IOWA CONSERVATIONIST

Volume 19 August, 1960 Number 7

BULL BASS LIKE LIVE BAIT

FARM POND PHILOSOPHY

K. M. Madden
Superintendent of Fisheries

arm ponds are like wives—derful things of beauty, but must be managed if you are live happily ever after with n. With ponds as with wives, soon learn they can't be basic-changed or reformed so learn must to live with the faults enjoy the virtues.

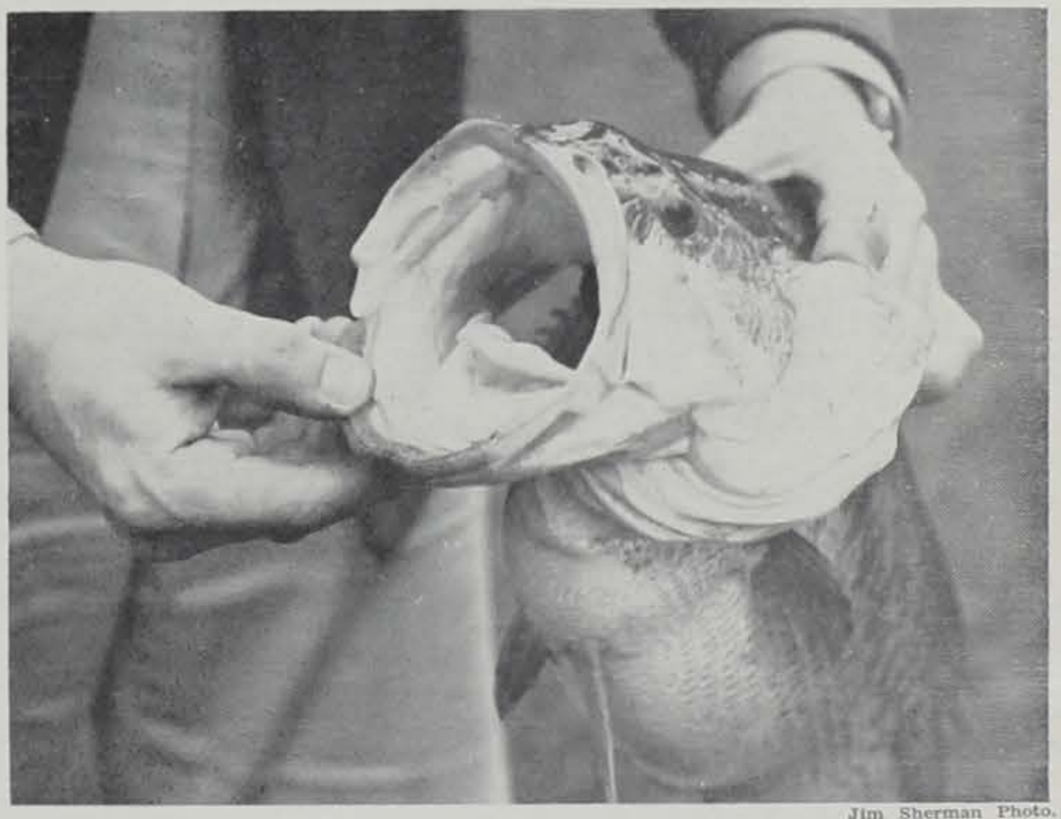
ood ponds are usually ½ sur- acre or more in area and enough to withstand summer ght and livestock water de- ds and yet are of adequate h for over wintering fish life. ertile land and water, when ogically activated by energy n the sun, build great crops of g plants, animals or both. Just errestrial crops require inten- scientific culture, harvest control, maximum specialized atic production is possible if gh effort and scientific man- ment techniques are applied to unit or pond.

ortunately, fish production is the primary reason for build- most farm ponds. Soil and er conservation, fire protection, livestock water supply, flood control, farm family recreation (fishing, hunting, picnicking, swimming, skating) are some of the commonly stated Iowa farm pond uses. Average local ponds yield from 20 to 60 pounds of recreational fish per acre plus the *other* values for which the pond was built. Certain oriental peoples depend on fish for "protein food" and they "farm" their ponds intensively, producing up to 5,000 pounds per acre.

Three major living crops are common in every pond. (1) Great quantities of minute plant and animal organisims (plankton). Plankton can directly convert organic and mineral nutrients of the water into living crops with the sun's energy (light). (2) Rooted and free floating large plants (aquatic vegetation). Aquatic weeds can also convert some nutrients of soil and water with the aid of sunlight into self sustaining living crops. (3) Large numbers of insects, other higher life forms, and fish. This group cannot utilize pond nutrients directly and is de-

(Continued on page 61)

owa farm pond can look like this one in Polk County with very little added expense he shelterhouse, picnic table, fireplace and bridge. The "weeds" in the lake are ry natural thing. Trying to get rid of them could ruin the pond both for fishing and, most important, as an emergency water supply.



Jim Sherman Photo.

Not a cavern or a canyon—just looking down the gullet of a big bull black bass. This fellow, caught on a chill April day in the Des Moines Reservoir on nightcrawlers, weighed 7 pounds and had a seven inch bullhead wedged in his throat. Top this one!

Roger Fliger

Any largemouth that gets up over the 3½ pound class falls into the category of Bull Bass. He has run the gauntlet of predation, winter kill, high water, pollution, and a hundred different types of bait and hook decorated hardware that has probably torn a hole or two into his respectable jaw. He has taken all this in stride and for the last couple years he has been dealing it right back. He's the king and he knows it. Bull Bass are rugged. They'll pick out a particular hole, stump or log and drive out all competition.

What is the most productive method for taking the extra large addition? This is the subject that keeps the blood pressure up long after the fishing equipment has been retired for the winter. Large bass are taken occasionally while fishing for panfish and crappies. Walleye and catfisherman will accidentally catch them at times. When the water is low and clear, bass bugs and hair frogs on the surface and weedless bucktail and spinner combinations that can get down and thread their way through the mazes of roots and debris are productive, *but live bait* will consistently account for more bass than any man made creation on the market. Green frogs, cray fish and minnows are the best with the latter taking the honors.

Shiner minnows are excellent, but are easily killed from abuse and lack of oxygen. The creek chub is rugged and will stay alive for an hour even when hooked through the lips. A small bobber keeping the chub a foot or two off the bottom will not restrict the minnow from performing for the lunkers without hooking on the bottom. A spinner and split shot ahead of the bait will add appeal at times. The heavy fly rod or bait rod has replaced the cane pole once used with devastating affect half a century ago. Water a foot to six feet in depth will harbor the majority of the feeding bass, but water fluctuation and temperature variations will keep even the expert revamping his bass lore. (See *Fishing With a Thermometer* in this issue.)

Remember, the characteristic undershot jaw and rushing attack of the largemouth did not come by accident—they were developed to take prey—a four or five inch chub

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Iowa Conservationist

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DUCK-SPATCH FROM THE CANADIAN BREEDING GROUNDS

Initial surveys of the duck breeding populations show a decrease of 19 per cent from last year. In the northern areas the numbers were down nearly 50 per cent, the Province of Alberta down 10 per cent, with Manitoba and Saskatchewan about the same.

Water conditions at the present time are good as a result of recent rains; many fields of Saskatchewan are similar to those in Iowa with water standing in them. Farm crops in that area, wheat, barley, oats, and flax are looking good though some hail damage is reported.

Good production this year may offset the deficient breeding stock but even so the picture at this time is not too bright. Production studies to be made in late July should give a better view of the season to come and will be reported in the next issue.

CAN YOU TOP THESE?

