

IOWA CONSERVATIONIST

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Wild Flower Gardening An Interesting Project

By ARTHUR E. RAPP

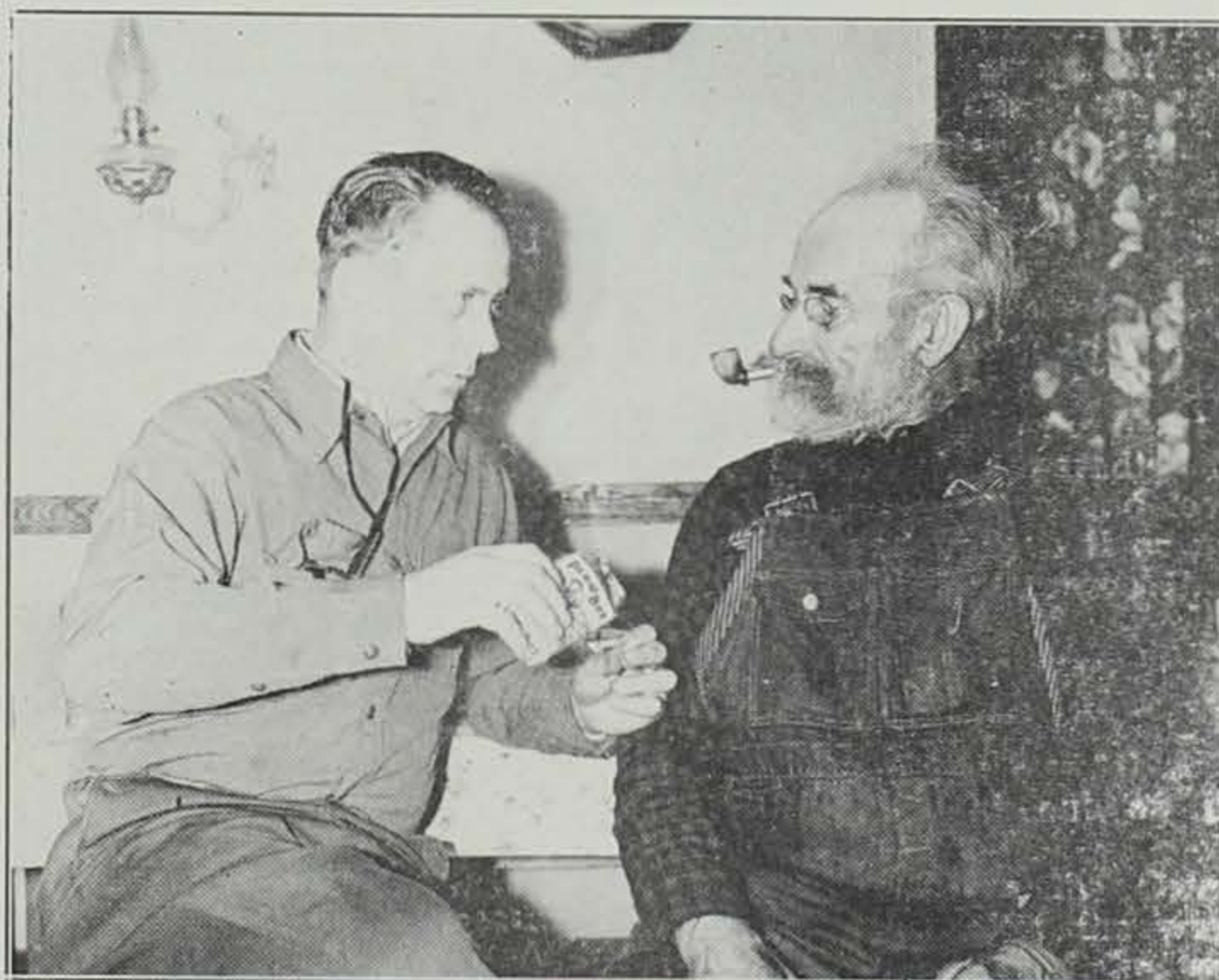
In carrying on these wild flower projects, it was necessary to visit a great many areas where wild flowers grew either naturally or under culture. As a result, gardens both public and private were visited, as were the grounds of nursery men and collectors, and the preserves of wild flower enthusiasts or their organizations. It was interesting to note that the impression given by seeing flowers growing under a wide range of conditions did not always depend upon their color or form, their quantity or rarity, or upon the success of the grower in establishing them.

Many of the gardens were interesting, but not all of them were attractive. Vast areas of wild flowers, such as can still be seen in the west, often owe their beauty to their color, while the charm of woodland flowers is in their grace and delicacy. Collections of wild flowers where no thought is given to their surroundings or to each other are almost always disappointing. Wild flowers growing in borders along with stronger growing and larger cultivated varieties are at a disadvantage, as are wild flowers placed in positions where they are too conspicuous.

As a rule, wild flowers in gardens are best displayed when they are used in adornment of particular areas suited to their needs, just as a button, a pin or buckle, or a bow knot is used in the adornment of a garment. Early spring flowers, such as Mertensia, Claytonias, dutchman's breeches, and wild phlox, can be used to brighten up areas too shaded for plants after trees and shrubbery attain their full leaf-

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Flathead Fishermen, a Race Apart, In a Class By Themselves



Expert flathead fishermen are generally secretive about their methods although, like other artists, they will open up when approached in the humble "seeker after truth" manner.

Farm Ponds Source of Food As Well As Water for Livestock

Lucas County Soil Conservation District,
Chariton, Iowa

By HAROLD J. SHOLD
Assistant Soil Conservationist

Iowa farmers having ponds of the right kind can help increase the nation's wartime output of fish as well as meat and fowl.

In addition to furnishing water for livestock and providing recreation, properly managed ponds will produce from 150 to 300

pounds of fish per acre of water a year.

Under Iowa conditions stocking with largemouth bass and bluegills gives best results. Bullheads and crappies also may be stocked, but their use cuts down on the total number of bass and bluegills that can be used.

For the production of fish as well as fresh water for livestock,

(Continued to Page 51, Column 1)

Devotees Disdain Angling for Lowly Bass, Pike or Trout

Tom Johnston's story of flathead fishing in the Skunk River in the May issue of the "Iowa Conservationist" brought requests for more dope on fishing for the big cats. Although it is improbable that anyone can catch any of Tom's "stump-puller" cats these days, flatheads up to a hundred pounds can be caught on pole and line if they are fished for in our larger streams.

Like fly fishing for trout or plug casting for walleyes, flathead fishing is a specialized sport, and flathead fishermen consider themselves a race apart. They do not associate with the common herd and would not stoop to the juvenile sport of bass, pike, or trout fishing. Generally these fishermen are secretive about their methods, although like other artists they will open up when they are approached in the proper manner. Proper approach, incidentally, is the humble "seeker after truth" manner.

Trot lines are used quite extensively to take the big flatheads in the larger streams south of Highway 30, where the use of this type of tackle is lawful. Although trot lining is effective, much of the thrill is lost because in the four or five hours between the time the line is "set" and it is "run" the flatheads have lost much of the fight displayed by a

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Flatheads

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freshly hooked fish. Trot-lined flatheads hooked in the forepart of the mouth have been known to kick up considerable rumpus before being landed, however, and in one case known to the author a sudden powerful lunge on the part of the fish caught the fisherman off balance and tipped him out of the boat into the deep water.

On trot lines the bait most generally used for the big flatheads is live fish. The bait used is from six to 12 inches long and is hooked through the fleshy part of the back in the dorsal fin region in such a manner that it has plenty of freedom of movement. Flathead catfish are attracted to live bait, and their normal food to a great extent is other fish.

