNER



ANIMAL TOPICS which are most frequently discussed in conservation education are mammals and birds. These are followed by studies of fish and reptiles. Probably the most common animal around our homes is the harvestman and his relatives the spiders.

The harvestmen or Daddy Long Legs appear as odd sorts of creatures. They have plump little bodies teetering on eight ungainly legs. They have two eyes placed back to back on top of two turrets called tubercles. Harvestmen are often confused with spiders, and are the object of many stories and fascinations. The name "harvestmen" comes from the large number of tangled legs and bodies which were found in straw when grain was harvested many years past.

They are obviously noted for their legs. If we humans had legs in the same proportion, they would be well over 40 feet long. The legs are much more than a mere organ of locomotion. The second pair carry sensory organs which function as taste and smell receptors and, in addition, are used to detect vibrations and avoid obstacles.

How are they different from spiders? They both have eight legs don't they? True they are similiar in the number of legs, but they are different in that they lack the "waist" that is typical of the spider. They have a segmented abdomen that spiders don't possess. The abdomen appears to have stripes across the back end of the body.

The Daddy Long Legs
never spin a silk web or build
a nest — instead, they capture
their prey as they run across
the ground. Possessing large
and powerful beak-like jaws,
they are able to grasp their
prey and suck out the body
juices of their victims. On the
other hand, their eight-eyed
spider relatives usually inject a
killing poison into their prey.

Harvestmen are omnivorous, which means they feed on a variety of food stuffs. These include insects such as the tiny springtails, spiders, other harvestmen and juicy plant materials. In captivity, they can be fed almost anything edible, from meat to bread and milk. They must eat frequently because they cannot endure long periods of starvation like spiders can. They also need to drink or they will become stiff and sluggish.

Harvestmen fall prev to centipides, large spiders and small insectivorous birds. As a means of self-defense, they can "cast a limb" — detach a leg. This discarded leg may twitch for several seconds and divert the attention of the predator long enough to make a good escape. These legs will not grow back but the animal is able to function. Harvestmen may also employ chemical warfare. Upon being confronted by an enemy, they can secrete a repugnant odor from glands near their front legs.

During late summer and early fall, harvestmen are seen wandering in grassy meadows, hiding under window sills or scavenging among damp leaf litter. A very peculiar behavorial characteristic is the ease and frequency with which they mate. The long and involved courtship displayed by spiders is nonexistant in Harvestmen. They mate immediately upon meeting. Females, when laying eggs, use their extensible ovipositor to deposit the eggs in soil or into crevices in the bark of trees. The small, pale eggs are usually quite unprotected. For some species, the eggs over winter and the young hatch at this time of year. For other species the eggs hatch rather quickly and the newly emerged young hibernate through the winter to be found now.

Observing these harvestmen and studying them, we realize they are an integral part of our natural resources. They perform a valuable role in the food chain — by feeding on insects and plants and by providing their own self as food for birds. Think about them in a different light.

BY BOB MOATS

Photos by the author

IOWA DOES NOT HAVE awe inspiring, deep painted canyons to explore or perpetual snow capped mountains to conquer. Yet to the observer who has a deep sense of awareness Iowa offers many adventures in the smaller areas tucked away and hidden in the folds of her secrecy.

One such area was "discovered" several years ago when a friend and I were scouting along the Little Sioux River "artifacting," soaking up sun and getting the winter cramps from our legs. We came upon a small stream of crystal clear water that lead us to a huge watery bowl lying surrounded by glacial prairie hills. Bare limbed trees, not yet warmed enough by spring to bud, ringed the upper edge. Within the bowl a beautiful, deep green carpet of sedges, rushes, and marsh marigold were sending their first shoots up through a freshly thawed, watery seep. I felt I had walked into a living fairy tale and somehow bridged the gap between fantasy and full awareness.

My attention was drawn to a stray piece of Indian pottery lying on a steep bank. I picked it up and realized that the ancient Americans probably felt the same attachment to this spot. This was my first introduction to one of Iowa's most unique geological formations — A FEN.