Big fish are caught almost everyday in Iowa's lakes and rivers. Just how large is big? Well, a four pound largemouth is a nice fish but records show that a 10 pound 2 ounce largemouth bass has been taken.

Some of Iowa's record fish are near the national level such as the five pound white crappie caught last year at Springbrook Lake.

If you have valid proof or pictures of extra large fish taken on pole and line, the CONSERVATIONIST is interested. Ten pound walleyes are uncommon, smallmouth bass up to five and six pounds are high on the list. The 81 pound flathead catfish caught in Ellis Lake will probably hold the record for a long time although undoubtedly larger catfish do exist in our state.

Tomorrow may be the day you'll pull that old northern out of the mill pond and establish a new Iowa record. KEEP US POSTED AND WE'LL DO THE SAME FOR YOU!

Editorially Speaking

UNTAPPED RESOURCES

Lester F. Faber, Assistant Director

Rarely in this day and age are we able to use the words "untapped resources." In the spirit of a few generations ago we can, however, think of the possibilities of the Missouri River along the western border of Iowa. We can see and accept the challenge to use this river to provide healthful outdoor recreation for thousands of people on the western flank of Iowa.

In years past the Missouri has been a fast running river, subject to regular flooding and often referred to as "muddy." Not many people have used the river along Iowa for recreational purposes because fishing has not been too good, islands were often flooded, and acres of land on both sides were under water periodically.

Upstream reservoirs have helped to stabilize the flow of water. This stabilization has helped a great deal in making the water less turbid. Channel work has created slack water areas that should benefit the sport fishery. Islands can now be developed with reasonable assurance that such work will not be lost every few months.

All of these developments have created a new recreational resource. At the same time, new problems have come to light that must be solved before a development program can be truly inaugurated.

Iowa law grants the ownership of all meandered streams to the state. In the case of a border river, this title extends from a point on the bank to the center of the river. In 1943 the Iowa and Nebraska legislatures agreed upon a described boundry that was generally in the center of the river at that time. Since then, the U. S. Corps of Army Engineers has completed many channel changes so that at present there are many miles of the river wholly in the State of Nebraska and in Iowa. Both states now have committees working on setting a new boundry, but until this is completed many thousands of acres cannot be developed because of doubtful ownership.

State law also grants the title to all islands in meandered rivers in the name of the state. During the periodic rampage era no one thought much of using many Missouri River Islands. Now, however, some of the islands have value to private owners as well as to the state so it has become necessary to quiet title through court action. The Conservation Commission has initiated such action and favorable decisions could allow the state to proceed with the recreational development of some of the islands.

To a lesser degree the questionable ownership of lands along the shores of the river has limited the Commission in proceeding with the purchase and development of lands for public access to the river.

The problems are surely not insurmountable. The Conservation Commission is planning a recreational program for the river. Court action has been started to settle the problems of ownership to lands. Access points are being designated for purchase and development.

Close cooperation is needed between the states of Iowa and Nebraska in their legislative actions on the boundry problem. Congressional action is also needed for funds for authority for the Corps of Engineers to do work that will benefit the recreational user in conjunction with their regular channelization program.

Even from a recreational standpoint maybe we can't quite call the nearly 200 miles of the Missouri River an untapped resource but the resource is there and the potential is enormous. We have only to work out the problems to make a reality of our statement that the Missouri River can become one of the major recreation areas in Iowa.

(See back page picture story.)

SCIENTISTS SAY LIGHT GOVERNS PLANT GROWTH

Research scientists are throwing new light on how trees and other plants grow. In fact it is light, they say, that controls plant development.

A pigment present in plants in invisible quantities acts as a "triggering mechanism" for growth, according to Department of Agriculture researchers. Scientists who isolated it as a protein believe it functions as an enzyme.

One form of the pigment abzorbs red light, and the other, far-red light. Far-red on the spectrum is near the limit of visible red light and near the range of infrared or heat energy. It is the selective absorption of the various colors of light by the two pigment forms that apparently governs many phases of a plant's development, including flowering, germination and elongation.

Growth-regulating effects of the pigment can be controlled by exposure to light wave lengths ranging from yellow-orange through red to far-red, the scientists explain. As light range changes, form of the pigment is subject to change from one that regulates plant growth to one that does not; and in turn the order can be reversed.

A female fly can lay its first batch of eggs in less than a week after its birth.

TREE FARMS FOR WOOD AND WATER

The availability of water—just ordinary plain water—is rapidly becoming a major concern to America and to much of the world. The facts indicate that as early as 1975-80, it may be our number one problem.

American industry, farms and homes are using more and more water. Our population is growing by one person every 11 seconds—330 every hour—8,000 every day.

Our present population uses about 240 billion gallons a day. In 20 years we will need three times as much, or at least 500 or 600 billion gallons.

In the opinion of experts in this field, this is a situation that calls for intelligent programs of soil and water conservation management and for the imaginative search for new water supplies which science can offer. Eventually there is every expectation that a plant using an atomic reactor might bring the cost of converting sea water into a thousand gallons of fresh for less than 60 cents—less than many communities are now paying.

Equally important to the breakthrough in converting sea water into fresh is the progress being made to control run off of water on the land by proper use of land, timber and water. Water and land are inseparable, and the subject of water is best viewed from the various aspects of soil conservation, forestry, wildlife, recreation and human welfare—but never alone.

While the major objective of most Tree Farm lands is to grow a permanent wood supply, the same technique makes them serve as effective watersheds. These sponge-like forest soils husband moisture for fresh streams, lakes and reservoirs. The results spell attractions to the hunter, the angler and recreationist, and add to the overall water supply. Tree farming thus makes a major contribution to the solution of the water problem.

Upstream watershed development is becoming a reality across the country under programs which combine local, state and federal resources and efforts and with local people in charge. Tree farming is private industry's part of this national effort to help guarantee the continued blessing of water to Americans—*From Weyerhaeser News.*

BULL BASS—

(Continued from page 57)

is just what he's looking for.

Bass fishing is similar to poker playing. You don't go into the big hands with a pair of deuces. A combination of good equipment, the proper bait, and bass "know how" will result in Bull Bass for a jack pot.

FISHING WITH A THERMOMETER

y Jim Mayhew and Tom Moen
Fisheries Biologists

)o you want to be an expert in eyes of your fellow "fishin" ldies? Or perhaps be thought as the guy that has all the luck en fishing in a small pond or e. Then we have the secret that turn failure into success. Try ning with a thermometer. Make n poor bait you say? Quite e, but it can be a valuable tool leading you to where the most can be located.

Each year every deep artificial e or small pond goes through r different temperature and mistry phases. These phases controlled by water tempera- e changes. The most important ture of the temperature is that ter is heaviest at 38.4° F. This why ice at 32° will float. Cor- pondingly, water at 50° is much vier than water at 70°.

During the winter, water im- diately under the ice cover is und 34°. As depth increases water becomes warmer, but dom will rise above 38.4°. This alled the winter stagnation peri- because of the limited activity water currents. In spring as surface water is warmed more idly than the deeper water, it ches 38.4° first. At one period lake will be at this temperature m the surface to the bottom. nd action at this time of the r can completely mix the ters. This is called the spring nover.

As the surface waters are fur- r warmed by spring sunshine water becomes stratified into ee different layers. This period most important to the angler. ain in the fall as surface waters cooled, 38.4° is reached first on the surface. As this occurs the surface water becomes heavier than that below so the heaviest water sinks forcing the warmer, lighter water to the surface. This creates a series of vertical currents and is called the fall turnover period.