Quite often trot liners when fishing for channel cat are surprised when lifting their line to see the awe-inspiring snout of Grandpa Whiskers part the wa-

The Old Stump-puller In Person



"Stump - puller" catfish are impossible to catch in Iowa streams in modern times, but flatheads up to 100 pounds can be caught on pole and line if they are fished for. Grandpa Whiskers in this picture weighed 79 pounds and was caught in Van Buren County near Lacey Keosauqua Park.

ter. The first impulse of the uninitiated is to immediately hoist the old boy into the boat. This is the wrong impulse. Invariably the flathead will give a leisurely tail flip, squirt a mouthful of water through his gills, and depart, looking for a safer cafeteria. The fisherman will have for his efforts an incredible facial expression and a trot line holding only a securely hooked channel catfish neatly skinned by the departed flathead.

When a flathead is accidentally caught on a trot line while fishing for other fish, if the line is lifted slowly and easily, even if the big fish is not hooked but only holding the bait in its mouth as is generally the case, the line may be dropped without scaring the prize away and the big fish will remain quietly and contentedly and wait for the second act. In such cases the fisherman, as soon as he is over his paralysis, should make post-haste for a dip-net, return, relift the line, and carefully use the net. If a dip-net is out of the question, a gaff may be used. It is a toss-up whether the use of the gaff will be successful, however, especially if an amateur is on one end of the gaff and a big flathead on the other.

It is not the purpose of this article to teach anyone to use a trot line nor to teach flathead fishermen how to catch flatheads, but rather to explain to Mr. Average Fisherman how he may hope to experience the supreme thrill of inland fishing, catching a big catfish on a pole and line.

Tackle for the big fish is important. It would be as logical to try to tow an automobile with a silk thread as to try to land one of these 50-pounders with a half-rotted cotton line.

The line generally used for

flathead fishing is cuttyhunk, 30-pound test or more. Also there should be, if using live fish for bait, a heavy gut leader at least 24 inches in length. Most flathead fishermen prefer a No. 6/0 or larger hook.

Although casting rods may be used for flatheading, the specialists invariably use a long cane pole, on which they have fastened a tip, guides, and reel seat. Generally a large size, inexpensive reel is used. The longer the reel handle when a big one is hooked, the better.

Probably the best flathead bait when water is clear is a bigmouth creek chub any length from six inches up. When streams are high (flatheads will take bait even in extremely muddy water), nightcrawlers make especially good bait.

Assuming that our fisherman friend is now equipped with proper tackle and with the two favorite baits mentioned, where and how will he fish? Successful flathead fishing must be done for the most part in the large inland streams tributary to the Mississippi and Missouri or the parent waters proper. In clear water deep holes must be fished. Probably more flatheads are taken legally on pole and line in the deep water immediately below power dams than in all other sections combined. However, flatheads are distributed generally up and down the major water courses, and any hole is apt to be productive.

Assume that we have decided to fish the deep water below a dam in July, August, or September, the best flathead months, and have reached the stream. The water in which we are fishing is 12 feet deep. We can use two poles. The first bait with night-

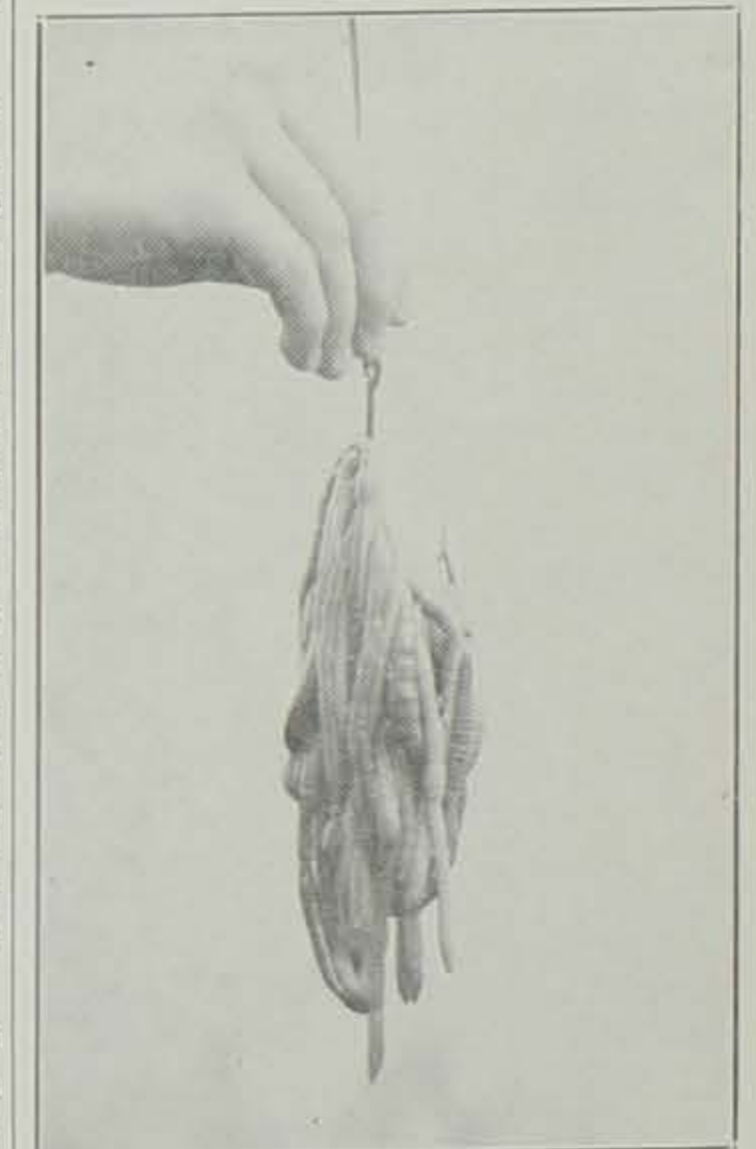
crawlers. Attach a bobber large enough to keep the bait off the bottom on the line about nine feet from the hook. Six feet below the bobber we will attach a weight sufficiently heavy to make the line between the weight and the bobber hang in the water perpendicular. The bait will then be about three feet from the bottom of the stream. Next bait with nightcrawlers, from 10 to 25 in number by hooking lightly through the skin at the center of each worm. The bait is cast and you are ready for action.

In fishing with a large chub on the other pole the bobber and sinker are both used, but the bait is fished nearer the bottom. The chub is hooked by most fishermen through the fleshy part of the back immediately behind the dorsal fin. Care must be taken that the backbone of the bait is not injured so that the chub will remain active and attract attention.

And now the long wait for Old Whiskers to take hold. Flathead fishing at its best is generally slow, but it makes up in action what it lacks in speed. Patience, Mr. Fisherman. The dancing cork on the nightcrawler line is only a fiddler stealing your bait. Your first introduction to a flathead will come with the crisp disappearance of your big float with a suddenness and a certainty that is almost shocking.

With nightcrawlers as bait a short wait after the strike is all that is necessary before setting the hook. When chubs are used most experienced fishermen give plenty of time, often a minute or more, before hook-setting. One ancient Des Moines River fisherman says, "I let them waller it a bit. They act like a poodle dog with a teddy bear. They'll pick

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Try a No. 6/0 hook baited with 10 to 25 nightcrawlers in a deep hole. Fish from two to three feet off the bottom, and don't say we didn't warn you.

Wild Flowers

(Continued from Page 49)

age. Mass plantings of columbine can be used to follow up the low flowers of spring, so as to give them the protection they need to mature their foliage, but it soon becomes evident that strong, individual clumps or small colonies of woodland flowers well placed are more attractive than scattered plantings.