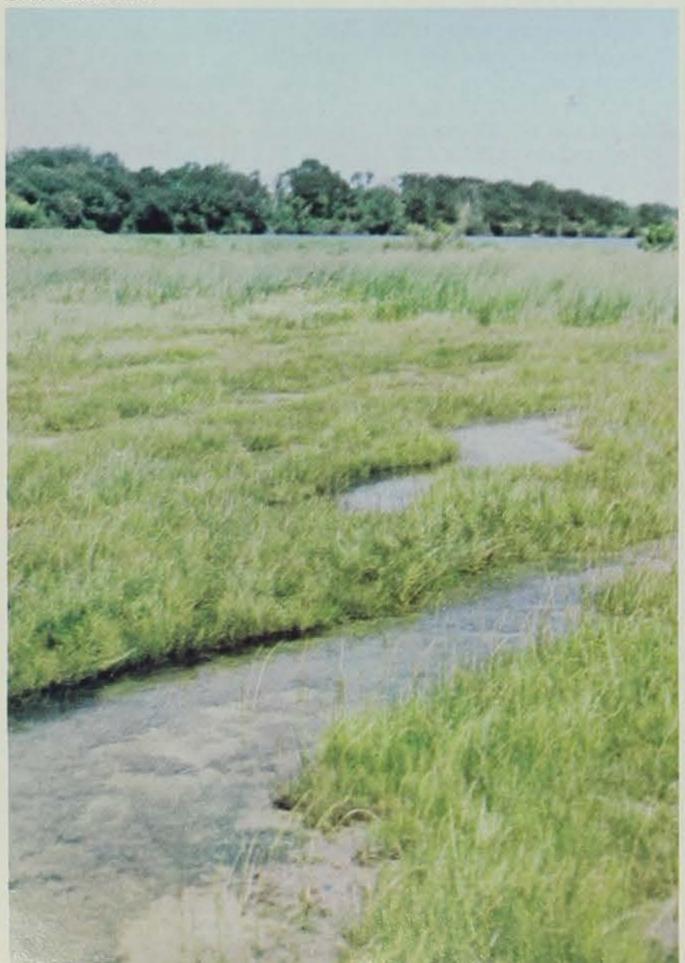
If you were to stop and ask people on a street what a fen is you would get replies like "They are those things that help fish swim" or "They are people who live in Finland". Actually a fen is a small conical area that has a vertical flow of calcareous water seeping from an elevated cone. The water seeps down from the central cone and forms terraces radiating outward, each holding small pools of water.

On the cone and watery terraces are some of Iowa's most unique plants. To look at a fen from a distance little is exposed, but get down to eye level and a world so aberrant takes shape that you feel a miniature dinosaur or pterodactyl may suddenly appear. Even the names of some of the plants, such as the *Triglochin*, smacks of an alien world. Commonly called arrowgrass, the two types of *Triglochin* that can be found there emit a hydrocynic acid that can sometimes be smelled before the plant is spotted. Other plants, such as three species of orchids, *Grass of Parnassus*, *Kalm's lobelia*, *Fringed gentian*, and *Low Nutrush* are all on the threatened or endangered list in Iowa, with the nutrush found only on one fen in the entire state. Sulfer bacteria and algae give the water multicolored shades of gray to emerald green and blue. Sedges, bullrush, cattails, and a host of other plants find the wet habitat to their liking.

It is strange enough to walk on a bluff and find a fen located on a hillside, much elevated above the surrounding terrain. But to venture out on the fen is like walking on a rubber island. Care must be taken to avoid stepping on the rare plants and also to keep on the sedge mats. A step into one of the pools could plung the unwary into a waist deep, soupy peat hole.

Only a few fens now remain. Most have been ruined by over grazing, drained, or have had the rare vegetation killed by herbicides. They are found only on the morainal edges of the Northwest region, with only one under state ownership. The others should be preserved so the future Iowans can someday get down and experience an eye level view of a "new" world perhaps 7,000 years old.

Silver Lake Fen



Below Top: Fringed Gentian Below Bottom: Gerardia





Below Top: Parnassus Below Middle: Bladderwort Below Bottom: Bog Twayblade Orchis

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IOWA CONSERVATIONIST MARCH 1981

Lookin' Back

Ten Years Ago



the *Iowa Conser-*vationist featured a
story on spring
migration of waterfowl and certain
other birds. The
phenomenon has
intrigued man for

centuries. March is the month to view many of the birds which travel through Iowa, especially waterfowl.

Twenty Years Ago



the magazine weighed the merits of crow hunting. Recently the commission decided not to establish a crow season for the coming year.

Several hunting "laws" were listed including — "Never be the only one with a game pocket in your coat" and "The last hill is always the highest".

Thirty Years Ago



the Conservationist celebrated President Truman's
signing of the
Dingell bill. The
law, which went
into effect a few
months earlier,

established a 10 per cent tax on fishing tackle which would then be shared among the states to improve fisheries programs.

The state of Virginia reported that it had twelve ringneck pheasants taken during its 1950 two-day season.

Get all

Get and hunting,

get and preserves,

get and preserves,

parks and preserves,

parks and preserves,

parks and preserves,

parks and preserves,

get all

G

REX EMERSON

FROM THE WARDEN'S DIARY

When the March winds quit blowing it will soon be spring. Most of you hunters have cleaned your guns and hung them on the wall, and the trappers have hung up their traps. You will forget about your favorite sports of hunting and trapping until next fall. Your hunting dog will look longingly at your old hunting car and wonder why all the fun had to stop.

Has everyone forgotten about hunting and trapping?
No way! The anti-hunters and anti-trappers never quit and will take this opportunity to get further ahead. They won't even put in their second team. They are extremely well funded and know how to fight by dividing and conquering. Meanwhile you, the hunter and trapper sit around and complain about the price of your hunting and trapping license.

