

ume 23

September, 1964

No. 9



Shooting over dogs like these brittanies adds enjoyment to upland game bird hunting and results in fewer lost birds.

Jim Sherman Photo

1964 HUNTING PROSPECTS

Bill Brabham

Superintendent of Game

The 1964 hunting prospects for Iowa appear to forecast another excellent hunting season. Ideal over-wintering conditions and good spring conditions have provided general increases in most game species.

Reviewing last year's information, the 1963-64 hunting season was one of the best in Iowa's history. The 1963 pheasant season was the longest ever held in the state. Also in 1963, Iowa had the first duck season that had ever been initiated.

These two firsts, in the management of our game resources, allowed sportsmen to enjoy more hunting opportunity and to harvest larger portions of the yearly surplus.

Game species are a product of the environment. With favorable environmental conditions, larger surpluses of our game species are produced. During these conditions, sportsmen can enjoy greater harvest of these species. We must keep in mind populations of game species to fluctuate and in turn hunting seasons must be gauged in relationship to these changes.

Each year surveys and censuses are conducted by game technicians, biologists, conservation officers, and rural mail carriers, to determine the status of our various game species. The final reports are thoroughly

reviewed by the Iowa Conservation Commission staff. From these reports, the recommendations for the game seasons in Iowa are made to the Iowa Conservation Commission for their action.

Management of waterfowl resources is conducted in a similar manner by the U. S. Fish & Wildlife Service in cooperation with those states in the Mississippi Flyway. They determine the status of the waterfowl populations each year in these flyway states.

Iowa did carry on a waterfowl banding program in 1964. There were several variations noted from the 1963 operations.

Coot production was definitely down in Iowa this year. This reduction in production of coots can be attributed principally to high wind conditions which were present during the late spring and early summer.

The majority of our game species are all relatively short-lived. Seasons must be determined which will allow the sportsmen the opportunity of harvesting this surplus. The annual surpluses, if not taken by Iowa hunters, do not survive for the next breeding season. In view of the information available from our census and surveys, the seasons that have been set, will allow Iowa sportsmen to harvest these surpluses. In this regard, the management programs are based to keep game populations in balance with the available habitat. This year, the State Conservation Commission set the season opening dates in February to allow sportsmen to make their hunting plans early.

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CIRCULATION THIS ISSUE 52,000

COMMISSION MINUTES**August 3 and 4, McGregor**

A walnut plaque with a gavel mounted on it was presented to Earl Jarvis of Wilton Junction in recognition of his service as chairman of the Commission for the past year.

The Commission toured various river areas between McGregor and Harpers Ferry to study the problem of private encroachment on state lands, and deferred any action on the problem for 30 days.

The Iowa Electric Light and Power Company asked for permission to use Cedar River water for cooling generator condensers.

COUNTY CONSERVATION ACTIVITIES

Black Hawk County received approval for the acquisition of 171.58 acres of land at a total cost of \$11,408 for the development of an access area to Black Hawk Creek to be used as a wildlife area and fishing access.

Black Hawk County also received approval for the acquisition of 21 acres of land at a cost of \$1,885 as an addition to Thunderwoman Park.

Delaware County received approval for the acquisition of 22.00 acres of land as a gift, located adjacent to Coffins Creek to be used for picnicking, camping, and as a fishing access area.

Hancock County received approval for acquisition by a 10-year co-operative agreement of three small areas of approximately 2 acres each for the purpose of installing wildlife habitat plantings.

Marshall County received approval for the acquisition of the Van Cleve school grounds consisting of 4 acres of land at a total cost of \$2,884 which includes a two story brick building and various recreation equipment and facilities.

Winnebago County received approval for the acquisition of the Thompson Highway 9 Safety Rest Area consisting of 1.00 acre of land under a sponsoring agreement with the Iowa State Highway Commission for the development of a highway safety rest area.

Wright County received approval for the acquisition of 3 acres

of land as an addition to Pike Timber Park at a total cost of \$405 to be used for improvement of the main access road and to provide additional camping space.

Black Hawk County received approval for a development plan for the Byron Sargent Memorial Highway Safety Rest Area.

Bremer County received approval for a revision to the Alcock Park Plan which will allow for expansion of picnic area and the straightening of a fence line.

Cerro Gordo County received approval for a partial development plan for the Shell Rock River Preserve which would allow the development of the east entrance road and trailer campsites immediately before the total plan has been completed.

