

IOWA CONSERVATIONIST

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TROUT WITH FLY, BAIT, AND SPINNER

Roger Fliger

Angling for trout is divided primarily into three categories—spinning, bait fishing and fly fishing. Each has its ranks of avid enthusiasts and their own common agreement is that they like to catch trout.

Of the three methods, spinning has swept the country in recent years, ranking near the top. For those who have little time to devote to trout fishing, spinning can be mastered in a few hours of practice. The deadly midget lures ideally suited to spin tackle have always been effective on trout. Examples of these lures are Colorado spinners, flicker spinners, pearl minnows, wobblers and dare devils, weighted flies and tiny plugs.

Spinning has other assets in addition—natural baits of all types can be handled very easily with them. The "invisible" monofilament line will let the lightest bait such as a grasshopper or cricket float with the current back in under drift piles and under cut banks where the big ones lurk. Brushy
(Continued on page 150)

IOWA'S WOODLAND MANAGERS

Bruce E. Plum
District Forester

Iowa woodland owner was offered \$500 for the buyer's choice of trees in his timber. To the owner this seemed to be a good deal and he could use the money, but before closing the deal the buyer and owner called in his local district forester to examine the woodlot and advise him. As a result the owner decided not to sell all of his timber, but with the help of the district forester he made thinnings to clear the crowded trees for better growth. He made an immediate cut to get rid of mature and weed species that were taking up space needed by high trees. In that way he sold about a quarter of his timber and received \$1,200 for it through the sale. Moreover in another five years he will be able to make more sale. Under present plans the woodlot will become more productive, produce a higher grade product and give him a regular income.

This is a typical case that may be found in the files of the Conservation Commission's six farm foresters. Iowa's free farm forestry service has been available to woodland owners since 1948. This program is a cooperative one; the Forest Service provides some operating funds. The Conservation Commission employs a professional forester for each of the districts. District headquarters are located in McGregor, Anamosa, Chariton, Wapello and Fair-

The Great Need

One of the responsibilities of the foresters is to convince the woodland owners of Iowa's two and a half million acres of timber that proper management can be profitable. The ownership is divided among farmers, factory owners, businessmen, professional people and even some farm foresters. The reasons



Jim Sherman Photo.

One rainbow trout on the way to the creel. If fishing had to be classified, angling for trout would fall into the top bracket for many. It is a sure test of fishing skill.

for ownership vary from "just liking timber" to "it's part of the farm." A majority of the owners have one thing in common—they can use some education in the science of forestry. Most woodland owners do not realize the profit it would be possible for them to make by properly managing and harvesting their timber.

What Happens

Upon the request of the woodland owner the district forester will go over this timber with him. Requests are made directly to the district forester or through the local Soil Conservation Service office, Conservation Officer, or County Extension director. Woodland management plans are often incorporated into farm plans made up by the S.C.S. farm planner.

Upon meeting the woodland owner for the first time the forester will probably make a reconnaissance of the woodland with the owner. Each woodlot is a new problem. No two can be treated exactly alike. During the walk through the woods the forester learns about the owner's objectives

and farm operation problems as they relate to the woodlot. At the same time the forester is looking over the woods and taking notes about the general condition such as damage from fire, insects, diseases or grazing, the kinds of trees present, topography as it will affect a future logging operation, location from roads, and the size of trees. A good woodland management plan must be drawn up primarily around the principles of good forestry and secondly in line with the objectives and problems of the owner.

Often times a woodland owner is tempted to let a timber buyer have his choice of trees in the woodlot for a certain amount of money. It is then that the farm forester explains to the owner that he can derive greater profits from his woodlot through selective harvesting. A farmer would not turn a hog buyer loose in his hog lot and let him take his choice of hogs. By the same token he should not turn a timber buyer loose in his woods to take the "cream of the crop." If the forester fails in his

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IOWA TROUT STAMP

VOID APRIL 1, 1962



\$2.00

STATE CONSERVATION COMMISSION

IOWA'S NEW TROUT STAMP.

Beginning July 4 of this year, all persons who fish for or take trout from designated trout waters in Iowa, and who are required to have a resident or non-resident fishing license, must have one of these affixed to their license. They may be purchased at all accredited places where fishing licenses are sold in the trout areas of north-east Iowa and vicinity and are good until April 1, 1962. Proceeds from the sale of these stamps will be used exclusively to improve the trout program.

Iowa Conservationist

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COMMISSION MINUTES June 13, 1961

The two new commissioners, Robert Beebe of Sioux City and Edward Weinheimer of Fontanelle, were introduced to the Commission.

Travel authorizations: Three persons to the Midwest Forest Wildlife Committee July 17 in Ohio; six persons to the Midwest Fish and Game Commissioners meeting July 10 in Michigan; two persons to Midwest State Park Association June 19 in Michigan; the commission pilot to Missouri to pick up Iranian pheasant eggs; two persons to the North Central Boat Law Administrators meeting June 26 in Minnesota; three biologists to travel within three miles of the Iowa border in Wisconsin and Illinois while on duty.

County Conservation Activities

The commission approved the following land acquisition items: Benton County, 60 acres in the Mount Auburn Bridge Area for \$260 on the Cedar River for fishing access and as a wildlife area. Floyd County, 3-4 acres for \$250 per acre on the Shell Rock River near Gates Bridge above Greene for boat and fishing access and picnic area. Worth County, Lime Creek Mill, dam and pond plus ten acres for one dollar at Fertile. Lee County, Coleman Memorial Park, a 2½-acre schoolhouse site in the northwest corner of the county as a gift. Humboldt County, lease of a field on the Frank Soldow farm for six months for \$40 for archeological exploration. Delaware County, Kenna Access three miles southeast of Manchester for river access and school-county forest at a cost of \$5,300 for the 90 acres. Linn County, 4.6 acres at Center Point leased for 99 years for one dollar to be used as a community center. Franklin County, a 2½ acre picnic site in the Zion-St. John area 2½ miles northeast of Aurelia for \$1,234 to be used for fishing and picnicking. Chickasaw County, a 1.9 acre addition to Haus Park for \$190 to be used for access to park and for

EDITORIALLY SPEAKING

GETTING YOUR MONEY'S WORTH

Malcolm K. Johnson

In a release from the U. S. Department of Agriculture this spring, a great deal of activity is said to be anticipated and some 25 million dollars will be spent for OPERATION OUTDOORS. This program is designed to improve hunting and fishing in the National Forests.

This belated recognition of the needs and rights of sportsmen, over 40 million strong and ranked number one in outdoor recreation, is appreciated. But is there something lacking?

Mention is made of planting shrubs and food patches, clearing game ways in dense vegetation, stabilizing stream banks and constructing channel improvements and access roads for hunting and fishing. But where in the program is the one thing that could pay for all the rest?