There is no necessity in wild flower plantings for the disorder that generally prevails in the deep tangled wildwood, as such disorder is incidental, not essential to natural areas; and wild flowers are definitely not material for formal plantings, being too irregular in their growth habits. But wild flowers can be used to bring out to advantage the reverse side of shrubby groups and to fill in openings in such plantings that are only apparent in the early spring. They can even be used as accents so that attention drawn is to them and away from some spot that is temporarily unattractive.

Wild flowers require greater skill on the part of the gardener not only in their care, but in their use; and no gardening is quite so interesting as the acquisition of and the success with some of our rarer wild flowers. There is however, nothing more ruthless than the destructive use of wild flowers by a person having neither the skill, the patience, nor the conditions which are essential to good wild flower culture

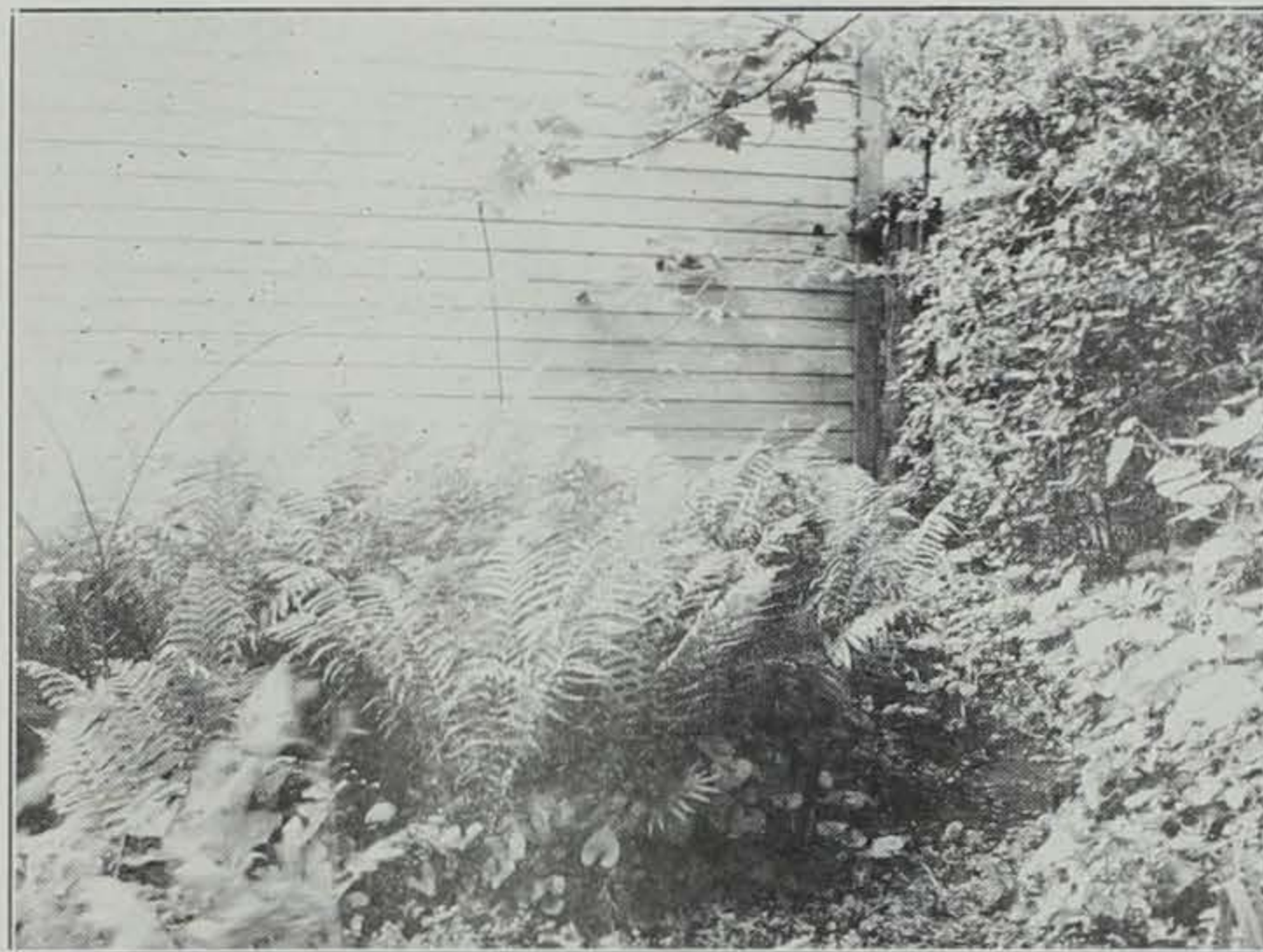
Farm Ponds

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farm ponds should be at least eight feet deep in about one-fourth of the surface area. This prevents fish from being smothered during the winter months, and assures livestock cool, fresh water during the hot summer months.

When used as a water supply for livestock, the water should be piped from the pond to a tank somewhat removed from the pond. Livestock should not have access to the pond as they will materially decrease fish production and will be very apt to contaminate the water. Tramping of ponds by livestock has caused complete failure in many cases. Tramping of pond and dam edges prevents growth of the vegetative cover necessary for protection of the dam and outlet.

For maximum fish production the farm pond should not have rank aquatic vegetation in it. Cattails and water lilies provide nothing in the way of food for fish and in many instances are detrimental to fish production. If a pond has much shallow water—three feet or less—these plants will soon completely fill the shallow areas. Fish keep down mos-



These large wild ferns are used as accents so that attention is drawn to them and away from a temporarily unattractive corner.

quito and other insect populations when aquatic vegetation is kept at a minimum. Plant growth along the dam and shore line prevents wave action and is useful in erosion control.

Fish production may be greatly increased by the use of fertilizer, either commercial or animal. Fertilizer promotes the growth of plankton, or "bloom" as it is often called. Plankton promotes the growth of aquatic insects, which are the principal food of bluegills. Bluegills in turn provide food for bass. This is rather a long food cycle, but it is necessary for fish production.

A commonly recommended commercial fertilizer is 6-8-4. This should be applied at the rate of 100 pounds per acre of water surface once a week for three or four weeks in late spring or early summer and then about once a month until frost. About 10 pounds of nitrate of soda should be applied with each application of 100 pounds of the fertilizer. Sheep or hen manure may also be used at the rate of one or two tons per season. Good results have also been obtained with tankage. When using manure or tankage, superphosphate should be added also. Equal parts by weight of manure and super-phosphate should be used—from 500 pounds to 1,000 pounds of each per season. If manure is used, care must be exercised to avoid spreading disease. Manure probably should not be used if the pond provides water for livestock.

Fishing should be heavy in stocked ponds to remove fish as soon as they are of pan size. Fishing heavily removes those fish that are large enough to eat and permits the smaller fish to grow more rapidly. Pond production of fish is limited the same way as crop production on land. A given area of water will support only so many pounds of fish regardless of size of the fish. In an overstocked pond of one species com-

petition for food is too great and small fish do not have the opportunity of growing as they should. In a pond already overstocked with one species it may be desirable to remove most of the fish present and make a complete new stocking.

Bluegill and bass fingerlings stocked this year in August or September in fertilized ponds will produce pan-sized bluegills and 10- to 12-inch bass by next September. Harvest should start as soon as the fish reach legal size.

Ponds will also materially increase game production in the area. It is a known fact that water supply throughout the season is absolutely necessary to maintain game production. An increase in the number of farm ponds in southern Iowa will see a definite increase in carrying capacity of game birds and animals. The pond area should be fenced and planted to suitable trees, shrubs, and grasses. These plantings provide nesting and escape cover for game birds and animals.