Chickasaw County received approval for a development plan for Split Rock Park which would include a 10-acre pond with a bathing beach, picnic area, campsite, and wildlife plantings.

Des Moines County received approval for a development plan for the Tama Beach Area which would be used primarily for river access.

Sac County received approval for a development plan for Grant Park which will be a multiple outdoor recreational area and will include an archery range, game area, winter sports area, amphitheater, picnic area, nature trails, and a hardwood timber area.

Winnebago County received approval for a development plan for State Highway 9 Safety Rest Area.

Wright County received approval for a development plan for the Flowing Well Safety Rest Area located on Highway 2 west of Clarion.

LAND AND WATERS

Approval was given to Guidelines and Lake Classifications as related to Construction Permits.

Approval was given to exercise an option for \$36,000 on about 18.5 acres of land adjacent to Clear Lake State Park owned by Leikington.

Approval was given to recommend to the executive council the sale of .59 acres of state owned land in Muscatine Slough in Muscatine County at \$300 per acre.

Approval was given for the revision of policy No. 95 concerning aquatic vegetation control to make it conform with the new law on herbicides.

Approval was given for the establishment of a new forest position for the Little Sioux Watershed Area.

The Commission voted to ask the Attorney General to institute a suit which would require the Pottawattamie Board of Supervisors to provide maintenance of the road adjacent to Lake Manawa.

A resolution was passed in appreciation of the cooperation of the Highway Commission in a program of erecting signs to mark the route of state parks.

LONG RANGE PLANNING PROGRAM

Editor's note: This is one of a series of articles on the long range planning program for the State Conservation Commission by Glen Powers. It is intended that this and future articles might describe in detail the various phases of the "Plan."

PARKS

The first concern in any long range planning program is to continue to improve present day areas. That is to bring all areas up to good condition as to size and developments which are necessary to meet present and future demands.

The recent surveys of Iowa State Parks indicates that a minimum of \$12 million will be needed for future Capital Improvements. To show the vastness of these improvements, Iowa has spent only \$13 million in the last 24 years to acquire all of its parks. Needs and desires are constantly changing and improvements must be made to meet these demands.

Many serious problems exist in Iowa's State Park system. As an example, in 1960-61 the Conservation Commission doubled the space and developments available to campers. Again in 1962, camping facilities were expanded, this time more than double that of the 1960-61 program. Today, at the end of the 1964 camping season,

FISH AND GAME

The 1964 game seasons were set, except for waterfowl and shotgun deer seasons. The trapping seasons also were set.

Approval was given to the establishment of a 4th district supervisor for the Fisheries Section.

A budget amendment was approved to allow for a residence on Otter Creek Marsh in Tama County. The Commission voted to exercise an option for the purchase of 35 acres of land at a cost of \$135 per acre for an addition to the Buffalo Creek Marsh in Kossuth County.

A resolution was passed recognizing the cooperation of the State Highway Commission and of each County Board of Supervisors for their help in preserving and propagating game by not mowing highway ditches until after July 1.

Approval was given to transfer of police authority from three staff members to three new Supervisors.

GENERAL

Travel was authorized to the National Association of State Foresters at Pennsylvania; The National Conference of State Parks at Morristown, New Jersey; A Waterfowl Meeting at Washington, D. C.; The Mid-west Forest Wildlife Committee at Sylamore Experimental Forest in Arkansas; International Association of Game, Fish and Conservation Commissioners and American Fisheries Society at Atlantic City, New Jersey.

camping areas are still pitifully inadequate.

Camping recreation is on the increase. Iowa parks in 1963 showed an increase in campers 30 per cent compared to a year ago. In June, although most of the month was wet and cold, campers increased 17 per cent. Most of the parks, at the present, are not able to facilitate the increasing camping pressure.

The \$12 million must be spent to up-date Iowa's parks if they are to continue to provide Iowans with complete recreation.

WATERS

Water is the hub of any successful outdoor area. It is the general rule that parks without water are not too popular with the public.

Iowa's waters are under the authority of the Waters Section of the Lands and Waters Division. Their authority includes the Capital Improvements, maintenance and management of all natural and artificial lakes and rivers within the state.

Again due to the increased demand for water areas, the range plans must include funds for major renovation projects on most all artificial and natural lakes.

The major problem in rehabilitation of these lakes is erosion control. Siltation in many areas not corrected will soon cause complete obliteration of valuable water areas. In one instance, over half of the original water capacity of a present day Iowa lake is occupied by silt due to water and shoreline erosion.