In Iowa, the Department of Agriculture is now paying over a million dollars a year to tile and drain wetlands. They are also paying to take other land out of production—from back to forth to back again.

The 25 million dollar cost for OPERATION OUTDOORS is scheduled to be paid in ten to fifteen years—it could be done without cost and at considerable saving if USDA would get off the money merry-go-round and let our natural sponge land, especially in the northern plains, do its job.

parking. Poweshiek County, 200 acres on the north side and upper end of Diamond Lake at Montezuma for access to the lake.

The following county conservation board development plans were approved. Carroll County, picnic area at the Richey Access. Carroll County, road and parking area construction plus camping and picnic facilities at the Riverside Picnic Area. Linn County, development of recreational facilities in the Center Point Park. Humboldt County, archeological exploration for remnants of Indian Culture at the Soldow farm in cooperation with the State Archeologist. Cedar County, boat launching ramp and picnic facilities at Rochester Landing. Chickasaw County, camping, picnicking and boat launching facilities at Howards Woods.

The commission also approved a concession agreement between the Carroll County Board and R. L. McDonald of Carroll to operate a refreshment stand at Swan Lake State Park.

Fish and Game

The commission moved to adopt and promote the Iowa Cooperative Hunter Safety Program.

The commission approved condemnation of land at Christopher Slough by Grinnell College. Condemnation costs will be subtracted from the price of the land paid by the commission.

The commission approved condemnation of about 70 acres of land at Lizard Lake in Pocahontas County to acquire access to the lake.

The commission approved re-routing the road into Forney Lake in Fremont County to improve access.

The commission approved an agreement with the Cerro Gordo County Conservation Board to replace a nursery pond outlet con-

trol structure lying adjacent to the Shell Rock River.

The commission accepted \$189,880.98 for wildlife restoration and \$51,767.44 for fish restoration from the federal government for federal aid programs. The money comes from an 11 per cent tax levied on hunting and fishing equipment.

Parks

The commission decided to charge fifty cents per 24 hour period for use of electricity at the state parks where outlets are available to campers.

The commission was informed that the Board of Control will no longer maintain a permanent prison labor camp at Geode State Park.

The commission approved expenditure of \$15,000 for rock to complete repair of the dam at Palisades-Kepler State Park.

Water

The commission approved safety and speed and distance regulations recommended by the superintendent of waters. They also approved regulations for boat docks (permits to be issued for a ten year period), dock construction and the storage of boats on public access areas.

Approval was given to have commission personnel patrol the Coralville Reservoir on weekends and holidays.

An exchange of property at East Okoboji was approved to straighten property lines and a construction permit was ordered to be issued to maintain an already constructed road.

The commission authorized construction of two boat ramps and docks at Clear Lake where two county roads run into the lake.

Retiring Commission Chairman George Jeck was presented with a walnut gavel in appreciation of his service.

NEW MOTOR BOAT REGULATIONS

Rules covering the operation of motorboats in Iowa approved by the Conservation Commission at the June meeting include the following:

Speed and Distance

In all waters under the jurisdiction of the State Conservation Commission:

1. No motorboat shall be operated at speeds greater than five miles per hour when within 25 feet of another craft traveling five miles per hour or less.

2. Motorboats shall maintain a minimum passing or meeting distance of 50 feet when both boats are traveling at speeds greater than five miles per hour:

In Natural Lakes:

1. No motorboat shall be operated at a speed exceeding five miles per hour unless vision unobstructed 300 feet ahead.

2. No motorboat shall operate within 300 feet of shore of a lake at a speed greater than five miles per hour.

And one rule of importance to the night fisherman:

Any boat on the waters of the state under the jurisdiction of the State Conservation Commission while in use and not underway during the hours between sunset and sunrise shall exhibit a white or amber light which shows around the horizon.

And for sailboaters:

Sailboats up to 26 feet in length propelled by sail alone between sunset and sunrise shall carry, in addition to a combined lantern (red and green forward light), an unobscured white light in the after part of the boat.

And for boats numbered by the Commission:

The passenger capacity of boats are assigned by the Commission and shall be painted or attached to the starboard side (the right side when in the boat and facing the bow) of the boat within nine inches of the transom in three inch or larger block numbers, rising above the water line when the boat is fully loaded.

Safety equipment:

Life preservers, life belts, ring buoys or other devices required for all persons in all boats shall be Coast Guard approved. Fire extinguishers shall be of a Coast Guard approved type as identified in the Coast Guard publication equipment list CG-190 by manufacturers model number and size.

CORRECTION

In last month's issue a statement concerning non-residents being able to purchase combination hunting and fishing licenses was made in error. Non-residents can buy either a hunting or fishing license or both, but a non-resident combination license is not available.



Jim Sherman Photo.

Blue Lake in Lewis and Clark State Park is a top recreation spot on the Missouri River. One of the most productive lakes on Iowa's "west coast," this oxbow lake provides fishing, water skiing and supervised swimming. You can also picnic and camp here.

BLUE LAKE— ONE OF THE BEST IN THE WEST

Stan Widney

Lewis and Clark State Park (and Blue Lake) were dedicated in the twenties. A newspaper notice years later telling of good fishing was indeed fortunate for a misplaced actor.

I was in 1932 and I was night-clubbing at a small hotel for five weeks a week and cakes (board and room). The depression had been on for three years then and the CCC and WPA hadn't been in-vented so you took any job you could get and liked it. Show business and radio were my line at the time and neither had recovered from the crash. The only reason I had a job at all was that I liked to fish and so did the hotel manager that and contract bridge was just becoming popular. One Sunday night the manager and I were playing bridge with a couple of representatives of contracting firms who were going to come paving in the vicinity. The hotel would make a fine headquarters for the workmen. There were two other hotels in the city and I felt the same way. The representatives weren't doing so well at bridge and I could see that the manager was getting worried by the way he kept kicking my shins under the table. Finally he wrote me a score pad and handed it to me saying:

"Here boy, check this, you're supposed to know about these things."

I took the card and read, "Do you think. We're losing these things."

"I shrugged and said, "If you'd read your Culbertson instead of reading the outdoor magazines so you might learn to keep your eyes open."

You see, I had spotted the fly rod when I checked the men in that afternoon.

Right away one of them said, "Outdoor magazines? Are you a fisherman by any chance?"

The boss giggled modestly. "Oh, I get out once in a while. Not as much as I'd like to."

With that beginning it was just a few minutes until our bridge game, including two bucks I had won, were forgotten.

"The heck of it is," said the boss, "there's no good place to fish right around here. The boy," meaning me, "and I have tried all the water around here short of the Missouri River and it's all too low."