Muskrats may do some damage to pond dams unless other nesting places are provided. Nesting places may be provided by digging narrow ditches six to 10 feet long with 12 to 18 inches of water in them at right angles to the water edge. Muskrats will use these rather than dig burrows in the dam.

Earth dams must be carefully constructed to insure permanency. The upper side of the dam should not have a steeper slope than 3:1 and the lower side 2:1. All vegetation underneath the dam should be removed. A seal trench at least eight feet wide in the center of the dam should be excavated to good clay the full length of the dam. This should be back-filled with clay the entire height of the dam.

Many dams have failed because of inadequate spillway provision.

Excess runoff may be taken care of by either vegetative or permanent types of spillways. Size of spillway depends on size of the drainage area. A drainage area of 10 to 15 acres in southern Iowa will normally provide enough runoff to maintain a pond of an acre of water surface. The drainage area should preferably be maintained in permanent meadow or pasture. If cultivated, intensive soil conservation practices should be used on the watershed to prevent excessive silting of the pond.

Further information may be obtained from your local conservation officer or the nearest Soil Conservation District Office. Iowa State College Bulletin P-17, "Ponds for Farm Water Supply", will provide much useful information on pond construction. The writer is very much indebted to "Fish Farming", by Lawrence V. Compton, Associate Biologist of the Soil Conservation Service, United States Department of Agriculture, for most of his information.

Flatheads

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up the bait, run, spit it out, pick it up again, spit it out some more, just as if they are playing with it. Then they take off in earnest."

When setting the hook for big flatheads, put on plenty of steam. Then look out for the explosion. Be particularly careful of a spinning reel handle. Many a thumb has been badly split by a runaway reel handle when Grandpa Whiskers made his first powerful surprise lunge. If your catfish is a big one and has been hooked in the mouth, the power he will display in his rushes is almost unbelievable. If your equipment is good, fight back, be plenty tough, and ultimately work the big fellow into shallow water before landing.

Flathead catfish, large or small, are excellent eating, and 50 pounds of unrationed food is an important addition to the fisherman's larder.

Every angler who has experienced the thrill of fairly hooking and landing one of the big fellows is a little sorry he has done so. He wishes he could again experience the incomparable wallop of hooking his first one.

We've read long lists of savage beasts

By hunters brave compiled,
But all of them are tame compared

With deuces when they're wild.

—Wyoming Wild Life.

The primary functions of vegetables in dogs' ration are to furnish vitamins, minerals and to supply bulk.



Ecology and Management of the American Coot (*Fulica americana americana* Gmelin)
Project No. 496

Iowa Cooperative Wildlife Research Unit
By GEORGE O. HENDRICKSON, Leader

The investigation on the American coot, *Fulica americana americana* Gmelin, was carried on chiefly at Dan Green's Slough, Clay County, in northern Iowa, by Clarence A. Sooter, 1936 and 1937. This slough is located in what is known as the "Ruthven Area", which consists of a number of marshes and lakes within a 10-mile radius of Ruthven, Iowa.

Green's Slough was selected for the principal investigations because it was representative of Iowa coot nesting habitat. Supplemental observations were made on other nearby waterfowl areas.

The purpose was to obtain further data on the life history, habits, characteristics, and various factors affecting the coot so that the bird would come more into its place among our game birds. Studies were also directed toward finding more practical management methods for aiding in an increased production of this bird and other waterfowl.

Coots migrated during the night and arrived with the earliest spring migrant ducks that reached the northwest Iowa marshes shortly after the ice began to disappear, about March 20, 1936 and 1937. Approximately 100,000 coots migrated through the "Ruthven Area" during the 1937 spring migration. Coots completed their summer molt about September 1, and fall migration began shortly thereafter. There were five distinct coot remigrations away from Goose Lake, Hamilton County, during the fall, 1936. The majority of the coots left the small lake as soon as the hunting season opened. One coot was timed at 25 miles per hour and other coots were seen flying two or three miles per hour faster. No mass migration of coots was observed.

One of 55 juvenile coots banded in the summer, 1936, was shot in Florida, November 30, 1936. This was the only return. At the time this coot was banded, July 21, it weighed six ounces and was estimated to be two and one-half weeks old.

Coots began their courting tactics about April 11, 1937, on Dan Green's Slough. Paired coots fought and chased others of their species from selected territories. Ducks were sometimes chased by



Young coots leave the nest as soon as hatched. They are odd-appearing little creatures, nearly bald with bright red bills. The crinkly feathers at the base of the bill are tipped with red and those on the sides and at the back of the head with bright orange.

coots from their nesting territories, and perhaps some of the timid were driven to nest in territories other than those they would have selected. Shortly after this they built crude, raft-like structures which were sometimes used in courtship, and then turned into nests or abandoned. The first coot nest on Green's Slough was found May 6 and it was the first to begin hatching, May 31. The 1936 and 1937 nesting seasons ended the first week in August.

There were two distinct nest hatching peaks in 1937. This was attributed to re-nesting after many nests had been destroyed during the early part of the nesting season.

Except for one nest which hatched two clutches, a nest was built for each clutch of eggs. Eggs were laid at a rate of one per day and deposited in the nest shortly after midnight. Incubation began as soon as the first eggs were laid, and because both sexes took turns at the nest the eggs were incubated continuously.

The clutches contained from one to 18 eggs, with an average of 6.08 eggs for 104 clutches in 1936, and 7.92 eggs for 345 clutches in 1937. Nests contained an average of approximately two eggs more per clutch during the first half of the nesting season than during the last part of the season in 1937. In eight coot nests, from each of which all eggs but one were removed at intervals of five to seven days, an average of 15.88 eggs were laid, varying from 14 to 18.

Nests were nine to 18 inches in outside diameter, and five to 10

inches in inside diameter. The rims of the nests were two to eight inches above the water, and the nest cups were naught to five inches deep. No nest was found with a cupola or similar structure. A large number had ramps or runways.

Coot nests were situated in emergent vegetation an average of 18 yards from an edge of wide open channels or large open pools. Narrow lanes of water were discernible between the nests and wide channels or large pools. Both parents shared in the duties of rearing the young. No coot was observed to go to extremes in protecting young. Adult coots were antagonistic toward coot chicks not of their brood. Coot chicks soon learned to forage for themselves but preferred to be

fed by adults as long as they would do so.

In 1936, 91 per cent of the clutches under observation hatched, and in 1937, 77 per cent hatched. The weather destroyed more nests than any other agent, although coots reinforced their nests during stormy weather. Birds (particularly crows and terns) were responsible for 10 per cent of the nest destruction in 1937. Muskrats caused five per cent of the nest destruction in 1937 and may have caused a number of the desertions recorded. In 1937, 17.5 per cent of the nests under observation were deserted.

Approximately two young were produced by each pair of coots nesting on Dan Green's Slough in 1937.

Leeches were known to cause the deaths of five coots in the "Ruthven Area". Other than that, no coot loss from parasites or diseases was noted.

The majority of the marshes in northwest Iowa supported stands of emergent vegetation that served as excellent nesting and rearing cover for coots. Deep water and other agents were noted causing eradication of emergent stands of vegetation in Dan Green's Slough. The most important plants used by coots as nesting and rearing cover were: hardstem bulrush, giant bur reed, sweet flag, reed grass, river bulrush, sedge and cattail. There was an average of 1.51 nests per acre on 224 acres, the area of Green's Slough in 1937, and 3.28 nests per acre on the 109 acres of vegetation of the slough. Only a small per cent of the nests were situated in very dense or very sparse stands of vegetation.

Food of coots consisted largely of available plant material. The four most common families represented in stomach examinations were: pond-weed, sedge, smartweed, and hornwort. Animal food material was more important in the diet of juvenile coots than in that of adults.