Now you may ask, how does this effect the distribution of fish? The answer is simple—very little during spring, fall and winter. However, the effects of stratification on fishes in the summer is quite remarkable.

The most important item for the fisherman to remember is that fish are cold blooded animals with appetites that are largely determined by water temperature (warm water species). As the water warms up their metabolism is stepped up and they require more food to satisfy this natural body function. The end product is growth of the fish.

A few days of warm weather in the spring will increase the water temperature several degrees, especially along the shore where the water is shallow and absorbs the heat more quickly. Both the fish and the fisherman feels this warming trend, the fish begins to get hungry and the fisherman gets hungry for fish. This spell of warm weather may continue, but quite often the water cools and the fishing drops off. This happened in many of the natural lakes of northern Iowa this past spring. Bullhead fishing was excellent for about a one-week period during the first part of May then their appetites were cooled off and fishing success dropped about 75 per cent.

Many species react the same way in the fall of the year. A warm period following the first cold spell often warms the water to the point that the fishes' interest in food is reawakened and one can have some excellent fishing during the "Indian Summer" period.

In all the natural lakes except West Okoboji the water temperature normally follows the air temperature. The wind mixes the water from top to bottom and there are no cold spots or cold water on the bottom. West Okoboji Lake does have the three layers that are found in the artificial lakes and many farm ponds. But most of the fish in West Okoboji will be found in less than 30 feet of water during the summer months and in most cases they will be found in the bays and along shore where the water is less than 30 feet deep and about the same temperature from top to bottom.

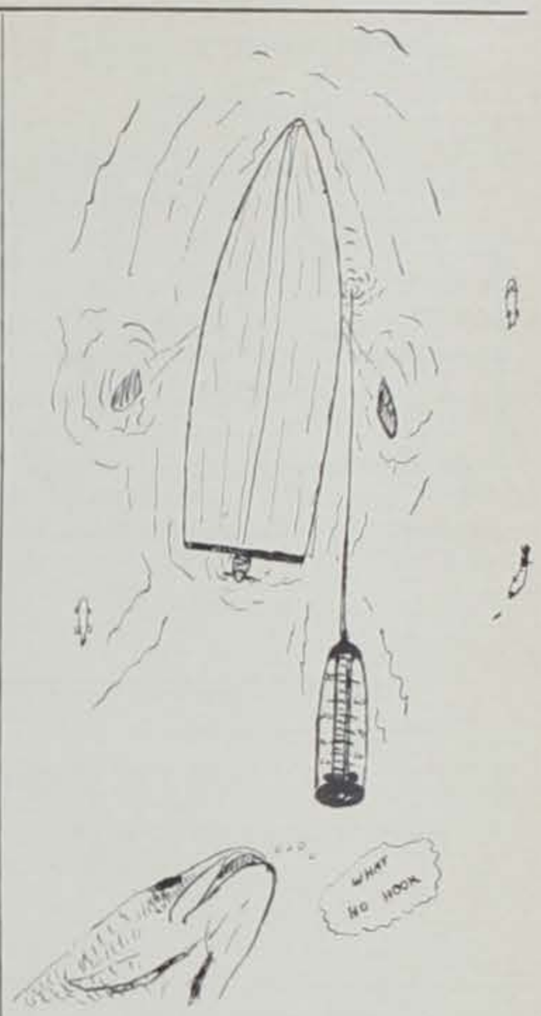
Fish are found in the deep water in the day time and shallower water in the evening and in some cases after dark. Many fishermen think the fish is looking for cooler water by going deeper in the daytime when actually the fish is only avoiding the strong light. Thus, they make their feeding migrations into shallow water in the evening as the light fades and a period that often coincides with insect hatches. Young fish are also fóund in these shallow areas.

How about winter fishing? Yes fish do feed in the winter when water temperatures are about 38 degrees. This feeding is limited to a relatively few species and the total food consumed is only a small fraction of that eaten during the warmer water periods.

Let's take a closer look at the temperature profile of a typical artificial lake in July. As stated before there are three different layers of water. The top layer, which is called the *epilimnion* by biologist, changes temperature very little as depth is increased. This layer usually ranges from eight to 14 feet deep. The second layer, called the *thermocline,* changes temperature quickly the deeper you go. A thermocline is defined by a 1.08° drop in temperature with each foot of depth. This layer is seldom more than six to 10 feet thick. The lower layer or *hypolimnion* is much like the top layer in that the temperature changes little from top to bottom. (See illustration for typical temperature profile of an artificial lake). Because of this layering effect it is physically impossible for any of the layers to mix. Hence the thermocline and hypolimnion are stagnated and become devoid of life-giving oxygen. Without oxygen to breathe a fish would be unable to survive extended exposure in the lower two layers. Thus, most of the fish life is crowded into the upper one-third of the lake.

Probably most important to fish life is the thermal barrier created by the rapidly changing temperatures in the thermocline. Fish are cold-blooded animals and their heart beat and respiratory rate are controlled by the surrounding temperature. Any rapid change of water temperature creates great discomfort within the body of a fish. This keeps them pretty much confined to one level of the water.

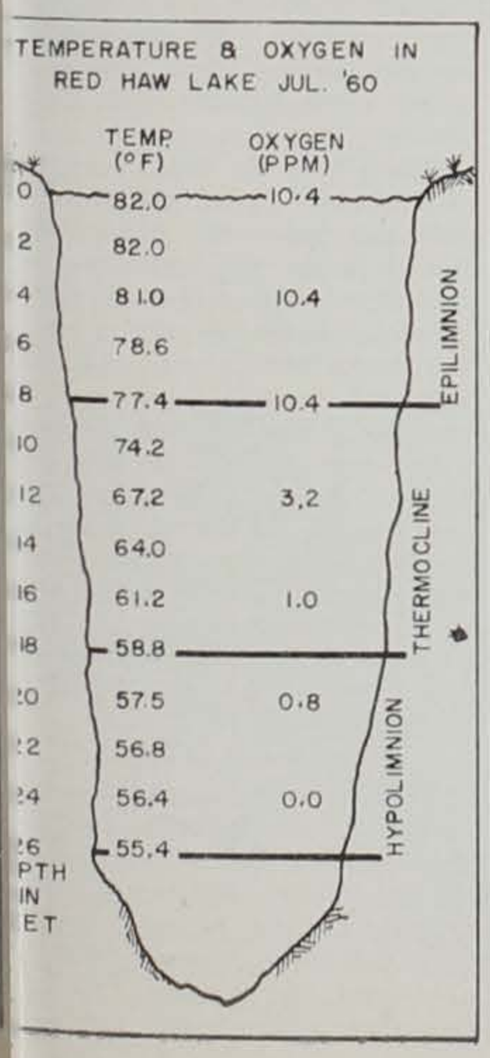
This brings us to the question, exactly where are the most fish located during the periods of stratification? Different species of fish are more tolerant to chemical and physical changes than others. For the past two years detailed studies by conservation biologists have been directed toward the relationship of thermal stratification and depth distribution of fishes. Using an 18 foot, depth-marked, experimental gill net, samples of bluegill, largemouth bass, crappie, channel catfish and bullheads have been observed in relation to thermocline location at Red Haw Lake in Lucas County. These studies were completed during three seasons of the year, but because most fishing is done in the summer months, only this season is considered in this article.