Artificial Lakes:

Today, to correct water problems alone in artificial lakes it would cost \$869,500. To correct shoreline erosion, it would cost an additional \$592,922. These are no means staggering sums considering the initial investment the State of Iowa has made in these areas. If water recreation is to be available to the people of Iowa, this work must be done.

Natural Lakes:

Shoreline improvements and dredging are the answers to rehabilitation of Iowa's natural lakes. Dredging, in the past, has been a controversial subject to the Commission and Legislature. Consequently, in every case, funds were inadequate and only a portion of the work that needed to be done was completed. Today, a few of Iowa's natural lakes are themselves to multiple-use recreation. However, there is still a need to "rescue" them if funds could be provided. On a brighter side, some areas cannot be rehabilitated they may revert to marsh areas, thereby filling another needed niche in outdoor recreation.

It is estimated that approximately \$1.5 million must be spent for shoreline improvements.

(Continued on page 67)

FOX AND COYOTE TRAPPING

Tom Berkley

District Game Manager
Perhaps no other phase of wild animal control has been made to appear more difficult than that of fox and coyote control with the use of the steel trap. The few trappers who possessed the ability to catch these predators were most secretive with their trapping techniques, making it difficult for the beginner to learn their methods. In order to remove some of the mystery from the really simple art of predator trapping, the State Conservation Commission has conducted trapping schools in counties where the higher population of fox and coyotes have been found. This program was started in 1949. It soon learned that farmers and trappers who were reasonably acquainted with the habits of fox and coyotes, and who knew the areas where these predators lived and traveled, could become profitable trappers when shown simple effective trap sets.

Trapping Secrets

There is any real secret in trapping successfully, it is in locating the trap set in the proper place. The best location is either in a few yards of a trail or "crossing" used by these predators, or in an area that is being hunted by the animals for their living. Even the best scent or bait can only be depended upon to attract fox or coyote a short distance, and the set must be made in a manner that will not arouse the animals' suspicions. To determine the best locations for trap sets, the trapper should know his territory. He should look for signs, either trails,

droppings, or areas where the fox has been digging for rodents or the coyote hunting for rabbits. In the event the foxes are preying upon a poultry flock or a coyote upon a herd of sheep, the best places to make trap sets will be near travel lanes used by the predators when traveling to and from the yards or fields where the poultry or sheep are confined.

As both coyote and fox sets are made in the ground, and the traps are covered with fine dry dirt, the most effective time of the year to trap is during late summer and early fall months. During this period, populations of predators are at their highest levels, and it is much easier to keep trap sets working without the problems created by freezing weather. Winter trapping may be done successfully by using absolutely dry dirt to cover traps or by using a mixture of 15 quarts of fine dry dirt mixed thoroughly with one quart of calcium chloride.

Trap Sizes

Perhaps the most important part of the equipment is the steel trap. One of the best traps for fox is the No. 2 Victor fox trap which is a coil spring trap, very compact and easy to carry and to conceal. Its wide jaw spread insures good holding powers. For coyotes, a larger trap is desirable, and a special trap was developed for coyote trapping, designated as the Victor 3N double spring trap. This trap has good power, and is equipped with offset jaws which reduces loss of animals from the traps.

Contrary to popular belief, these traps need not be waxed or dyed, and may be handled with the bare hands. The only advantage in waxing traps is that they are protected from rust and waxed traps will outlast untreated ones. If cal-



The "secret" in trapping is locating the set in the right spot.

cium chloride is used in winter trapping, it is important that traps be waxed to protect them from the rust caused by this chemical.

Steel drag hooks made from 28 inches of $\frac{7}{16}$ -inch cold rolled steel may be used in coyote trapping with the traps fastened in pairs to each drag. A drag may be used when fox trapping, or the traps may be staked at the set. The drag on coyote traps offers the advantage of permitting the animal to drag the traps away from the set, thus keeping the set from being torn up and spoiled for another set. This factor is of less importance in fox sets.

Using Scents

In addition to the traps, stakes and/or drag; a hatchet will be needed for digging; a clean piece of canvas three feet square for use as a ground cloth to kneel upon while making the set and to re-

move all surplus dirt; some pan covers of clean cloth or waxed paper, 5-inches by 7-inches; a dirt sifter made from a square foot of $\frac{1}{4}$ -inch hand woven cloth, and a supply of fox and coyote scent. Numerous trapping supply houses sell fox and coyote scent, or it is available at times at local sporting goods stores. It has been found that coyote urine is equally attractive to both coyotes and foxes and may be used for both. As most coyote and fox trapping is done during the closed season for many of the furbearers, scent is recommended for bait as it is more selective and attracts fewer protected furbearers.