It was estimated 3.19 coots per

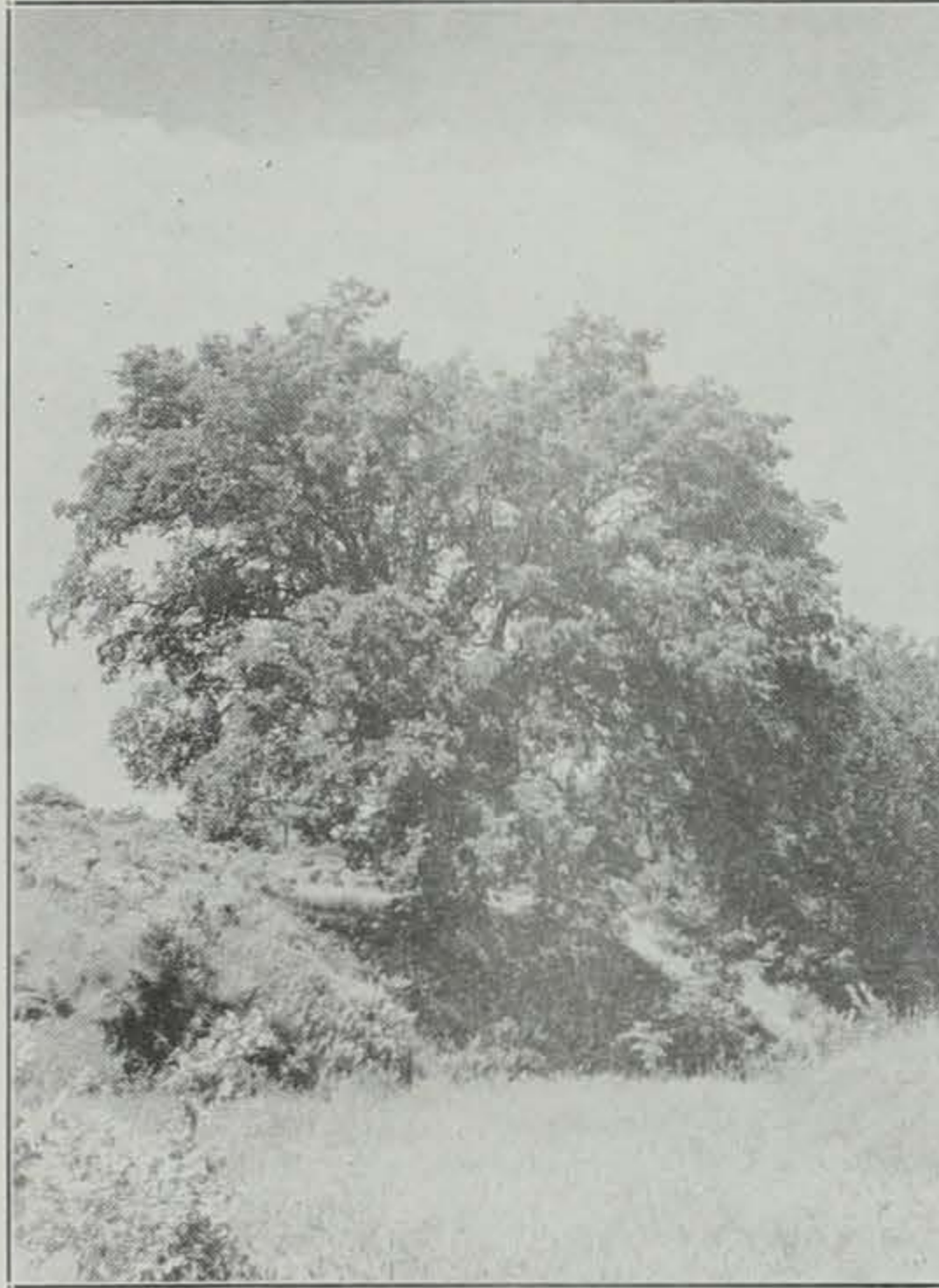
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Coot nests were nine to 18 inches in outside diameter and five to 10 inches in inside diameter. The rims of the nests were two to eight inches above water, and the nest cups were from naught to five inches deep.



"Only God Can Make a Tree" . . .



A tree is defined as a hardy, long-lived plant having a single main stem or trunk, crowned by leafy boughs. It commonly exceeds 10 feet in height. It is alive and depends upon moisture and sun for growth and reproduction. Like human beings trees require food; like us they need water to drink; like us they cannot grow without the sun's warmth; like us they must have light. Deprive a tree of food, water, air, warmth, or light, and it will die. Like us, too, trees are born, grow, reproduce, work, rest, and die of old age.

A tree has no skull or thorax to house its center of life. Its life is in the tips of its roots and the leaves on its branches, and in the tissue of cells beneath the bark which is called the Cambium layer. The so-called "heart" of a tree is really dead. So is its outer bark. The great enemies of the forest are the things which injure the leaves, roots, and Cambium layer—fire, drought, insects, fungi, disease, and age. Some trees live 20 years and some live for centuries, but all trees eventually die. Modern forest management helps to make forests continuously useful by harvesting trees when they are ripe and protecting them from their enemies and by assuring conditions under which new tree growth may continue.

Poets of all ages, from the Psalmist to Joyce Kilmer, have sung the praises of the living tree.

Of the more than 1,100 varieties of trees in the forests of the United States, only about 100 have sufficient commercial value to be of broad economic significance.

Of these, about 40 are what the forest industries call "softwoods", and the rest are "hardwoods". Of the softwoods, 14 species, and of the hardwoods, 15 species, are extensively used in the manufacture of lumber, plywood, and pulp.

Trees which industry calls "softwoods" are coniferous trees which are usually evergreen. The "hardwoods" have broad leaves and for the most part are deciduous. "Coniferous" and "deciduous" are technical words. "Coniferous" refers to the cones in which are borne the seeds of most of the trees in this group.

The leaves of "deciduous" trees, called "hardwoods", are usually shed every autumn. "Coniferous" or "softwood" trees have needle-like or scale-like leaves, and are

usually "evergreen". There are exceptions within the general classifications. The larches and southern cypress are deciduous conifers. The junipers and yews, though classified as conifers, have berry-like fruit instead of cones. Magnolias, live oaks, hollies, and several other hardwoods, though broad-leaved, are not deciduous, but evergreen.

The principal hardwood trees, in order of their commercial importance as measured by the volume harvested, are: oak, red gum, maple, yellow poplar, tupelo, birch, cottonwood, beach, basswood, elm, ash, chestnut, hickory, walnut, sycamore, alder, magnolia, willow, pecan, cherry, hackberry, locust, buckeye, cucumber, butternut, and box elder.

There are about 250 species of the pine family, which includes the pines, spruces, firs, hemlocks, cedars, and other cone-bearing trees with needle-shaped leaves. These "softwoods" constitute the oldest family of existing trees, except tree-ferns of the tropics. The chief softwoods of commercial importance are the southern yellow pines (shortleaf pine, longleaf pine, loblolly pine, slash pine), Douglas fir, ponderosa pine, hemlock, northern white pine and Norway pine, Idaho white pine, cypress, redwood, sugar pine, Sitka spruce, together with western red cedar, larch, white fir, white spruce and red spruce.

About 80 per cent of all forest products (both hardwood and softwood) are manufactured from the several trees species grouped commercially as the southern yellow pines, the west-

ern pines, and the West Coast woods of Douglas fir, hemlock, Sitka spruce, and red cedar.

The early history of the American forest industries is greatly concerned with white pine. From the first English colonization other pines were famous, as they still are, in the lumber trade, both foreign and domestic. But it was the white pine which first attracted the attention of explorers, from the Vikings on. Towering virgin forests of white pine stretched from the St. Croix River of Maine to the Red River of the North in Minnesota, and their harvesting is one of the sagas of the frontier. — American Forest Products Industries, Inc.