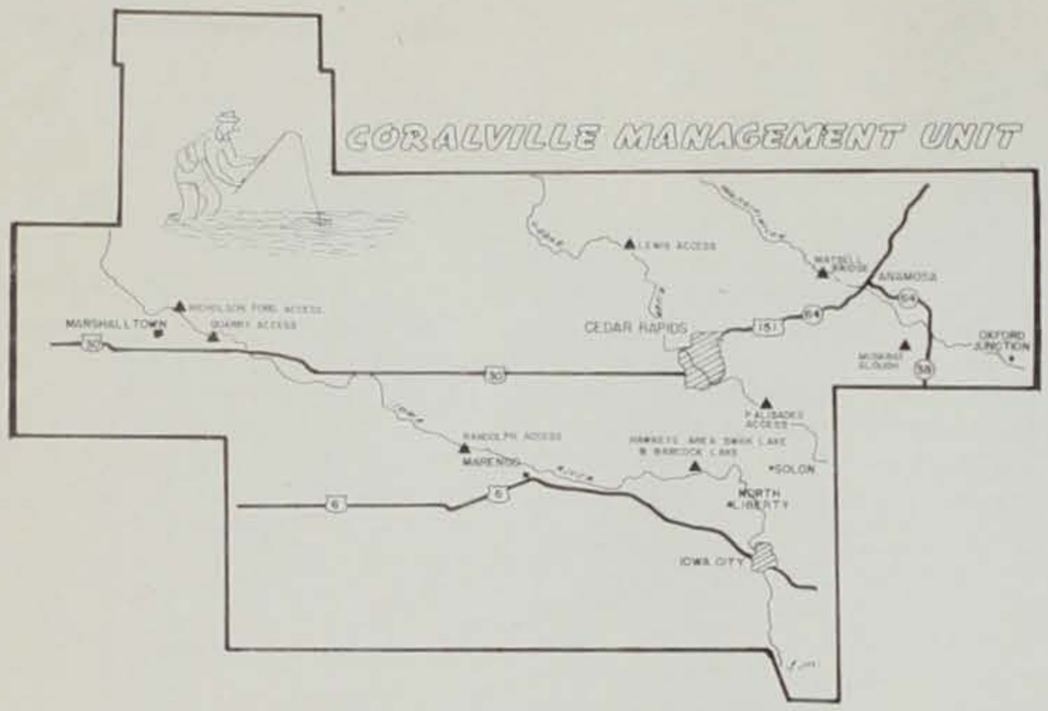


A total of 1,813 fish have been captured in the gill net when the lake was stratified. Largemouth bass was the only species never found below the thermocline. Also only five per cent of the bluegills captured were found in oxygenless layers of water. The two bottom feeding species, channel catfish and bullheads were caught below the thermocline about 25 per cent of the time. Those that were captured in the oxygenless water were stuffed with bloodworms, indicating that feeding was occuring on the bottom. Crappie were found below the thermocline more frequently than any other fish.

The next question in your mind is undoubtedly at what depth to fish to increase angling success in stratified lakes. First of all the thermocline must be located. This can be easily done by using an inexpensive and reliable maximum-minimum thermometer. These can be purchased through almost any drug store. Lower the thermometer on a marked line and determine the temperature at two foot intervals. The first depth at which the temperature drop exceeds 1.08° F. from the previous temperature reading marks the upper limits of the thermocline. This is the area in which 65 per cent of the fish captured in the experiment were found. In fishing for bottom feeding species success can be increased greatly by locating the intersection of thermocline and bottom.

There are many other effects of stratification on the lives of fish, other than controlling lateral movements in the summer. To be a successful fisherman, one must understand that this phenomenon occurs in about all artificial lakes and ponds and can be used to an advantage. The secret of success is to get yourself a thermometer and use it.





THE CORALVILLE FISH AND GAME UNIT

Tom Berkley
Unit Manager

The Coralville Fish and Game Management Unit is one of the state's newest and is yet in the primary stage of development. Most of the plans for the areas involved have now been submitted and approved, and 1961 should see much of the necessary construction for efficient unit management completed.

The following counties have been assigned to the Coralville Unit for area management and farm-game habitat planning and planting: Jones, Linn, Johnson, Iowa, Benton, Tama, Poweshiek, Marshall and Grundy. The state-owned areas located in these counties include Muskrat Slough in Jones County; Palisades, Matzell Bridge and Lewis, access areas in Linn County; Nicholson-Ford and Quarry accesses in Marshall County; Randolph access in Iowa County; Swan Lake, Babcock Lake areas; and the segment of the Coralville Reservoir, known tentatively as the Hawkeye Wildlife Area in Johnson County. These state-owned or leased areas total approximately 4,600 acres of land well suited for wildlife production as well as use by the public for outdoor activities.

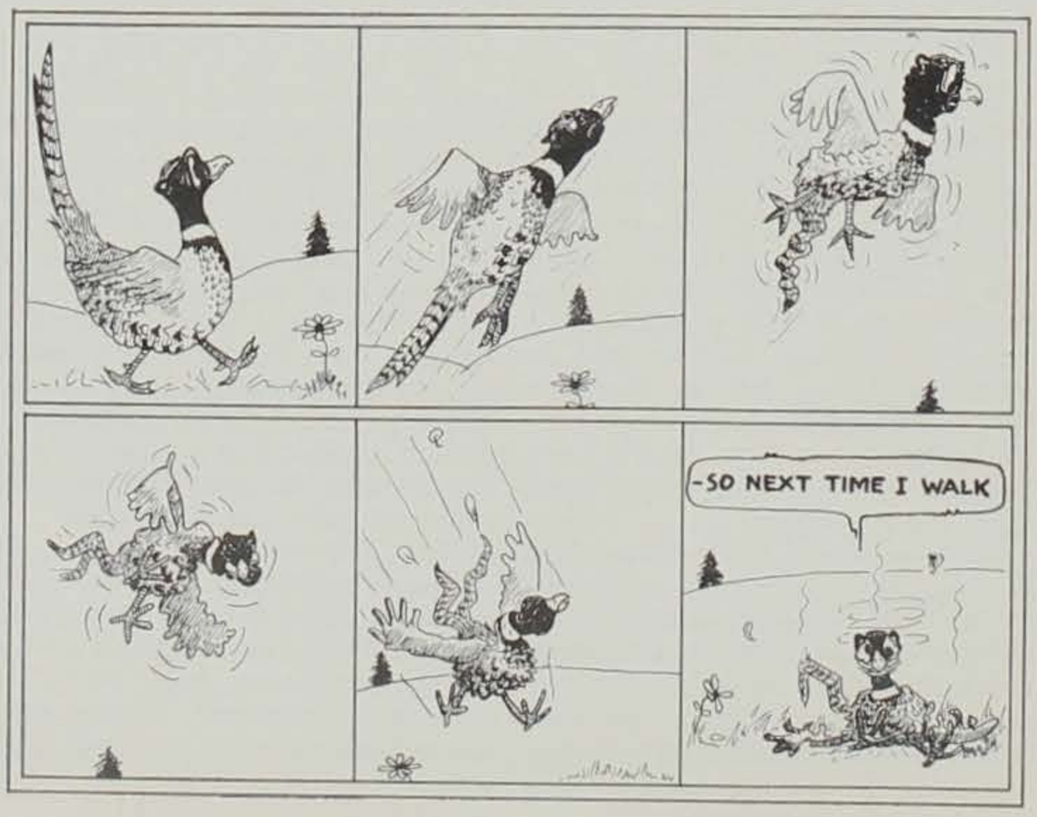
Muskrat Slough, Swan Lake and Babcock Lake are managed primarily for waterfowl and upland game and classified as public shooting areas. Swan Lake and Babcock Lake areas are entirely open for public hunting, while a part of the Muskrat Slough is designated as wildlife refuge of great value in maintaining waterfowl populations in the area during the hunting seasons. A segment of the new Hawkeye Wildlife Area will also be managed as a waterfowl refuge and attempts will be made to attract and hold large numbers of waterfowl during fall migrations. Areas of this nature have proved to be beneficial to waterfowl at the same time providing improved hunting conditions in the adjacent public hunting areas.