"Tomorrow's Labor Day," said one of the men. "We could leave now and be at the river by midnight and start fishing by sunup."

"Yeh," said the other man, "but what kind of fish can you catch in the Missouri? We're from Chicago and I've always heard the Missouri fish are hard to catch."

The boss looked sad as he turned to me. "Come on," he said, "you've told me a lot of stories about fishing the Missouri. Speak up, boy." He had a way of saying "boy" that made me mad.

But I said, "Nearest place I can think of is Onawa." I remembered reading in the morning paper about good fishing on an oxbow lake there. I went on, still mad at the boss, "You three could make it to Onawa in a couple of hours. Maybe three. Black Hawk Lake and Manawa will be too crowded or you could go there."

"Ever been to Onawa, boy?" the boss looked at me sort of suspicious like.

"Oh sure," I lied. "I played the Onawa theater for a week. Fished every day." I was scared to death he'd ask me the name of the lake before I could find that morning paper, but he didn't.

"What are we waiting for?" said one of the men.

"That's what I say," said his friend. "Can't the boy go, too?" He indicated me with his thumb.

"Sure," said the boss. "He has to show us where to fish."

So I made my first trip to Lewis and Clark State Park and Blue Lake. What's more, we all caught so many fish we were giving them away to the picnickers—crappies over a foot long, bass up to three pounds, and bluegills? Man oh man, did that fly fisherman ever have a good time. I'm a bullhead man myself and they had and have them in Blue Lake up to two pounds.

Needless to say the workmen from the construction companies stayed at our hotel most of that winter and the next spring. I left in May to join a show in Newton, but before that we went back to Blue for another crack at those crappies and bluegills. What's more, the boss never called me "boy" again.

Fishing's just as good and even better today at Blue Lake. I was up that way this spring and found out. Extra large bluegills that make your line sing in the water as they try to get away, northern pike up to eight pounds, and many of them, and black bass that bend a fly rod out of shape call in fishermen from a hundred miles away.

What's more, the camping accommodations at Lewis and Clark are tops. Clean, level campgrounds with showers and flush toilets are provided, as well as electric outlets for trailers. Lots of fireplaces and picnic tables for picnicking and camping are available, plus a lodge that is usually booked up several weeks ahead. There's a bathhouse and supervised swimming, and the park officer lives close to the campground.

The Highway Commission is paving a new road from Onawa out to the park with a new bridge over interstate 29.

In August of 1804, members of the Lewis and Clark Expedition stopped here for several days—only it was different then. The main channel of the river ran right through what is now Blue Lake. A flood in the late eighties moved the channel a mile west and left this oxbow lake for our recreation.

FISHIN' TIPS FROM THE OL' TIMER

You don't hear much about it any more, but chumming is another angle to help catch fish that used to be quite popular. The idea is to put something into the water that will attract the fish within range of your offering. Chickens or their entrails in a cheese cloth bag, or cheese similarly wrapped and hung in the water near a favorite hole has made many a catfisherman famous for his ability to put that species on a stringer.

Bluegills, crappies and perch come-a-runnin' when a can of con-

INSTINCT VS. MOTHER LOVE

Joe Linduska

Now they've done it—discredited mother love and disparaged parental good judgment. It shouldn't happen to a duck, but it is happening, and to ducks.

According to long standing sentiment, it's mama duck's job to shelter and protect her brood and to prepare them for survival in a hostile world. But dispassionate observation shows that this is *not* for the birds.

U. S. Fish and Wildlife Service biologists report that once hatching is accomplished, the mother duck is nothing but a liability to the family.

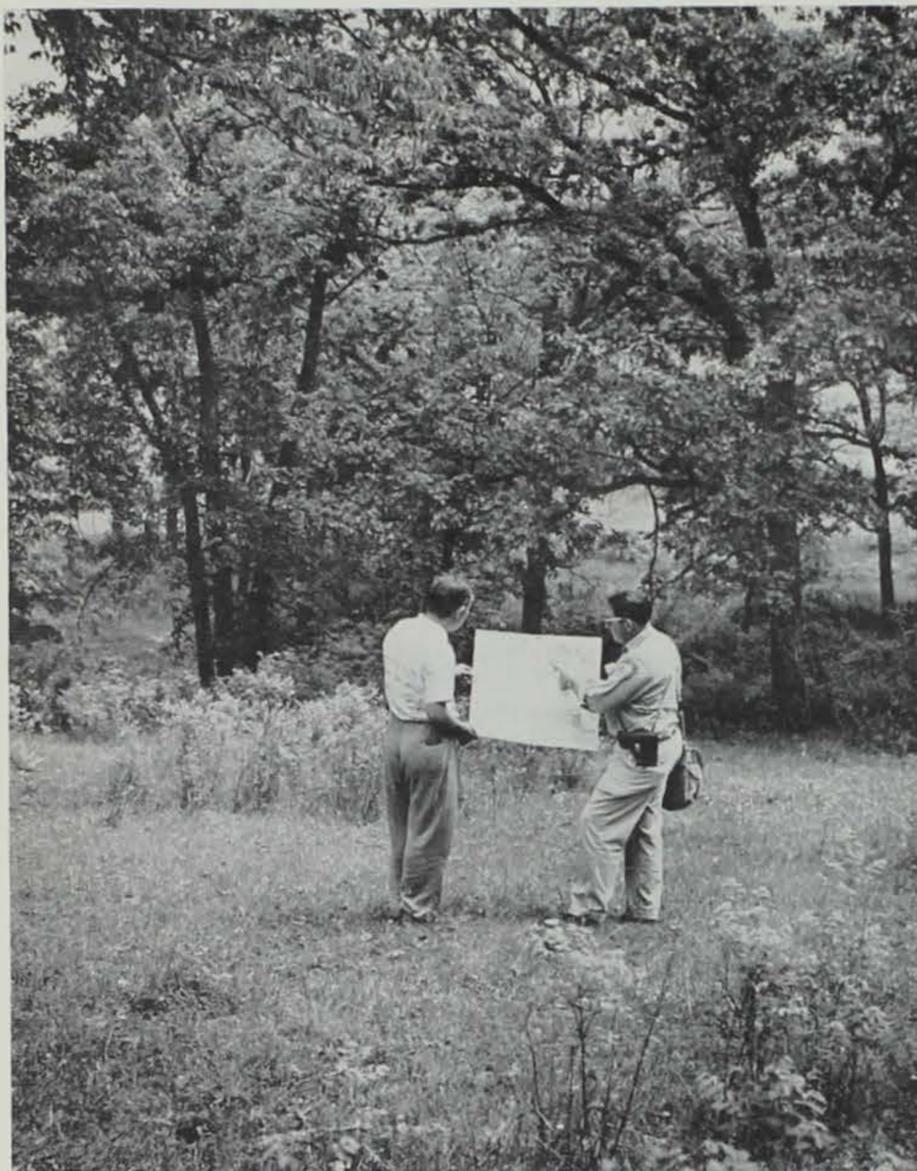
It's a low blow for motherhood, but those are the facts and here are some reasons why: Hen mallards are a foot-loose lot and do a good bit of wandering from pot-hole to pot-hole. Young birds follow the hen, of course, and these excursions over ground make them vulnerable to predators. But a brood without a mother seldom leaves the pond until grown to flight stage. They avoid pitfalls of land travel.