Wildlife Research

(Continued from Page 52)

acre were produced in 1937 on Green's Slough.

Nest censusing can be simplified by making counts of birds on sample areas and correlating numbers seen with nesting studies made at the same time.

The coot is a game bird that should be recognized for its true value by sportsmen, and when properly cooked coot meat is as good as that of ducks.

The marshes of northwest Iowa would produce more coots and other waterfowl if fenced against livestock. For coots open pools of about one-fourth acre in area and channels at least 10 feet wide at intervals of about eight rods would provide feeding places. Emergent vegetation between the channels and pools would provide nesting and escape cover. Muskrats from which a surplus might

A tree is defined as a hardy, long-lived plant having a single main stem or trunk, crowned by leafy boughs. Like human beings trees require food, water, sun's warmth, and light. Like us, too, trees are born, grow, reproduce, work, rest, and die of old age.

WARDENS' TALES

SHOP TALK FROM THE FIELD

Conservation Officer Vern Shaffer was checking fishing licenses on one of the artificial lakes in south Iowa when he came upon three small boys from nine to 12 fishing and dabbling along the shore. Vern had a nice visit with the boys and was particularly taken by the intelligence of the youngest lad. Upon leaving, and with the idea of cautioning the youngsters about the danger of drowning, the officer asked, "Do you know how deep that lake is out there in the center?"

"It's not very deep," said one of the boys.

Vern replied, "Oh, yes it is. It's almost 35 feet deep. You could put that big tree down in the water and the top wouldn't stick out."

The youngest of the boys, with his black eyes snapping, pointed to a coot well out in the lake and said, "Don't kid me, mister. It's only up to here on that duck."

—WT—

Conservation Officer Jock Graham was checking fishing licenses along the Chariton River. He came upon a middle-aged man fishing for catfish. Jock, in his inimitable Scotch, asked, "Ar-r-re ye havin' any look?"

"Haven't had a bite," replied the fisherman.

"Wot kind o' bait ar-r-re ye usin'?" asked the conservation officer.

"Worms."

"Ye shood tr-r-ry some other-r-r bait," suggested the warden.

The fisherman directed a starry-eyed gaze at Jock and replied, "H—I, man! I ain't runnin' no cafeteria! They can eat worms or go hungry."

The Decorah Journal tells this on Leland McCord, technician in the district soil conservation office:

"Mac" and Mrs. McCord were trout fishing. Mrs. McCord hooked an unusually large trout which, after a tussle, she successfully landed. Mac, being a camera enthusiast, suggested that she put the fish back in the water so that he could take an action shot of the big event. You guessed it—the fish got away!

be harvested for profit and, to a lesser extent, mechanical methods (dams, dredges, and dynamiting) might be used to remove excessive plant growth.

Let's Enjoy Water Sports Safely, Says Petersen

By VERNE PETERSEN
State Boat Inspector

Iowa lakes and streams are furnishing recreation for thousands of fishermen, boatmen, and swimmers, but they are also the location of numerous drownings, mostly caused by carelessness. Drownings to date this year have been extremely high, and safety officials throughout the state are cautioning bathers and boaters to use extreme care while enjoying these sports.

Due to the fact that many life-guards have entered the armed services we must be doubly cautious in our water activities this year. With the return of hot weather our first thought is an afternoon's relaxation at some nearby lake or river boating or swimming. With the use of proper caution your picnic will be a "picnic" and not end in tragedy.

The American Red Cross has issued the following hints for swimmers:

Swim only in supervised swimming places. Bathing in cold water is dangerous due to the extra energy needed to combat the cold. Don't swim too soon after eating; it is best to wait two hours before entering the water. Don't stay in the water after becoming tired. Don't overestimate the distance you are able to swim. River currents are dangerous; don't try to buck them.

Don't expose yourself to too much sunshine at first. The rays of the sun are of great benefit but should be taken in small doses. Dangerous and even fatal burns have occurred from sunburn.

When a person accidentally falls into the water, he should remove clothing before trying to swim out. In rescuing a person in trouble in the water the safest method possible should be used. Use a boat or throw some floating object if at all possible. Finally, use good common sense in all water activities.

There are more than 10,000 pleasure boats on Iowa's inland waters, and a few safety rules governing their use will prevent many tragedies. It is suggested that a copy of the rules of water safety be secured from your local Red Cross station. Learn these rules and by example and word of mouth teach them to others.

The three following water safety rules are violated often, and they are listed in the order of their importance:

Never go in or on the water when drinking. Don't use an unseaworthy boat. Never overload any boat at any time.

Iowa law requires that all boats for rent must pass an in-



The old turtle rolled off the log with a parting word of warning to the fish, "Don't bite on everything. Clear Lake will be open for business this summer like it has been for 90 years."

spection annually, and the passenger capacity of each is at that time determined. The inspected boat has a small metal tag attached with the capacity and date of inspection stamped thereon. If possible, rent a boat from a commercial boat livery and avoid the friendly offer of boats whose structural safety has not been determined for you.

Safety officials and the "water wise" shudder to see inexperienced boatmen on the water during a storm or when a storm is approaching. Do not hesitate to come in or stay in when the water is rough.

A few other cautions are listed for boating safety. Don't stand up in or rock the boat. If you are unfortunate enough to capsize, stay with the boat. Unless you are an extremely experienced swimmer it is fool-hardy to attempt to swim to shore. Iowa's lakes and rivers are not so large but what you will soon drift to shore. By holding onto the capsize-craft you are certain to be rescued or to drift to safety. If there are two or more of you in a capsized boat, hold hands from opposite sides, changing hands occasionally to rest.

Never jump out of a boat under any circumstances without first dropping the anchor. The boat may drift away from you faster than you can swim to overtake it.

Remember, a boat will drift faster than an oar, but in the same general direction. If an oar is lost, let the boat drift for a few seconds, drop anchor, and wait for the oar to overtake you.

Never stand up in a boat to hoist the anchor. Reach around front, take hold of the chain or line, and hoist it over the side from the front seat. In returning to a boat from the water do not try to get back over the side. Return to the boat from the stern or back end.

Do not put a large motor on a small boat. For safety's sake, if you use a motor weighing over 15 pounds, put an air tank under the back seat, using the formula of 60 pounds of dead weight to the cubic foot of air tank.

The cautions and suggestions reviewed have been worked out by men whose business it is to help you enjoy swimming, fishing, and boating safely. They are mentioned here to help you have an enjoyable outing. The majority of accidents happen to the novice—not to the person who is accustomed to being on the water—and one sure way to show your inexperience on the water is to violate the above rules. There are no finer sports than swimming, boating, and fishing. Let us enjoy them safely.

Fishermen have had the best fishing in the Spirit Lake region that they have enjoyed for many years.

Numerous Iowa squirrel shooters plan to hunt with muzzle loaders this fall.

An important source of game cover in Iowa is the railroad right-of-ways.

Wise Mr. Turtle Sagely Advises His Finny Friends

Two fish were talking out near the rice bed one day last week as they glided hither and yon munching in turn on some tender shiners and some fresh shoots of wild rice.

"I understand there's some sort of struggle going on in the world," the crappie said to the walleyed pike as they moved along together.

"Just yesterday I was napping in the shade of a boulder on the North Shore where some men were putting in a dock," confided the slick, well fed looking pike, between bites. "I gathered that there is a war where men are pitted against men and they kill each other and destroy property. Some fight for democracy and some for power and some just for the love of fighting.