Fishing access is provided to the three major rivers located in the unit. Access is provided to the Wapsipinicon River by Matzell Bridge; to the Cedar River by Lewis and Palisades, and to the Iowa River by Randolph, Nicholson-Ford, and the Quarry accesses. Access to the Iowa River will also be provided by the new Hawkeye Wildlife Area in the future. These already provide or will be developed to provide entrance roads, parking and picnic areas, boat launching facilities and places suitable for overnight camping. Public hunting is permitted on these access areas with some fair hunting to be found on the larger ones. Public use appears to increase each year as the interest in outdoor recreation grows, and more persons become acquainted with these fish and game areas.

The largest and perhaps most important part of the Coralville Unit is the recently acquired Hawkeye Wildlife Area obtained by license from the United States Corps of Engineers. The tract contains 3,595 acres and is located in the upper reaches of the Coralville flood control pool in Johnson County. The license for the management of this area extends for a period of twenty-five years and follows the general outline of the licenses involved in the state management of other federal lands which include Lake Odessa, the Princeton Area and the Green Island Bottoms. The Hawkeye management area starts at the highway bridge on 218, just south of Cou Falls, and extends upstream for a distance of four miles. Existing plans provide for the east half of the area to be managed as a waterfowl refuge with the west half of the area to be open for public hunting. The refuge will be closed to public use only during the waterfowl hunting season and will be open for boating and fishing during the balance of the year. This will permit boaters to explore the area during the spring and summer months and fishermen can utilize it throughout much of the season. All such activities will be prohibited during the waterfowl hunting season when such activities would be detrimental to waterfowl use.

This area has been selected a headquarters for the entire uni and negotiations are under wa with the Corps of Engineers to ac quire an additional six acres fo the construction of the headquar ters buildings. Included in thi plan is a residence for the uni manager, an office, storage an service building. Located on th north side of the management sec tion, it is approximately one mil west of Cou Falls. Storage an service of all unit equipment wi be done here. The buildings wi be similar to those used on th other management units over th state.

The Coralville Pool, immediatel downstream from the 218 bridg remains under the jurisdiction the Corps of Engineers and offe wonderful opportunities for ou door activities, as does the Lak Macbride State Park immediatel adjacent to the main pool. Th combined water area totals ov 5,800 acres, creating the large body of water in the state. Oppo tunities for public use are bei improved by the construction concessions which will provi boats, bait and other facilities assist John Q. Public in the enjo ment of the outdoor activities he so dearly loves.



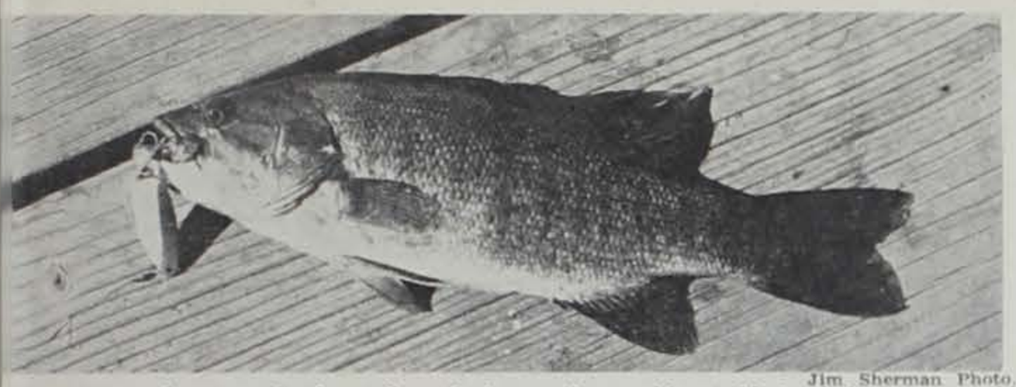
NEW CAMPGROUND CONSTRUCTION

Jim Sherman Photo

Gull Point State Park on West Okoboji Lake is getting a new campground. Formerly campers in this park used the auto parking area. The new campground is being built in a tract of burr oak timber located in the southern part of the park. The new area will accommodate about 150 camping units and is adjacent to a beautiful bathing beach

Birds have the highest bod temperatures of all creatures 104 to 110 degrees Fahrenheit.

Weasels are believed to hav only one litter a year. The youn are blind and helpless for abo nine days after birth.



Jim Sherman Photo.
e quarters of a pound of smallmouth bass—the yankinest kind of fish you could hope to get on your tackle. An artificial lure brought this one in, but natural baits are highly effective at catching the eye—and the mouth—of this fighter.

MALLMOUTH BASS ISHING IN IOWA'S GREAT LAKES

Bill Basler
onservation Officer, Spirit Lake

erhaps one of the least sought r fish in the Iowa Great Lakes , is the smallmouth bass. What kes this even more surprising ne fact that they are abundant oth Spirit and West Okoboji, are absolutely unsurpassed action on the end of a line.

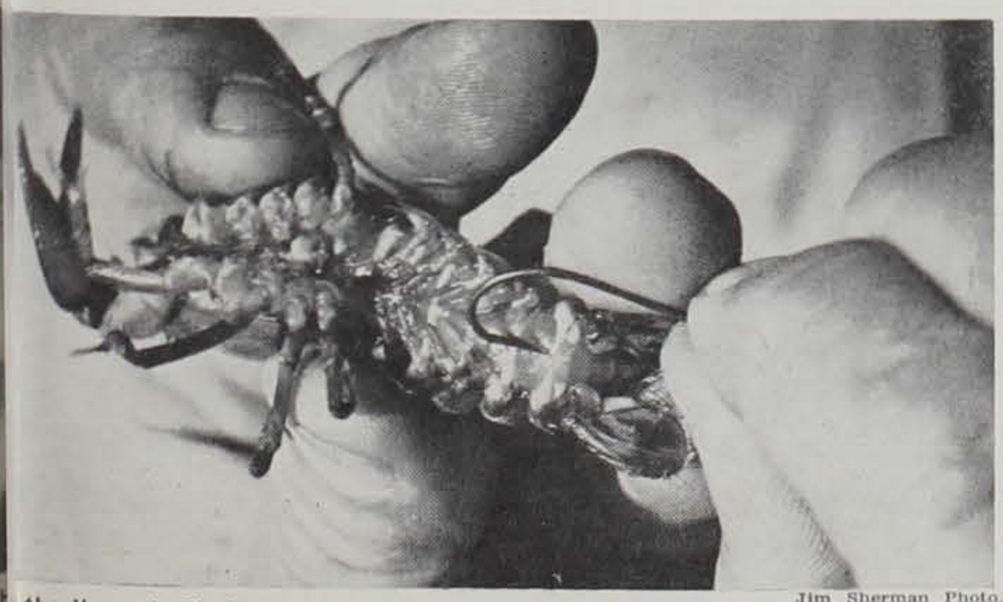
he smallmouth fisherman is in- l a separate breed. He would er part with the family car the location of his favorite spots, or the lure that is work- the best. At the risk of losing w treasured friends, or pos- a warning shot over the bow y boat, I'd like to set down a personal tips, and invite more ws to join the club.

ork the rock reefs, and rock les on West Okoboji; my fa- rites are Pillsbury Point, Fort odge Point and Gull Point. On irit, Big Stoney Point. All ur are long rock reefs, and ex- nd from shallows to 12 to 20 et of water. These points are l marked on local maps of the ea, and the shallow parts easy locate. As you proceed to eper water, use a sash weight a line, and sound for the cks. Your boat anchor will so work. Spend some time, el out the reefs, and get some ference points on shores, so u can return without having sound each time. This is im- rtant only because it saves ne. Bass are not afraid of an chor or of the noise it makes uncing over the rocks. In my perience, it attracts rather than frightens them. But it saves time to line-up a tree with the door on a cottage, and in a different direction a windmill lines up on a corner of a barn, drop the anchor and go to fishing. This is especially important when you find an isolated rock pile, and can't follow a reef to get there.