Also, the mother hen is a worrisome sort and, aside from normal wanderings, any disturbance at the pond and she heads for land. And again, the young get in trouble.

Young ducklings, with and without mothers, behave differently, too. Those "with" seem to develop a false sense of security. They wander widely over the pond, make sorties into tall vegetation and peep regularly to keep in touch. But the constant "yapping" puts them in touch with hungry vermin hiding in the shadows, as well as with mama and one another. And they get picked off regularly on these noisy ventures afar. But orphans hang together and keep their mouths shut. And when trouble crops up, they dive or hide in aquatic vegetation. It proves to be far safer than running to the shore with the "sagacious" old hen.

So there you are. It's hardly comforting information and it leaves one less thing that we can be *for*. But biological facts are biological facts.—*Remington News Letter*.

condensed milk is punctured at either end and lowered into the current. Carp seem partial to corn meal made gooey and dropped overboard. But whatever the method or attractor, don't expect it to take the place of real fishing knowledge and good sense. Remember that your baited hook or colored lure or fly first of all has to appeal to your prey when he is in an approachable mood. There is no legal method known that is sure fire at any time and under any condition.



George Tovey Photo.

When discussing forestry possibilities for land, the district farm foresters often make use of aerial photographs so that land owners and farmers can see just how their property may best be utilized. It pays off with much more than dollars.

WOODLAND MANAGERS—

(Continued from page 145)

persuasion the woodland can be damaged to the point that it would take at least three generations to restore the woodland to its full productivity. Or if the cleared land, which usually is submarginal for crops, is put into crop production it will erode badly and may eventually become tax delinquent.

After the owner and the forester have looked over the woods the forester can better advise him on the next step. Quite often this will be a cruise of the timber to gather information for a detailed management plan. A sketch map is necessary for the cruise. This can be made from aerial photos available to the forester at the county A.S.C. offices. A tracing made from the photo will delineate timber types and size classes, show the boundary of the woodlot, streams and roads. From this the forester can tell how many acres exist in the various timber types, and how to conduct the cruise. A cruise is made by measuring all of the trees over ten inches in diameter in random sample plots. The number of plots depends upon the size of the woodlot and tree distribution and the position of the plots are predetermined on the map before the forester goes into the woods to cruise.

The tools used while cruising timber are tally board, compass,

plot tape, diameter tape, increment borer (to measure growth) and hypsometer (to measure tree heights). Data gathered in the cruise is compiled in the office. The final figures will include the number of board feet of the various species in three condition classes, rate of growth per year, and rate the timber can be cut and still maintain maximum production from the woodlot. The management plan is drawn up around these figures. The woodland owner is given a copy of the plan on the forester's next visit. After explaining the details of the plan to the owner the next step can be planned. If the timber owner needs a few logs to make lumber for a corncrib or if he decides to conduct a timber sale the forester's next step is to mark the trees which should be removed. The owner accompanies the forester on a marking job to assist in measuring the trees and marking them. It is necessary to keep a record of the number of trees to be cut and their volume in order to keep in sight the objectives of the management plan. The trees are marked with paint from a paint gun made for tree marking.

The job of selecting trees for harvest is not as easy as it might appear. Some of the questions that go through the forester's mind before he marks a tree are these:

Has this tree any defects? Are

the defects minor enough to leave the tree for the next harvest? Should it be taken now? Are the defects so extensive it cannot be marketed? If so should it be culled or left as a den tree for wildlife? Will this tree be more valuable if left to grow another ten years? Is it necessary to take this tree to make an opening for reproduction in this spot? Is this tree interfering with the growth of a more desirable tree? It takes a lot of experience to be able to answer these questions so that the trigger of the paint gun can be pulled with confidence.

Where the owner has the time and equipment the forester explains to him that he can make more money cutting and hauling his own logs. If the owner is unwilling or unable to do the work the timber is sold on the stump. Often times the timber owner has no idea where to market standing trees. Here is where the forester can help two people at once. He not only can help an owner find a market, but at the same time help mill operators in locating available timber supplies.

At the request of the owner the forester will make out invitations to bid on the timber and give the owner a list of timber buyers to send the invitations to. Often times the forester will write up a timber sale contract for the owner and successful bidder to sign. The contract is an essential item in a timber sale in that it keeps to a minimum any misunderstandings between buyer and seller.

The farm forester's work encompasses other phases of woodland management besides utilization. One of his most important jobs is assisting land owners in reforestation projects which is becoming increasingly popular. Iowa has approximately three quarters of a million acres which have been cleared, cropped, grazed and are now eroded and practically worth-

less. Much of this land is steep and should have never been cleared in the first place. A new generation of Iowans has taken up the challenge to heal the wounds of the land left by past generations. This is a job which many agencies and other interested groups are working on cooperatively.

The farm forester works with the local Soil Districts, Extension Service, Agricultural Stabilization and Conservation Committees and County Conservation Boards in reforestation projects. These various agencies through promoting tree planting get many requests from farmers and other land owners for advice. The farm forester advises the land owner not only what species would be best suited for a particular site, but will also return at planting time and instruct him on proper planting procedures. The forester can take the land owner's order for trees if they are to be ordered through the Conservation Commission nursery. Or if the prospective planter wishes to receive government cost sharing through the A.S.C. the forester can advise him how to apply for this. He will also see that a tree planting machine is made available to those planting large numbers of trees.

The Busy Time

Spring is the farm forester's most busy season. He works long hours scheduling, and delivering tree planting machines, demonstrating how they are used, arranging for tree orders to be delivered with the planters and making sure A.S.C. performance regulations are complied with when planting is done under government cost sharing.

The farm forestry program is geared to benefit Iowa in several ways. With proper management our woodlands can increase the income of the owner and the timber operator, be a great asset in state

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George Tovey Photo.

These Iowa logs are ready for market. With the demand for wood steadily increasing tree farms are a sound investment for the person who wants a secure income.