"I gathered that literally millions of young men and even young women have gone to this war and that everyone who stayed at home is so busy making guns and tanks and airplanes and ammunition that they aren't even making fish poles or reels any more because they can't spare the metal."

"You mean that there won't be any fishing in Clear Lake this summer, and that there won't be speedboats rushing overhead when we think we've found a restful spot?" inquired the crappie.

They decided to swim over to the island where the wise old turtle was sunning himself on a log after coming up out of the mud where he spent a long drowsy winter.

"I'll tell you, boys," the old turtle said as he waved his head from side to side with a feeling of pride and an air of authority.

"I've been around this lake ever since the Indians used to battle it out among themselves. I was here when they fought down to the shore and then took to their

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There are no finer sports than swimming, boating, and fishing. By following simple water safety rules tragedies may be prevented.

With Rod and Gun

By B. L. E.



Mr. Hawkins with a largemouth

This department "Conservation Columnists", is to give each month a little sketch of one of the columnists who write outdoor columns regularly for newspapers. These writers are widely known for what they write, and we know that you will enjoy these briefs of what and who they are.

By BLAINE HAWKINS
Wapello Republican

What is more interesting and more romantic than the great scheme of nature—God's great outdoors and His creatures of earth and sky?

Most readers of this will agree that "nothing" is the most appropriate answer to the question, because it is true.

So it seems rather trivial to devote a column of space to a writer on these subjects merely to give him an opportunity to tell all about himself. However, the very kind invitation to contribute to these columns suggested an autobiography, so he feels obliged to comply.

Way back in 1898 a freckle-faced kid with tough callouses on the bottoms of his feet discovered it was more fun to roam the countryside all day long establishing "trails" and naming newly found "lands" than it was to pick up splinters from the hot board sidewalks in town.

He didn't have any gun or "bow 'n' arra" to tote, in fact not even a "nigger shooter", so he just traveled and became familiar with all the living things he saw. He was most intrigued by bird life, and to afford greater opportunity for intimate study he innocently began gathering a collection of bird eggs. Whether it was due to Darwinian ancestral proclivities or the tough callouses on

his big toes, the boy proved to be quite handy at climbing trees, and it wasn't long until he had a specimen of practically every bird native to Iowa.

It was a neighbor, the late Col. H. O. Weaver, who influenced the youth to end this activity by explaining why it was wrong to rob birds' nests, but his study of birds had advanced so far that it has continued even to this day.

Colonel Weaver introduced his wire-haired terrier "Jappy" to the lad and thereupon began a long list of boyhood experiences hunting rabbits, squirrels, skunks, groundhogs, muskrats, mink, 'possum, and the like, which will never be forgotten—nor will the memory ever fade of little "Jappy", the nervy little cuss, who long since has rested from the chase of rabbits he never could quite catch.

Of course the kid was tutored early in the art of fishing, and while he didn't start out with the willow sapling, a piece of wrapping twine and a bent pin (because his pop was quite a fisherman and had lots of tackle), he was "on his own" ever after the first fishworm was impaled on his hook.

Carey Rhodes, dean of spoon-hook fishermen in these parts, was responsible for the kid's transition from a bait fisherman to the realm of the "untouchables"—the wielders of artificial lures. It was an old No. 3 Skinner spoon-hook he gave the boy for his initial venture, which was so successful that he never got over it, nor did he ever forget Carey Rhodes. Wrapped in a piece of faded newspaper, as he left it, is Carey's favorite old No. 3 Skinner sponhook and line, tucked away in the lad's box of treasured keepsakes.

The years flew swiftly by, it seems, and in rapid succession the youth grew to manhood, acquired experience in trapping, small game hunting, quail hunting over finished pointers, river and marsh duck hunting, river and upland goose hunting, back-to-nature camping (30 days a year in a three-wall tent during duck hunting), fly fishing, fly tying, outboard motoring and selling outboards, boat building, botanizing, dog training—aw, fiddlesticks!—everything except big game hunting and deep sea fishing.

In 1921 he decided to write about all the wonderful experiences he was enjoying in the great outdoors, to help others see the beauties he saw in nature and to point out the great opportunities for recreation to be found on every hand right here in Iowa.

Having grown up in a newspaper office, he had no difficulty in putting his desire into effect in a column titled "With Rod and Gun", which he has written with more or less frequency ever since. Later he did some radio broadcasting on outdoor subjects, took an active part in conservation organization and exemplification of the ideals of conservation, and had a leading part in giving the undesirable "Moscow Dam project" a kick in the pants every time it arose.

But all this was as nothing compared to the lasting benefits of outdoor craftsmanship he gleaned while worshipping at nature's shrine and delving deeper to fathom her mysteries.

The years have rolled along and experience has accumulated. The freckles have faded. Silver is at the temples and boots have taken the place of the callouses on his feet. But he is still a boy at heart and if given half a chance he will run your legs off in quest of fish or game—whip a trout stream or bass water all day long, follow the coon hounds throughout the night, or sit in a cold duck blind till it's no use.

Yes, that crazy guy is me—B. L. E.—the fellow you probably have never heard of. And I'll let you in on the secret of that adopted nom de plume—B. L. E. stands for "bird-legged editor".

He was born Jasper Blaine Hawkins, son of Rodney Grant and Avarella (Kinkead) Hawkins, at Morning Sun, Iowa, October 19, 1892, came to Wapello in 1896, and is still a resident there. Wapello is in the heart of "God's country", a paradise for the hunter, fisherman and lover of nature, and believe it or not, that's the principal reason B. L. E. is there.

Mr. Turtle

(Continued from Page 54)

canoes and fought out on the water.

"I can remember the Grindstone War, just after the white men came to Clear Lake, and then there was the World War. All of these wars made a lot of talk and caused a lot of hardships, but there was still fishing and boating.

"If they can't get a steel fishing pole they'll use bamboo, and if they can't buy a reel they'll do without. I'm just telling you boys you hadn't better go around snapping at everything that looks good to you because there'll be plenty of fishermen, and they'll be trying harder than ever to get ahold of you fellows."

The old turtle rolled off the log and sank under the water with a parting word of warning to the two game fish:

"Don't bite on everything—Clear Lake will be open for business this summer like it has been for more than 90 years."—Clear Lake Mirror.

Brief Resume of New Laws Relative To Conservation

By K. M. KREZEK,

Chief, Division of Administration

A brief review of legislation enacted by the 50th General Assembly relative to conservation matters reveals much of a corrective or clarifying nature. Several changes, however, are of importance to the general public. The following is a brief of the new laws:

House File 47 clarifies the law prohibiting use of seines on the Mississippi and Missouri Rivers from May 15 to June 15.

House File 218 establishes pole and line fishing areas and excludes commercial fishermen from the LeClaire Canal near Davenport, Bussey Lake near Guttenberg, and Credit Island Harbor.

House File 54. This amendment to section 1794.045 strikes one season and leaves the open season for frogs May 12 to December 1.

House File 82 amends section 1794.029 by inserting the word "walleyed" ahead of the word "pike".

House File 83 amends section 1794.029 by striking the 25 daily catch limit and 50 possession limit on sheephead. There is now no catch and possession limit on sheephead.

House File 103 makes the size for largemouth and smallmouth bass the same at 10 inches. Also it reduces the size of walleyed pike that may be taken to 12 inches.

House File 447 changes the catfish season to April 15–November 30. This bill also had two amendments attached to it which passed. One provides for use of basket fish traps, constructed with 1½-inch mesh web in the back end, in the Mississippi and Missouri Rivers. The other permits spearing of carp, buffalo, quillback, gar, and dogfish in Winnebago River in Worth and Cerro Gordo Counties.