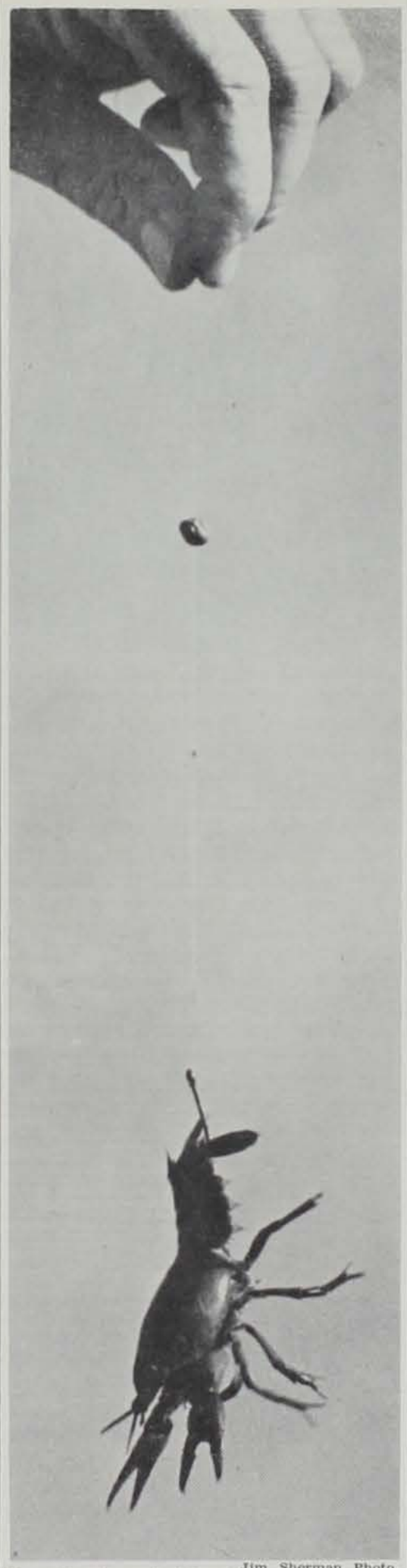
2. Keep moving—Early in the season, or late in the season a fathead minnow hooked through the nose and trolled right down among the rocks, is very effective. It also keeps you moving till you find the fish. Once you find them, anchor and cast, or continue to troll the same area. However, through the hot part of the summer, July-August and part of September, try a small cray fish, 2 to 3 inches long and hooked through the extreme tip of the tail. Here the spinning rod is tops. Use only a split shot for weight, anchor and cast. Let the cray fish settle to bottom, and retrieve very slowly. Snags are frequent, but if they can't be loosened, the loss is small. One hook and one splitshot. And as an added dividend, you will catch other species as well.

Fresh water drum, locally called sheepshead, are frequent, and full of fight. Also an occasional walleye, perch, bluegill and bullhead. But don't stay longer than 10 to 15 minutes unless you get action. Sometimes a fifty foot move gets you in pay dirt, or should it be pay water, or you may move a dozen times before you connect. It's work, but go find them. And at times they are in a spot as small as your boat, so keep moving and casting.

3. Try different bait and lures—



Jim Sherman Photo.
the "crawdad" through the tip of the tail, throw him overboard in a likely look- rock pile a few feet under water, and hope that your rod will stand the strain.



Jim Sherman Photo.
Crayfish (crawdads) might not look so hot to us, but to a smallmouth they are a tasty morsel. Split shot should be about six inches up the line from the bait for best results.

Fathead minnows, cray fish and the popular jigs are usually sufficient. But at times it may be a frog, or perhaps a leech or a killer rig that will connect.

That's all there is to it. Keep your eyes open for new rock piles, ask the boat livery men and tackle men, or any Conservation Officer for help if you have trouble, and have fun—that's what fishin's for!

The carp, a native of Asia, was introduced in the United States in 1872.

Deer, elk and moose have no gall bladders.

REALLY THINKING AHEAD

This fishing thing has pinned a lot of us. It does strange things to a person.

The other morning, unable to sleep as dawn approached, I arose, dressed quickly and slipped from the house without waking a soul.

Driving to the parking lot in the morning fog, I was surprised to see a man already seated on a camp stool on the river wall. From a distance I could see he was casting and retrieving. Moving down to the wall beside him I was astonished to see that he had not a thing in his hands, although he continued with the motions.

After a while he turned to me and said, "I suppose you think I'm wasting my time—but I can explain all this. Years ago we all used heavy poles, an 18- or 20-pound test line. Then came the glass rods and nylon lines. Everyone went for the lighter lines—10 or 12 pounds. Well, then we got into spinning and the next thing I knew it was 8, 6 and 4 pound lines.

"Well sir, I can see where all this is heading and I'm keeping ahead of the game. And I'm getting results!" With that he reached down and pulled up a stringer of fish.

By this time the sun had begun to brighten the day, but there were others near, so I scrambled back to the car to find someone to witness this.

When I returned he was gone!

—Bellevue Herald

FARM POND—

(Continued from page 57)

pendent on both plankton and aquatic vegetation for food and shelter.

Farm pond weed control questions have multiplied as the pond numbers have increased to more than 21,000 ponds in Iowa. There is no single simple remedy since pond designs and depths vary and control how much aquatic weeds will interfere with special pond use purposes. The fishery workers and biologists who are qualified to recommend remedies can do so only on a limited basis. Public water production problems keep them hopping so they are not ordinarily available for more than friendly consultation. Ill advised "miracle chemical" controls of weeds may jeopardize livestock watering, fish life, biological balance or even human health, so living with pond weed problems may be better than fighting them and losing the other pond values. Consult with a Soil Conservation Service expert, fisheries worker, or biologist and learn to appreciate the natural beauty of the life and productivity of your pond. Let what your farm pond is used for serve as a guide for management effort.

George Tovey Photo.

Some 80,000 bass in bags of 200 each have been distributed to farm ponds throughout Iowa. The oxygen filled bags have practically insured loss-free transportation of fish.

BASS BY THE BAGFUL

Dale Stufflebeam

Science and industry have combined again in such a way as to aid the distribution of bass fry to farm ponds all over the state. Using plastic bags to make delivery of the fish gives the Iowa Conservation Commission a big help in the field of fish management.

In early years the fish were delivered directly to ponds by Department trucks. Ten ponds a day was considered a day's work. For a hundred ponds or more, two weeks were required to collect and distribute the fish using two trucks. As the number of ponds increased and farmers got into the swing of having backyard fishing, it was necessary to bring the bass and bluegills to a central location and have the pond owners supply their own containers and do their own stocking. This system allowed some 500 ponds to be serviced, but it still took four men and two trucks a month to stock 40,000 to 80,000 bass. In the spring, advanced bass fry were delivered and in the fall came fingerlings and bluegills. The four to five inch fingerlings were taken from crowded rearing ponds so were an inch or two shorter than fish of the same hatch stocked in farm ponds in June. These bass taken for farm pond use are those that would normally be lost if not thinned out in the hatchery rearing ponds.