WOODLAND MANAGERS—

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...our soil, create homes for wildlife and provide places for recreation. Good forestry practice protect watersheds. Well managed woods have high aesthetic and recreational values. Gullies from forestry services are available to every timberland owner in Iowa and there is no charge for this service. All timberland, good roads, needs management. The forester can assist owners in getting all values of their woodlots.



George Tovey Photo.

...a tree's growth through the years, this instrument gives a forester an idea of growing conditions during past seasons. The rings appear on the wooden core protruding from the handle.

IRREPLACEABLE WATER

Water is recognized as our most valuable resource and is the one that has been wasted the most. More water is wasted than consumed by industry. Soil erosion, once our main problem and still ranking high as a resource waste, has in a large measure been stopped with sound conservation practices. Water conservation is now beginning to make itself heard.

In the scheme of things water is valuable for what some of the Madison Avenue "biggies" and Washington "eggheads" call the "better life." In short, to them, that better life is made up of things like fishing, swimming, hunting or zipping along in a boat. Too bad that a long time ago they did not first take up the cudgel in promoting better conservation practices and conservation in the future all that so-called "better living" could be had. It hasn't fallen too short but each year sees areas that feature all the above more crowded and less appealing. Water makes everything.—Sports by Ort, Kansas City Press.

When full grown the raccoon weighs 30 to 36 inches in length, weighs from 15 to 25 pounds and is about 12 inches high at the shoulder.

The litter of the raccoon usually consists of four to five young.

FOREST PRODUCTS AND IOWA'S ECONOMY

Professor George B. Hartman

It has been many years since Iowa was a great lumber-producing state with busy mills in the river towns, sawing white pine lumber from logs rafted down the Mississippi.

But Iowa is still a large producer of lumber. Her nearly 1,100 small mills cut about 70 million board feet of native Iowa lumber. This is enough lumber to fill about 3,400 railroad box cars.

Iowa's forests also provide many other useful and interesting wood products. The list is very impressive. In Iowa there are two paper mills using native woods for pulping, a veneer plant, a plywood plant and operations making lump charcoal, maple sugar and syrup, bowling pins, blanks from which ladies shoe heels are shaped, framing items for furniture and built-in cabinets, finely finished walnut and cherry furniture, boxes and crates, blocking and bracing for holding machinery when in shipment, and numerous other articles.

The state also boasts of a great group of wood-working plants which use shipped-in softwood lumber, chiefly pine, to remanufacture into window sash and frames, doors and millwork of all kinds.

So, Iowa's wood-using industries are an important part of Iowa's family of manufacturers. They are extremely important to the state's economy.

To bear out this statement, how many people know that the total number of workers in Iowa's wood-using industries ranks fourth among industry groups or that these workers are paid \$34 million a year for their services? The number of workers in the wood industries are out-ranked only by those in (1) food and food-processing, by those in the manufacture of (2) non-electrical machinery, and by those in (3) printing and publishing.

If predictions are correct that we shall need more of almost all classes of wood products including lumber by 1975, and if Iowa's wood-using industries are to have the raw material to work with, it seems logical that the first step is to get every acre of forest land or potential forest land into the production of the greatest amount of wood it is capable of providing. Those forest areas which are presently in hardwood forest need to be managed for continued crops of hardwood trees. Those areas which are presently bare probably should be planted to coniferous (evergreen) tree species. It will take all our forest land producing at capacity to supply the raw material for the state's industries.

The U. S. Forest Service con-

MOLTING IN REPTILES

Mann and Thompson

A snake or a frog sheds its whole skin in one piece in just one day. On the contrary we lose a little of ours every day. Some is worn away and some is soaked loose every time we bathe. We do not realize how fast our skin grows until we have a broken arm or leg and see the crust of dead skin that forms under the cast where it cannot be washed or scratched.

Hair and feathers are really parts of the skin of mammals and birds. Dogs—at least house dogs—shed hair the year 'round. In contrast, a fur-bearing animal, such as a mink, loses its thick underfur in spring and grows a new coat before the next winter. Wild birds, as a rule, molt their feathers and replace them a few at a time so that they are always able to fly. Wild ducks and geese, on the other hand, lose all of their flight feathers soon after nesting. Then, for a few weeks, while a new set of feathers is growing, they cannot fly. In order to grow, young insects, spiders and crayfish must exchange their tough outer coverings for new and larger ones.

For several days before a snake

molts the eyes appear bluish or cloudy, the pupil cannot be seen, and they are said to be blind. This is because of air under the outer coverings of the eyes which are shed as part of the skin. During this period snakes do not eat but hide away as if they felt insecure. Molting is hastened by wetting. The skin around the lips loosens first and is slowly forced back over the head, neck and body, inside out, as the snake crawls over rough surfaces and through narrow crevices. The snake now is shiny, the colors bright, and the eyes clear. The adults of our common kinds molt two to five times a year—the young ones oftener because they are growing faster.

The cast skin is a horny substance much like our fingernails and almost transparent. Because of the folds or "tucks" under the edges of the overlapping scales, the straightened skin is about a third longer than the snake it came from.

Rattlesnakes shed like other snakes except that a part of the skin on the tail is not cast off but is elaborately modified.

The molting snake got too big for his britches.—Cook County Forest Preserve.

siders that 60 per cent of all commercial forest land lies east of the Great Plains. This includes the farm and other forest areas of Iowa, Illinois and other central,

southern and eastern states. Need more be said regarding the need for more and better forestry practices in Iowa and other sister states?



George Tovey Photo.

The wood from Iowa forests is used in everything from bowling pins to push brooms. The \$25 million netted annually from wood and its manufacture is big business.

TROUT—

(Continued from page 145)

or heavily forested streams that are almost impossible to fly fish can be fished beautifully with a spinning or slip casting outfit. A flip of the wrist sends the Colorado spinner to the head of a riffle with only a foot or two clearance to make a back cast.

Bait Best At Times

Bait fishing is an art that is fundamental to becoming an excellent all-around trout fisherman. The greatest contribution that bait fishing gives you is plenty of time to just observe what is going on along and in a trout stream. Often fly fishermen and spinners spend too much time perfecting casting techniques and changing lures to learn the habits of trout.

Here is an example of observation paying off. French Creek in Allamakee County has many large pools which often have as many as 20 or 30 trout per pool. I had approached such a pool cautiously and cast a night crawler into the middle of the pool and sat down to wait. The light was excellent and I had a good view of the entire pool without exposing myself. In a half hour a trout swam over, picked up my night crawler, then dropped it. Then I noticed several trout move to the tail of the pool and begin nosing around the rocks—feeding on nymphs. I very carefully retrieved my night crawler and replaced the large hook with a smaller hook and pinched off all but a half inch of the crawler.