While traveling to and working in the area to be trapped, it is well to leave as little human "signs" as possible, and smoking, spitting, and otherwise leaving evidences of trapping activities should be avoided.

Upon reaching the site of the set, which has been determined by the presence of animal signs, the exact spot for the set should be located from some distance away, then with traps and equipment, one should walk directly to the site, spread the ground cloth, kneel upon it, and stay there as much as possible during the operations involved.

The following material will describe the installation of the double trap set, which is the most successful set made for coyotes, and which will also work well for foxes:

Making the Set

The first step is to dig a flat-bottomed trench seven inches wide, 1½-inch deep, and 30-inches long. Be sure that all dirt and vegetation removed is placed on the ground cloth. The next step is to place the drag in the center of the trench, set the traps, and place one in each end of the trench, so that each trap is ½-inch below the surface of the ground. Using dirt taken from the trench, fill in around the traps, covering the

(Continued on page 71)

DREDGING—

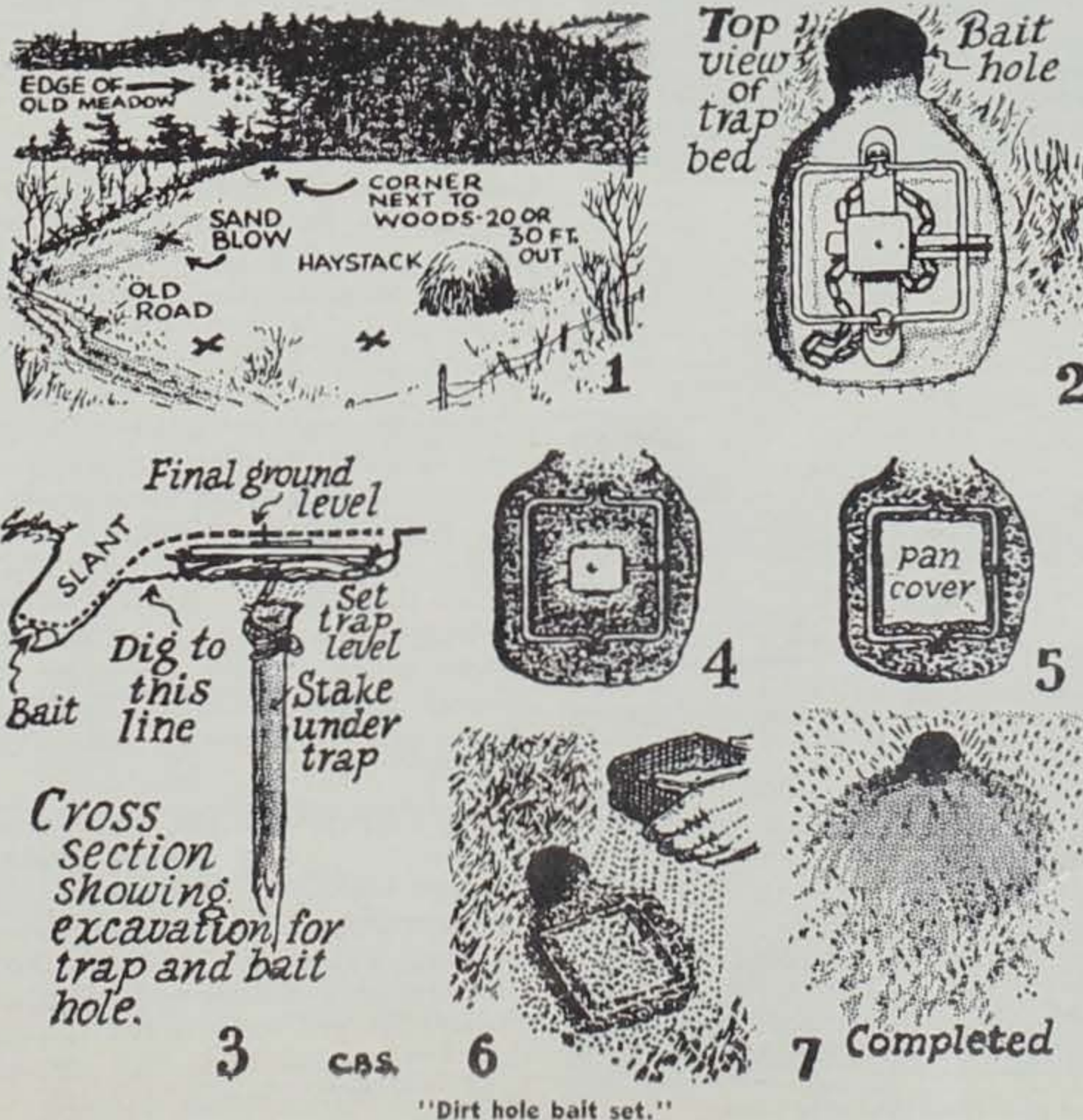
(Continued from page 66)
natural lakes. As part of the dredging program, the "Plan" recommends 12 natural lakes to be completely dredged, and that two or three 10 inch dredges be purchased for this work. Dredging is expensive, but if properly done, it is money well spent. The cost of the recommended program to save natural lakes would cost approximately \$14 million.