Even with the increased efficiency the farm pond stocking picture was not complete. The containers usually brought by the owners were milk cans, thoroughly scrubbed with soap and water. Quite often mortality was high between the distribution point and the pond—caused in a large part by the "washing powder blues"—the bass just couldn't stand the residual detergents left from cleaning the cans.

Now deliveries are made in plastic bags filled with cold water and pumped full of oxygen before sealing. When the pond owner gets home with his container of fish, he can put it in the water without opening it until the water in the bag has attained the same temperature as that of the pond. This, with the other improvements in techniques, has reduced transportation losses to practically zero. In addition the total delivery time this year was three days. No further deliveries will be made this summer or fall, but you can get on next year's list right now for a bagful of bass. Check with your conservation officer.

Commission Minutes July, 1960

Mr. E. P. Kettering, representing the Lake View Commercial Club, requested permission for that group to hold annual speedboat races in the restricted speed zone area of Black Hawk Lake. Permission granted.

All Conservation Commission budgets for '60-'61 were studied and approved.

A delegation from the Southwest Iowa Power Cooperative asked for permission to build a highline across Green Valley Lake. Action deferred until some of the commissioners could visit the site.

Carroll Lane of the Okoboji protective Association asked the Commission to ask the next legislature for an appropriation to complete the sewer around the west side of Lake Okoboji.

A delegation from Storm Lake asked for the sale of lake area on Storm Lake to the city of Storm Lake for use in building a swimming pool. No action.

Objection to the building of a swimming pool in Storm Lake was made by Emil Mildenstein.

Hjalmer Carlsen was presented with a plaque by the Commission in honor of thirty years service in fisheries work.

County Conservation

The following county park projects were approved:

A management agreement with the Wright County Conservation Board for the north end of Lake Cornellia.

Management agreement with the Linn County Board for the Matzel bridge area.

Winnebago County, 21½ acre gravel pit acquisition for one dollar.

Fishing access acquisition 29.7 acres for $100 per acre on the Cedar River in Benton County.

Buchanan County, 45 acres on the Wapsipinicon River at $35 per acre.

Cerro Gordo County, ten year lease on 4⅓ acres for $100; 11 acres acquisition for $1,550, 8⅔ acres acquisition approved.

Story County, lease for a pond near Zearing for $350 per year.

Jackson County Board received approval for a roadside park near Zwingle.

Miles corner on highway 64 in Jackson County approved.

Mills County roadside park three miles south of Emerson approved.

It was requested that the Soper Mill area be transferred to the Story County Board. The Commission recommended a management agreement be worked out instead.

A Polk County roadside park of one acre on Vandalia road was refused. The Commission heard a report on Scott County Conservation Board work from Bill Rush.

Mr. Wagner of Burlington requested lease or purchase of an island in the Mississippi River. Denied.

Travel was authorized to the American Fisheries Society in Denver in September.

The Commission heard a report on a two-way radio system costs.

The Commission declined an invitation to participate in the Des Moines Home Show.

Forestry

A report on progress in the Yellow River Forest was given.

A report on the forest nursery production for this year was given.

Parks

A deed for 32 acres of land at Upper Pine Lake was recommended for acceptance by the executive council.

The concession contract at Palisades-Kepler was cancelled.

Request for a helioport on West Okoboji was denied.

Fish and Game

The Commission accepted apportionment of federal aid funds.

An option was accepted for 4 acres on Elk Creek for $50 total.

An option was accepted for purchase of Lazy Lagoon on West Okoboji for $9,000.

An option for 320 acres on Corville Marsh in Louisa County $39,000 was accepted.

A report was given on fish hatchery success this spring.

An administrative order was approved establishing a size limit 24 inches on northern pike in natural lakes. Each fisherman to allowed one undersize northern possession limit of three northern

Plans for a new fish hatch at Orleans were discussed.

Condemnation proceedings the Selmer Lien property of acres in Elk Creek area established the purchase price at $6 which was accepted.

A joint meeting of the Conservation Commission and Nebraska Game, Forestation Parks Commission agreed on following policy which the Commission then adopted—*It be the policy of the Iowa Conservation Commission to develop the State of Nebraska a mutual and cooperative approach to projects, problems, rules and regulations involving the recreational uses of the Missouri River.*

The Nebraska Commission indicated that they will approve similar policy at their next meeting.

"As I remember it—it was much larger . . ."

BIOLOGIST'S CORNER

WHO GETS THE FISH? PART II

Bob Cleary

In the April CONSERVATIONIST it pointed out that angler interviews on the Mississippi River indicated that one doesn't have enough fish all the time to be a successful angler. The inference being that angler aptitude is just as important as time allotted to angling.

We recently took the answers published by some 8,000 Mississippi River anglers and fed them to one of these "mechanical brains" or computers. We asked the machine: "Should I fish from a boat, barge, off the bank; what kind of bait should I use; and what kind of rod should I have connected to my line in order to be a successful fisherman?" The computer digested the data cards we fed it and came up with the following answers:

The most successful angling, using fish caught per hour as a basis for comparison, was the ice fisherman; next the wader, usually a bluegill popper fisherman; and least effective was the barge fisherman. However, on a weight-per-hour basis, the barge fisherman and his walleyes and saugers probably was in reality the most successful angler.

Angler Type	Number Fish Per Hour
Boat	.90
Bank	1.10
Barge	.58
Wader	1.27
Ice	1.53

As further evidence that the bluegill popper fisherman was an excellent angler, flies took more fish per effort than any of the baits used. The use of insect bait was the second most productive bait; the ice fisherman using them almost exclusively. Worms and crayfish proved better general baits than minnows; while the frog-using bass fisherman should have been using something else.

Type of Bait	Number Fish Per Hour
Minnows	.98
Worms	1.11
Prepared Bait	.83
Frogs	.32
Crayfish	1.17
Larvae	1.40
Plugs	.98
Flies	1.82
Spoons and Spinners	.86

With the exception of the ice rod which was the "weapon" of the most successful angler and normally on the opposite end of the second most effective bait (Larvae), all other line-holding equipment ranked about equal.

Type of Gear	Number Fish Per Hour
1. Casting rod	1.03
2. Spinning rod	.89
3. Fly rod	1.04
4. Cane pole	1.09
5. Ice rod	1.43
6. Trot lines	.67

It is evident from these tables that angling methods and/or bait used are more important than tackle to the successful angler. One might deduce that old timers with their cane poles are more knowledgeable about where the fish are and how they eat than the myriads of spinning enthusiasts with that new fangled type of equipment. Where do you fit in the tables?

IOWA STATE LAKES

A Where To Go and What To Do Feature

IOWA'S BAYOU COUNTRY

Stan Widney

It's funny how a man will go along for half a century and not see what's right under his nose, so to speak. I'll bet I've traveled Highway 61 from Burlington to Muscatine and Davenport 50 times and didn't realize I was passing within four miles of duck heaven—a lake that has everything—and a little bit of the Florida Everglades right here in Iowa.

Oh, I had seen the signs—"Lake Odessa"—but I didn't pay them any mind because, at that time, I was not in the conservation business although I loved to fish and hunt and boat and would have stopped every time I went by, had I known. You can do all three at Lake Odessa, and how! What's more, you can camp at one of the cleanest camp grounds in the state. There is a new ramp to get your boat in; the slickest, most modern floating docks you every saw that'll park 160 boats, and a concession where you can buy darn near anything from milk to minnows at reasonable rates.