Casting above the trout feeding at the end of the pool, the current carried the piece of crawler into the immediate feeding area. A nice rainbow came up, took the bait and was soon in my creel. Each pool produced its trout and a limit was soon filled.

While this method may not be the best, it was for that particular day on that stream. Observation paid off.

At times trout become very selective in their feeding habits. I opened a trout during a June bug's hatch. The 16 inch rainbow contained 20 of these insects. Midges (small flies) often occupy the feeding activities of trout at the expense of other forms of fishing. Minnows are another staple of the larger trout's diet. Crayfish, small and soft or semi-soft, are also preferred. Grasshoppers and crickets are the classic trout bait in autumn. Other times trout may be found with nymphs, larvae cases and snails.

There are thousands of natural baits—an examination of a trout's stomach makes you stop and wonder why they are so difficult to catch at times. The list would go from bugs to birds, but perhaps the most important to an angler are garden worms, minnows, night crawlers, salmon eggs, cray fish, crickets, grasshoppers, hellgrammites and cut baits. Some of the more unusual baits are cheese,

marshmallows, hamburger and liver, which appeal to freshly stocked fish.

Spinning rods or fly rods too, can be used to fish with natural bait. Much depends on the fisherman's preference—type of water, as mentioned previously, and whether he prefers bait early in the season and then corresponding with trout feeding habits, swings over to fly fishing as insect life becomes more abundant.

Purist's Method

Many books have written on fly fishing and it is as popular today as ever. While often considered to be the most difficult to master, it is one of the simplest and most rewarding trout fishing techniques. It is relatively easy for a good bait or spin fisherman to become a fly fisherman. Besides learning the "feel" of a fly rod, tapered lines and leader, the most interesting part is the business end—the lures.

Generally speaking, Iowa trout flies fall into these groups—dry flies that float on the surface, and wet flies that sink beneath the surface. Streamer flies and buck tails resemble minnows or cray fish. Nymphs are replicas of bottom dwelling insects. There are also spinner-fly combinations and Colorado spinners that can be used with the fly rod.

The serious student of trout fishing has a small pocket sized box of wet flies, another of dry flies, and perhaps a book of streamers, buck tails and nymphs (these may double for bass, crappie and bluegill fishing). The plastic compartment box for dry flies is essential so the tackles and tails are not crushed, important to keep the fly afloat.

Wet and dry fly patterns should be in four basic colors—black, brown, gray and tan. Almost all the basic patterns are variations of these colors for good reason—they look like insects. There has been much scientific research and study on what a trout sees, but the natural colored flies produce and that is what makes for the best fishing.

The fly should be tied on hooks sized from 8 - 10 - 12 - 14 - 16 - 18, the 12 - 14 - 16 being the most popular. On rare occasions, such as during the midge hatches, size 18 and even 20 are needed.

When a particularly large trout has been spotted, a campaign of offering him bass sized flies and floaters may turn the trick. The fly fisherman should be prepared for those occasions.

A list of favorite patterns may read as follows:

Both Dry and Wet Flies

Light Cahill 8 - 10 - 12 - 16 - 18
Royal Coachman 8 through 18
Grasshopper 6 - 8 - 10
Brown Bivisible 14 - 16
Gray Bivisible 14 - 16
Light Hendrickson 8 - 10 - 14 - 16



Jim Sherman, in charge of the lake patrol in Okoboji area tapes a stencil to the hull of one of the five new patrol boats for use this summer.

WHY A LAKE PATROL?

It is recognized by authorities in the matter of water safety that a good water safety and lake patrol program definitely decreases drownings from all causes.

Previously (before the Iowa navigation laws were recodified by the 59th General Assembly) the Conservation Commission lacked authority to prevent overloading of boats and enforce the wearing of life preservers or having them close at hand. This allowed many people to ignore warnings by patrol personnel and several drownings resulted.

The Commission has purchased five new boats for lake patrol work. Two of them are inboards

and will replace the two sold to the Commission last spring. Patrol boats are stationed at the following areas: Clear Lake, Spirit Lake, East and West Okoboji, North Twin, Black Hawk and Manawa. Those at Clear Lake, Spirit Lake and the Okobojis are equipped with two-way radios.

While most of the patrol boats are plainly marked, several auxiliary units don't carry the identifying name, IOWA CONSERVATION COMMISSION LAKE PATROL, and will be used when and where the boating pressure demands.

Respect water and be courteous to others. This is water safety.

OUTDOOR TIPS

Sharp hooks mean fewer lost fish. A good way to insure yourself of always having a hook sharpener on hand is to cement a disk of emery cloth to the butt of your rod. Rub your hooks on the cloth occasionally to keep the point keen.

There are almost as many different kinds of fish scalers as there are scales on a lunker largemouth. But, perhaps you haven't heard of this one before. A little brass scouring pad—the kind your wife uses in the kitchen—will quickly and efficiently remove the slime and scales from your catch.

Grey Hackle (peacock) 14 - 16 - 18

Black Gnat 8 - 14 - 16 - 18

Black Nymph 8 - 10 - 12

Out of hundreds or thousands of recorded fly patterns, ten patterns are as few as you should use. As the beginner tries each one, he will evaluate it and either discard or keep it on his permanent list.

No matter which field of trout fishing you choose or fall into, bait—fly—or spinner, you'll find specialization within each. There is no end to the interesting variety of baits and lures that appeal to trout at one time or another.

Fishing is a sport which involves traveling—with equipment. Little tricks of experienced sportsmen can take a lot of the headaches out of packing gear back where the big ones are. Here's one such tip: To keep line from unraveling from your reel when you are under way (or even when your gear is stored) loop a rubber band over the spool. This simple precaution can save you an awful mess later on.

Maps and charts are important to a sportsman. Sometimes he needs them to tell him where the fish are, other times he needs to tell him where he is. Whatever the occasion when maps are needed they must be in a readable condition—which brings us to the tip. A good way to protect maps and charts is to keep them rolled and inside a fishing rod tube. They'll be dry and unwrinkled when you need them.

There is nothing more important to a sportsman than his campfire. Sometimes it's a matter of life and death. Here's a good fire starter. Add one-half cup melted paraffin (old candle stub will work) to two cups of sawdust. Mix it up and form it into cakes. A small chunk placed under damp twigs will warm things in a hurry.

HISTORICALLY SPEAKING



By Stan Widney

Last September I attended a meeting in Ames of the Advisory Committee for the Conference on Historic Preservation. Men and women from all over the country spoke with much enthusiasm about what they were preserving their historical places and things and what could be done. Iowans spoke of the buildings and landmarks of our state that were in danger of destruction in the name of progress.