Water Pollution:

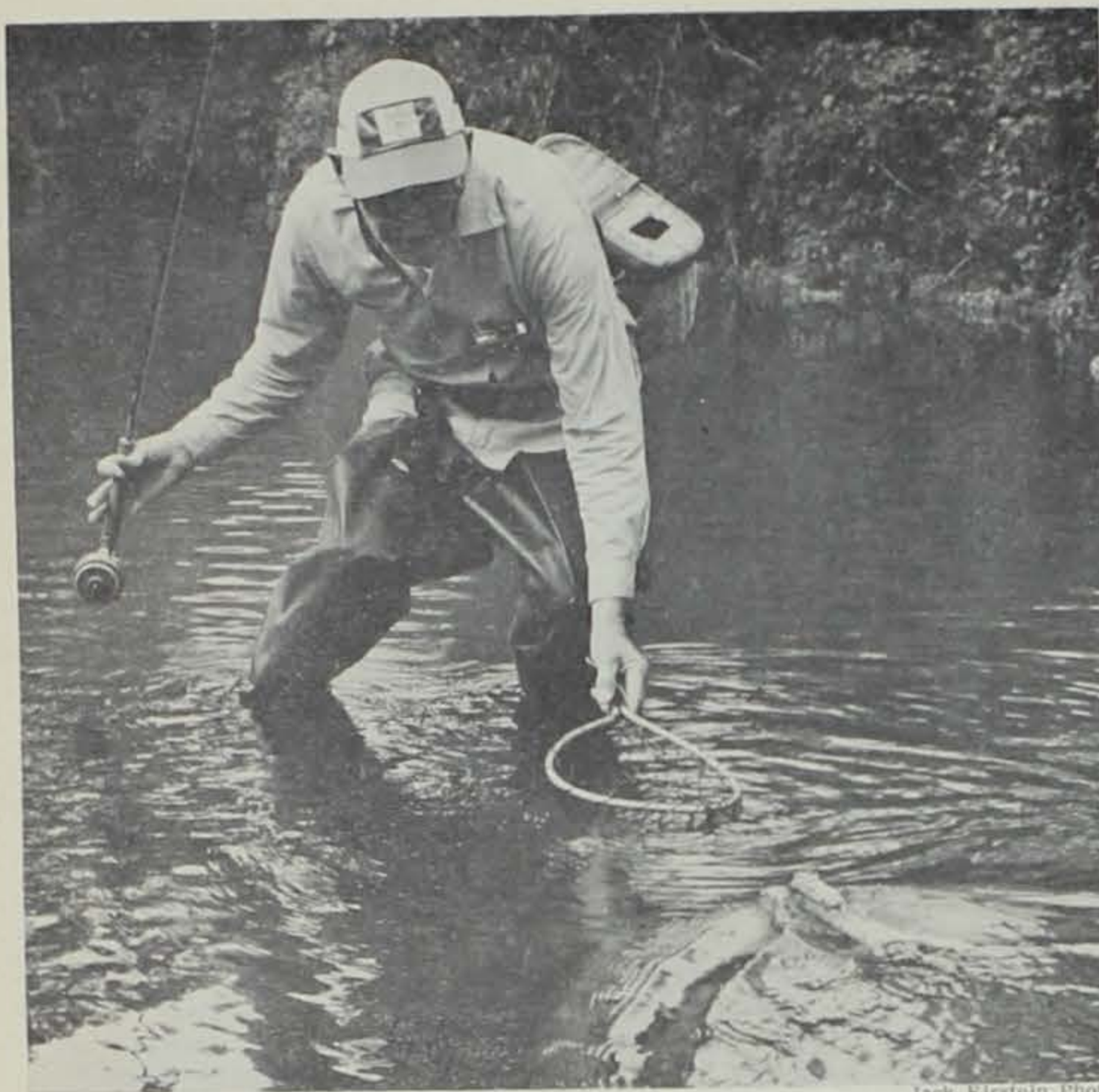
A large amount of dredging or shore-line improvements can solve the problem of water pollution in Iowa. Water pollution is a problem which must be dealt with before not after it occurs. Facts concerning Iowa's water pollution are not available in the State at this time. However, the problem should be uppermost in the minds of all Iowans.