John Madson, in one of his recent speeches, made an excellent quote from an old Maine trapper. He said, "When someone decides to take up reformin', they first find somethin' that won't interfere with their style of livin', and then, brother, can they reform!"

It would be a safe bet that the anti-trappers have never bought a trapping license, or studied the animal signs along a stream bank, or stuck their hands in that icy water to make a set that was just right to outsmart the animal that had been eating a farmer's crop. And yet, I wonder how many fur coats those people have who are furnishing all the money for the anti-trapping fund?

The "anti's" are cute. They don't pick on everything all at once. Just a little here and a

little there. And they go in a roundabout way to accomplish their goals. They may pick on minority groups, such as the dove hunter, or the trapper, or the bow hunter. They are always trying to get a foot in the door. They have gotten all trapping stopped in the city of Davenport. This was accomplished by claiming the traps in the streams were dangerous to children and dogs. There are not many children playing in the water in cold weather when the traps are set, and all dogs are supposed to be tied up. But they sold this bill of goods to the city council.

Now I wish they would come up with a workable solution as to what to do with the raccoon, beaver, skunks and muskrats that are causing problems in the city. The Conservation Commission gets blamed for the animal problems in the city and the people want us to do something. We try! An open season is set to harvest them, but when trapping is outlawed, our hands are tied. The anti-trappers have a foot in the door.

The "anti's" have another cute scheme cooked up for the hunters. They are trying to outlaw the use of hunting dogs. If you don't own a hunting type dog you probably don't care. That is what the "anti's" depend on. Divide and conquer.

They claim this type of hunting is cruel to the dog. The poor dog is required to jump into cold water and retrieve a duck, or chase raccoon all night, or point birds out there in the snow.

Whoever believes this kind of drivel has never hunted ducks with a black lab.

They have never had the opportunity of watching a dog as he sits on the end of a blind boat scanning the sky for ducks. When you shoot a duck the dog takes to the water without any command from his owner. In fact, the dog usually hits the water before the duck does. When you miss a duck you get a cold stare from your dog that makes you want to get in a little shooting practice on the skeet range before the next hunt.

If you think a dog doesn't like to go hunting, just leave him shut in the car where it's nice and warm and start across the field with your shotgun. The dog will probably tear the inside of the car up trying to get out so he won't miss out on the hunt. I have seen coon hounds that didn't seem to enjoy the hunt, because they went home and left the hunters in the woods. However, you usually have a problem getting them to stop hunting when it's time to go home.

Don't wait until the reformers have hit your favorite sport. Start fighting back.

Number one, be a responsible and considerate sportsman or sportswoman.

Number two, join a hunting or trapping club that will keep an eye on legislation and will keep you informed.

Number three, quit complaining about the price of hunting and trapping licenses.

My old friend who lives down by the river said his wife's brother went hunting last fall in Canada. The guide told him to put on a clean pair of socks each day. He did this, but on the seventh day he couldn't get his shoes on.

1980 ENTRIES RECORD FISH



Brian DeCook



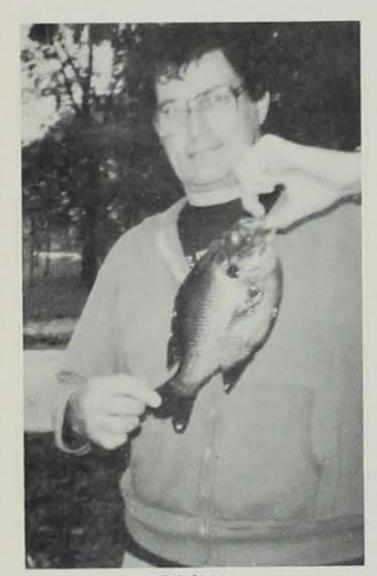
Charles F. Brooks



Andy Swanson



Bob Hansen



Bob Lister Joe Krier

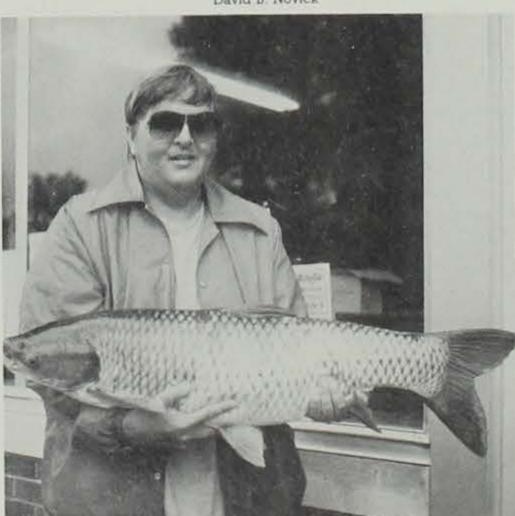


James Hanson



Bernice Knockle





David B. Novick