Only mildly interested at first I came away from that meeting determined to do all I could to make this very worthy enterprise succeed. I have visited many of the places mentioned and had no idea that they were not already preserved. The following paper, prepared by the Society, may help others to realize, as I did, the necessity of doing something about our glorious past instead of letting it fade away to an unremembered paragraph in the history books.

Preserving the Past

Someone has said that "History is the news worth remembering." At many points in Iowa, the State Conservation Commission has taken steps to preserve important landmarks which will help us to remember the news of the past. Visitors at Pikes Peak State Park, Fort Atkinson, Plum Grove, Creek Mill, and other state-aided preservations feel closely identified with our early history. The main, however, citizens of Iowa are indifferent to the preservation of historic buildings. The house in which Mark Twain lived in Keokuk was dismantled and moved to New York, where it is assembled for the enlightenment of tourists. The boyhood home of William F. "Buffalo Bill" was lifted from its foundation in LeClaire, loaded on a flat and hauled to Cody, Wyoming, where it is now a popular attraction. These are only a few examples of the loss of historic buildings which the people of Iowa have preserved for themselves and their children.

In the past, Iowa citizens have received little guidance or encouragement in the preservation of landmarks. The assessment of the cost of restoration, the determination of historic authenticity, and the evaluation of inter-

NO EXCUSE FOR NOT USING FLIES

Of all the many ways known to man to induce a fish to end his days in a fish stringer, none is considered more difficult than fishing with artificial flies. Primarily because people don't understand it.

Today, there is no longer any excuse for these skeptics not to try the deadly fly. With a two to four-pound test monofilament line and a modern day spinning reel, a fly can be fished with deadly effect. All that is needed to make the outfit complete is one of the little plastic bubbles now on the market.

They add enough weight to make casting possible, yet light enough not to disturb fish when they hit the water. Most of them are made of clear plastic. They give a bonus benefit in that they act as a bobber.

When a fish hits the fly trailing in the water, the bubble goes under and a sharp eye will note this immediately, usually quicker than when a fly is fished without a bubble.

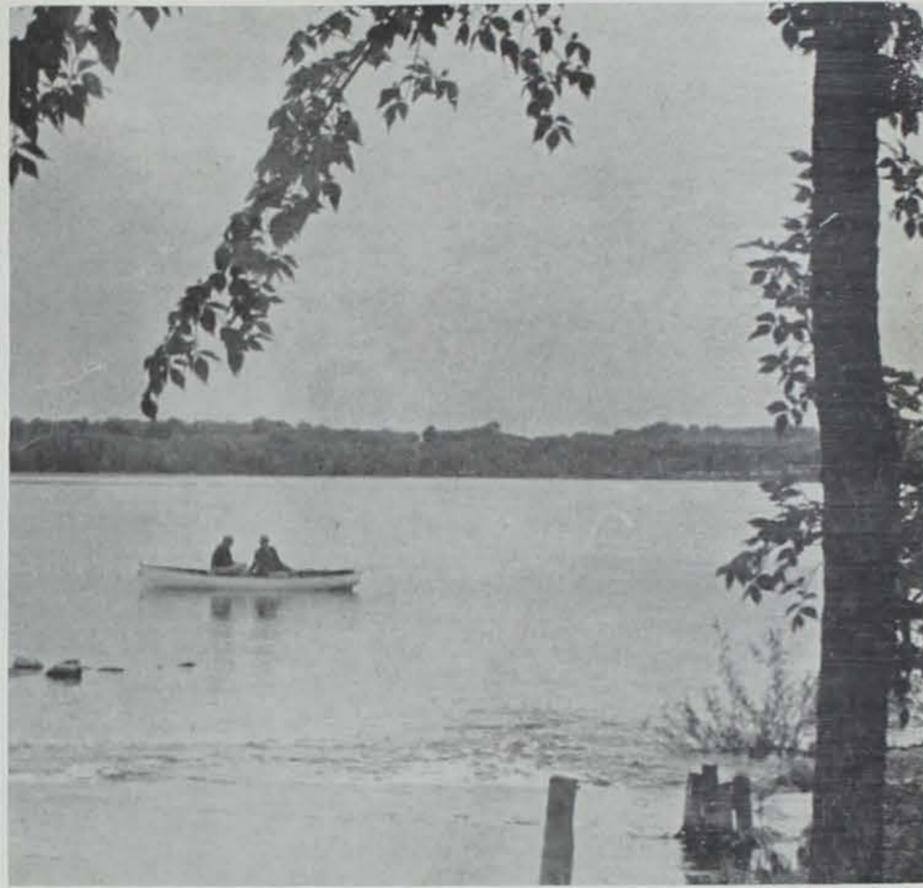
Of course a conventional flyrod and reel is the ideal tool to use when fly fishing, but it takes time to learn, and could discourage a beginning fisherman. This is not true with a spinning outfit, which can be cast by practically anyone.

Fly fishing is usually associated with trout fishing in the minds of most people. This is true only to a very small degree. It is true that a great many trout are taken on flies, but other fish will take a fly just as quickly, and many times more often than the trout. Bass, walleye and northern are among the game fish that love to hit a streamer fly. Crappies and bluegills are especially eager to take a properly presented fly.—*Marvin Lyon, Jefferson Bee.*

est beyond the limits of local pride are problems for specialists to solve.

In an effort to meet such local needs, the Iowa Society for the Preservation of Historic Landmarks was organized. It is the purpose of the Society to provide guidance to civic groups, County Conservation Boards and local organizations which are interested in preserving historic buildings. It is not a "Foundation" which provides money for preservation projects. The membership of the Society includes architects, experts on historic restoration and specialists in research. The unique talents combined in the Society thus afford resources which are not available in any other Iowa organization. However, its policy of service is limited strictly to counsel. It is not a source of cash.

For further information contact William J. Wagner, Secretary, Iowa Society for the Preservation of Historic Landmarks, 506 Shops Building, Des Moines.



Jim Sherman Photo.

At the end of the working day there is nothing like a boat ride to erase your troubles. You don't have to fish, picnic or anything for that matter. Just have fun.

DON'T WAIT FOR THE WEEK END

Malcolm K. Johnson

Long evening shadows on the water bespeak the day's most tranquil period. Fishermen know and revere this time. Many boaters fail to realize the opportunity.

In summer, every evening is a short vacation, or can be, if you will but take advantage of it. Out on the water, whether aboard sailboat, canoe or motorboat, the last hours of the day take on special significance. The gusty winds of sunlit skies calm, or at least reduce their force to gentle cooling breezes. The water of lake and pond becomes glassy smooth, unbroken except for fish rising to snap at low-flying insects, or swirls on the surface as big fish rush through schools of minnows.