House File 50 corrects the language of section 1794.052. The law formerly stated that skunk, muskrat, beaver, mink, and raccoon dens could be destroyed in the presence of a conservation officer. This amendment corrects the law so these dens may be destroyed by permission of a conservation officer.

House File 167 changes the quail season to November 1–November 30.

House File 320 advances the pheasant season to October 28–October 30.

Senate File 184 sets up a method for controlling beaver by permitting farmers to trap them after permission has been obtained

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New Conservation Laws

(Continued from Page 55)

from the Conservation Commission.

House File 44 requires boats when passing sailboats to pass to "leeward" instead of "windward".

House File 205 repeals the law privileging any boat licensed for hire to use the state pier located on West Okoboji Lake at Arnolds Park on payment of a \$25.00 fee. Repeal of this law authorizes the Commission to regulate the commercial use of this pier.

House File 46 repeals the provision in the law that provides for licensing fur dealers' agents. The fee was stricken by the preceding legislature.

House File 183 provides that the trapping season open at noon of the first day instead of opening at midnight.

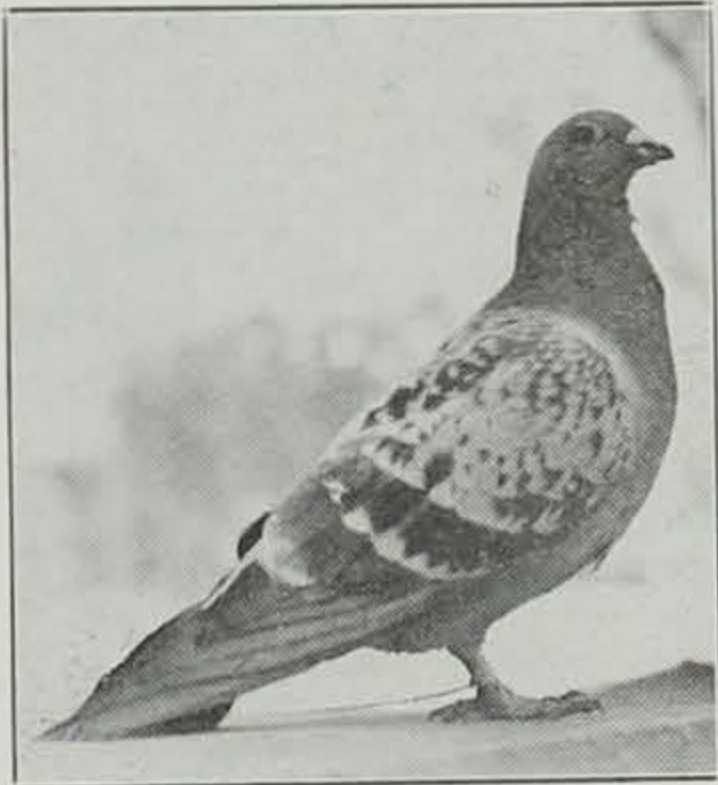
House File 42 provides a penalty section for Chapter 86.1.

House File 136 provides that jurisdiction of wildlife remain in the state in all areas purchased by federal agencies.

House File 283 gives the Commission authority to do stream improvement work, erosion control, etc., on private land when consent of the owner has been obtained.

Senate File 31 prohibits killing or injuring carrier pigeons.

Senate File 111 provides that, upon the issuance of data or information in printed form to private individuals, groups or clubs, the Commission may charge



House File 31 prohibits killing or injuring carrier pigeons. Most Iowans would not intentionally harm one of these birds, but many people cannot distinguish a racer from an ordinary barnyard pigeon. These birds ordinarily have a slender appearance and are usually gray with darker blue-gray slate markings. Ordinarily there is a noticeable heaviness at the breast caused by the highly developed flight muscles, this compared to the chunkiness of both the semi-wild barn pigeons and various pigeons developed for their eating qualities. A fleshy protuberance at the base of the upper bill is conspicuous. This cere is much less in evidence on barnyard pigeons than on the racers. Racing pigeons are invariably banded with aluminum or rubber leg bands bearing the initial of the pigeon club plus the identification number of the individual bird.

therefor the actual cost of printing and publication.

Senate File 112 provides free hunting and fishing privileges for members of the armed forces for the duration of the war.

House File 367 provides that the Executive Council can pay for improvements on roads through state-owned land from any funds not otherwise appropriated.

Senate File 212 permits holding of bird dog field trials using birds procured from licensed game breeders.

Senate File 221 adds a section to specific powers of the Conservation Commission to permit them to control wildlife that is destructive to property.

Senate File 350 is an appropriation bill allotting \$200,000 to the Lands and Waters Division of the Conservation Commission for state park purposes and \$12,500 for the acquisition of McIntosh Woods.

Senate File 376 is a claim of \$1,500 for loss of furniture by fire.

Senate File 389 is an appropriation of \$10,000 to the Interim Committee to purchase the Gardner (Sharp) Log Cabin at Arnolds Park.

Two Viewpoints . . .

The wish of every boy is to be a man and the regret of every man is that he is no longer a boy. The boy knows that dad has a lot of strength and wisdom that he has acquired by fending for himself out in the world; and son wishes that he had that equipment so he, too, could play a man's part. The man knows that son has a lot of fresh enthusiasm and tireless energy which youth alone may possess; and dad wishes he had that buoyancy so he could face the future with equal faith. Put son and dad together and especially in the great outdoors, which is the natural place for men and boys to be, and they will come to know each other better. —Walter H. Newton.



Seiners are urged to take no more minnows than they have immediate need for or for which they have adequate storage tanks.

* * * * *

Anglers Urged to Conserve Minnows

Fishermen are finding not only a shortage of gasoline, rubber, and tackle to hinder their sport, but also in many areas an acute shortage of minnows. Part of this shortage is caused by careless handling by commercial dealers and part by fishermen who secure their own bait.

Commercial bait dealers are governed by definite laws designed to prevent waste. Individual fishermen, however, do not have such restrictions placed on them. The State Conservation Commission feels that all sportsmen, if they realized the seriousness of the situation in this state, would cooperate more fully in a minnow conservation program.

Minnow seiners are urged to take only as many as they have immediate use for or for which they have adequate storage tanks. All small minnows should be returned to the water as quickly as possible. Don't seine any stream too heavily; leave plenty for "seed".

Probably the greatest minnow loss is caused by overcrowding. It is not uncommon to find pails designed to carry three or four dozen minnows loaded with 10 or 15 dozen. As a result of such overloading, the bait quickly loses its pep and soon dies.

Ice may be used in transporting minnows, and the most satisfactory method is to set a small cake on the top of the pail. As the ice melts slowly, the cold water running through the perforated lid into the bucket carries life-saving oxygen to the fish. If the ice is placed directly in the pail, the rapid change in water temperature often kills the bait.

Another method used in transporting minnows alive is to carry a bicycle or automobile pump and at frequent intervals pump in fresh air. Minnows can be carried safely for long distances this way unless over-crowded or unless the weather is extremely hot.

The nine-foot channel program on the Mississippi River is responsible for the great comeback of the pileated woodpecker in this state. The dams have flooded thousands of acres of bottom timber land, and many of the trees have already drowned, providing ideal habitat for this large, interesting woodpecker.

An Outcast In Hell

During a lull in the Stygian flames
A group of shades were exchanging names,
And telling of places that they had been,
With bits of gossip and tales of sin.
A lonely shade who was standing by
Approached to speak; but without reply
Each wrapped himself in his ghostly shawl—
Murderers, robbers and blackguards all—
With a whispered word and averted stare
Vanished and left him standing there.

"Who was he?" I asked as they turned and fled.
"He poisoned his neighbor's dog," they said.

—From The Yellowstone, as reprinted in South Dakota Conservation Digest.