I knew the Mississippi River was over that way someplace when I went through Wapello. It's one of those things a man knows but never thinks about as he drives along.

Of course it wasn't so much of a vacation spot in the old days. In years when the river was average or below, the farmers raised corn in the bottoms that is now Lake Odessa. A bunch of bridges, narrow and rickety, crossed the creeks and sloughs to bring a road over to the irrigation pump house on the levee, and at one time they were going to build a railroad through along the bank of old man river—spent a lot of time and money grading and filling—but nary a rail was ever laid. I don't know why but I'm glad because it might have spoiled what's there now.

What's there is a lake that's five or six miles long and covers 3,116 acres of timbered islands, open water and avenues a mile long that wind through foliage that meets overhead like the everglades do in Florida.

They say Spirit Lake is bigger, but it doesn't seem like it when you travel around Odessa in a canoe—even a canoe with a kicker (I never could paddle a canoe because I can't kneel down right and I always did say, either a man kneels to paddle a canoe of mine or I get out). Of course Spirit Lake is open and can be seen nearly all at once and when I travel on it I don't canoe. Those inboards up there sure get out and go, don't they? As far as that's concerned, Lake Odessa has some pretty fast boats, too. But I'd a lot rather canoe because you see so blamed much.

Like those big snapping turtles on fallen tree trunks stretching out their necks a good eight inches to see what makes that put-put sound; a great blue heron peering down at us from a perch high in a dead elm, then taking off to a spot farther along our route to have another look; egrets — splashes of white against the blue sky flapping slowly along like an old prop job compared with a jet; wood duck mothers playing choo-choo-train with their young so close to shore you have to look for them with binoculars; muskrats "v"ing the channel with small wakes, and all the other bird life and varmits I couldn't name.

There's fish there . . . any fish that swims in the Mississippi River puts on extra pounds in the lake! I was riding in Bill Aspelmeier's (Bill is the Unit Manager at Odessa) runabout one morning when we hit what I thought at first was a stump, only it sort of gave when we hit it so I knew it wasn't anchored wood—in fact, it actually felt meaty, like the time I hit a mule on the highway. (It didn't hurt the mule any that I could see but it cost me $85 for a new fender for that '26 coupe.) Anyway, I asked Bill what we hit and he says, "Fish, a big cat, flathead or gar."

There's bass, pike and all kinds of nice pan fish in there too and of course carp which is not bad coming from that water. I saw a couple of big bull frogs too—sitting on old bridge pilings and when I picked them up in the binoculars their eyes looked as big as rear vision mirrors on a car fender. One of them jumped off with a splash that sounded like my boy Buford when he forgets to straighten out his legs. The other bull stayed right there till we were almost up to him, then darned if he didn't hop six feet to another piling.

How Odessa was formed, how the water is lowered in the lake (as it was early this summer) and other areas of the unit you can find in the December, 1959, issue of the CONSERVATIONIST along with what all Bill does there besides being the best host possible to all visitors from both in and out of the state. I'm trying to get you to visit Odessa and all I've got to say is, anyone who won't go just doesn't like the out-of-doors; camping, boating, scenery, wildlife—even hiking. It's all there, at Lake Odessa.

Horace still doesn't quite have the knack of it—

CONSERVATION AT THE STATE FAIR

Smoky Bear and Little Smokey will be making an appearance again this year. You'll probably find them outside the forestry exhibit which has been completely revised; Iowa wood products will be featured including such items as bowling pins, whiskey barrels, furniture and gun stocks that all go to make up $25,000,000 annual income from wood in Iowa.

For the people who like to do things outdoors, a hobbyists' booth with equipment and demonstrations will be a main attraction. Fly-tying, bird and flower indentification, rock collecting, rod building and gun work will be done and explained for the fair goers. A glass enclosed poison ivy is numbered among the plants to be shown.

Cruising Down The River

PHOTO FEATURE BY JIM SHERMAN

Jim Sherman Photo.

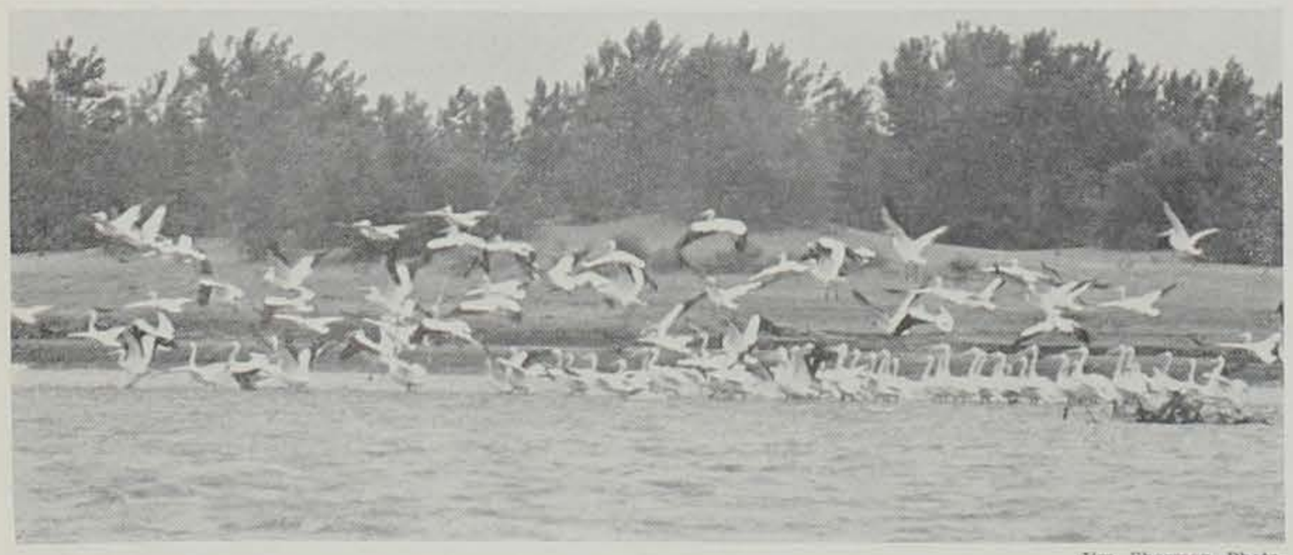
The Mighty Missouri carried a flotilla of 28 boats over 97 miles of clear, then muddy water, on an inspection trip June 16th. The day dawned cold and cloudy making many of the voyageurs apprehensive about comfort while on the broad expanse of water. Noon brought the sun and clear skies making the weather ide for river travel and members of the State Conservation Commission, legislato news men, and their hosts completed the afternoon inspection in good cheer.

Jim Sherman Photo.

Ham sandwiches were served for noon lunch at the Decatur Marina, one of the few places where boats can pull off the river between Sioux City and Council Bluffs. This boat launching site was built by the Decatur Boat Club just north of Decatur Bridge.

Jim Sherman Ph

Pointing out an island whose title is under question because of channel changes, t Conservation Officer guiding the group explains their location and the problems a potential of the area. Rock channel-baffles are visible in the background.



Jim Sherman Photo.

A flock of graceful pelicans rise from the lonely waters of the river. Very few boaters and fishermen were encountered in nearly 100 miles of travel making one feel that this area is indeed untapped.

The high bank of the De Soto Bend Canal was formed when t Missouri was rechanneled to make a 7½ mile long lake out the former meander of the river.