Along the river, unheard daytime sounds force their way into your mind. The steady movement of water assumes its role of power. You sense its strength after dark. The principal physical sculptor of the earth, at peace, unhurried by flooded watersheds seeking relief, is the friend of every man. It can sweep your troubles downstream to be dispersed in the eddies and backwaters just as it does occasional loads of silt thrust upon it by drain tiles and tributaries.

The evening boater learns the river as no other can. His rate of travel is of necessity slow. In this way he learns the currents and varying channel. But even so, floating logs and debris and stumps or rocks only partially exposed are very difficult to see and avoid, so high speed on the water has no place when light is low. Lighting equipment available to small boats is poor at best for

seeing what's ahead. Boaters should by all means have a portable battery light and not rely on lights affixed to the boat. Very often what you want to see is alongside—out of reach of forward lights.

What to do in the evening? Opportunity unlimited! A simple picnic on the bank with friends or family will not soon be forgotten. Even more memorable is sandbar campsite (when the first rush of mosquitoes has passed). It is then that the mechanical sounds of civilization are out of place; when radio and humming engines disrupt the night sounds of nature.

It is after darkness envelops the lake or river when big fish are taken. The giant catfish, big bass and walleyes choose this time to do most of their feeding and are therefore more susceptible to baited hooks.

Why wait for the weekend to enjoy your boat? Why not make full use of the time you have? Get out on the water after work, take some food, and don't forget jackets—it gets cool. Know the regulations for operating your boat, tell someone where you're going and when you'll be back and, with life jackets on, cast off.

SMART WARBLERS

Though most birds seemingly pay no mind to the invasive tactics of egg laying cowbirds, the yellow warbler minds and does something about it. When an intruder's egg is found in the nest a new floor is constructed above, sealing off the unwanted egg along with their own. A new clutch of warbler eggs are then laid and hatched unless the cowbird pays a repeat visit. If this happens the whole procedure is done again.



George Tovey Photo.

A small quick fire is the simplest and quickest way to cook morning and noon meals. Leave the "hot coals" method for evening when lingering campfires are desired.

THE ESSENCE OF CAMP COOKERY

George Tovey

"Indian build little fire and stand close—white man build big fire and stand back." So goes the old saying—not strictly true, as is the case with many old saws. The Indians probably built big and little fires according to their needs.

Anyone trying out something with which he is not entirely familiar often depends on things he has heard and read, and the phrase "cooking over the glowing embers," often appears in romantic fiction of tales of the old west. It's a fine old phrase and a nice fire to cook over, and could be true at a campsite in use for some time. But if you are hungry and starting from scratch it would be a long time before you got your breakfast.

When your stomach says "hurry," it's time to build a fire which fits your needs. A small hot fire will cook your breakfast pronto. Start with a handful of crumpled paper or dry leaves. Lean about it loose twigs of matchstick size or slightly larger. Now apply the match and when it is going nicely add more twigs. When the fire has a healthy look add more twigs the size of the little finger and a little later, branches as big as your thumb. If the fuel is dry it will burn with a bright hot flame with little smoke. The fuel will burn rapidly and be in need of re-

placement every few minutes, but stay with the thumb sized banches.

In fifteen or twenty minutes the bacon and eggs will be ready for the table and a finer way to start the day in a state park hasn't been invented.

If you still want to cook "over the glowing embers," use your charcoal grill.



NEW DUCK BOOK

The fourth edition of the Commission's famous book, "Waterfowl in Iowa". Sporting a new green cover, this book has been revised but little—maps of the goose feeding areas, along the Mississippi bottoms, flyways and other pertinent information to aid hunters and watchers were added by Jack Musgrove to bring it fully up to date. The price of the volume is \$2, check or money order. Send to "Duck Book", State Conservation Commission, East 7th and Court, Des Moines 8, Iowa.

WHAT THEY FISH FOR

As the days grow warmer, the thoughts of many men, and women, too, turn to fishing. One of the curious ideas that dies hard is the notion that fishermen go fishing to obtain fish. It is hard to understand, in the face of all the evidence to the contrary, why this belief persists.

Commercial fishermen, true, are out after the finny tonnage and never mind the sport of it. Even among the non-commercial rod and reel gentry, there are some matter-of-fact devotees who can only be described as meat fishermen.

But we're not talking about them. We're talking about the great majority of those millions who buy fishing licenses and sally forth whenever they can. It is the sallying forth that matters to these folk—the business of going, of being outdoors alone, or with good companions, of testing skill against the fish. If the effort pays off and there is a good catch, so much the better. But anyone who supposes that the catch is the main objective should suppose again.—Boone News Republican.

The pocket gopher is one of the few animals that can run backward as fast and as easily as it can move forward.

WILDFLOWER OF THE MONTH



Culver's root
Veronicastrum virginicum

Appearing in early summer, Culver's-root may be seen in moist woods and meadows, on prairie land, and along railroad right-of-ways. A tallish plant, it rises to three or four feet and is crowned by slim, tapering flower spikes four to six inches long. The white flowers are small and number over a hundred on each spike.

Along the stem, leaves appear in whorls. Usually paired, the narrow leaves have sharp points along the edge, a sharp tip, and number from four to seven on each stem.

Culver's-root is also known as Culver's Physic as well as by other lesser known names.



Jim Sherman Photo.

Cleaning trout at poolside assures the licious flavor one expects from this favor of epicures. Damp grass in the creel help take the place of refrigeration if ice is available for the trip home.

INSIDES OUT AND OUTSIDES OFF!

Stan Widney

There are as many ways of preparing fish for the skillet as there are lures and baits for catching them. But I still say, no matter how you cook the critter, the quicker you get his insides out and his outsides off, the better he'll taste.

I used to string my catch through the gills and out their mouths and then carry the stringer home before I cleaned them. By the time I got there, two-thirds of the string would be stone dead and curled up and the rest would be their last flop. It takes a good cook to fry fish like that so that it taste like anything.

Then one day my cousin, Newt, who had been over east, told me that he had found a creel on the bank of a stream along with a broken fly rod and hat with a lot of flies stuck in it that looked like it had been tropped on. There was some grass and a couple of six-inch shrivelled up brookies in the creel.

"How come the grass?" I asked. "Guy up there told me that you keep the grass wet and put your fish in it and they stay fresher longer than on a stringer," Newt said.

Another thing Newt learned was that one of his frequent trips over east on the Mississippi was the right way to use the stringer. Run your stringer in through the lower jaw and out through the upper, instead of coming through the gills. That way the fish can breathe better than with just one gill. Then for the trip home, put them in a sack full of wet grass.

The best way of course, when you have time, is to operate as soon as you catch them and put the carcass on ice, or at least an insulated creel with wet grass. That way, when cooked, fish don't have the strong flavor that comes from leaving them in a creel or a stringer for hours.