Recreation:

The vast needs of Iowa's park and water facilities must be met to insure high quality future recreation. To provide for these needs a tremendous amount of funds must be available. Whether or not these funds will be a reality, is in the hands of the Iowa people.



FISHING ALONG THE



Iowa's trout waters offer the colorful rainbow and the wily brown.



More than 18,000 acres of natural lakes border the Trail.



Walleyes and panfish highlight action near Mississippi wing dams.

Max Schnepf

The Hiawatha Pioneer Trail offers fishing for you, whether you're a died-in-the-wool trout fisherman or a plain old panfish and bullhead fisherman. For 1,500 miles the Trail winds through Iowa, linking the finest fishing waters in the state.

The Trail's purpose is to provide tourists a route which passes through many of Iowa's historical and scenic points of interest. The travel log includes President Herbert Hoover's birthplace and Presidential Library, the Amana Colonies, the Little Brown Church and many more of Iowa's finest tourist attractions.

These attractions may or may not cause a fisherman to bat an eye. But when the Mississippi, Cedar, Des Moines and Upper Iowa Rivers; Clear Lake and Great Lakes; approximately 130 miles of well-stocked trout streams and several thousand farm ponds and artificial lakes are added to the travel log, even half-hearted anglers will take notice. Furthermore, the problem of getting out of the house on week-ends without an argument from the wife and kids is solved. Take them along, and let the historic and scenic points of interest occupy their time.

The Hiawatha Pioneer Trail enters Iowa across the Mighty Mississippi at Davenport. Lock and dam numbers 14 and 15 near metropolitan Davenport provide the site for an angler's initiation to Mississippi River fishing. The waters below the main dam and around the wing dams are a walleye, channel catfish and panfisherman's paradise. The back waters above the dam and lock produce fine bass and panfish.

On the lower loop of the Trail from Davenport to Keokuk to Des Moines, the fisherman can choose from a variety of types of fishing: typical Mississippi River fishing above or below any one of four sets of locks and dams between Davenport and Keokuk; bass and panfish fishing in Lake Odessa near Wapello, the city reservoirs at Albia and the Red Rock Reservoir near Pella; or channel catfishing in the Iowa River near Wapello, the Skunk River below Burlington, or the Des Moines River, which crosses the trail at several points including Keokuk, Keosauqua, Ottumwa and Des Moines.

The segment of the loop from Keosauqua to Des Moines passes through the heart of Iowa's farm pond country. Thousands of these privately-owned ponds are stocked with largemouth bass and bluegills. Fishermen are encouraged to obtain permission from the owner, however, before using a pond.

Rather than traveling this southern-most route, one can leave Davenport by way of Interstate 80. This route through Iowa City, Toledo, Cedar Rapids, and Maquoketa to Bellevue offers access to some of the finest river fishing in the state. Channel catfish highlight the action on the Iowa, Cedar, Wapsipinicon and Maquoketa Rivers. The Cedar offers fine walleye fishing below the dam in Cedar Rapids, and the Wapsipinicon River is a fine smallmouth bass stream.

From Bellevue north, the Mississippi River is a fisherman's paradise. Walleyes, channel catfish, crappies, bluegills and bass abound in the waters of this great river. An added attraction is the National Aquarium at Guttenberg.

The fisherman looking for variety can not overlook the fine smallmouth bass and trout waters along the Hiawatha Trail from Bellevue to Decorah. Streams such as Mill and Little Mill Creeks near Bellevue, Buck Creek near Garrettsville, Bloody Run near Marquette, and Big Paint and Little Paint Creeks in the Yellow River State Forest harbor the wily trout. The Upper Iowa River near Decorah is the best smallmouth bass stream in the state.

For those fishermen with a little more time, a float trip on one of the rivers along the way can provide added enjoyment and fishing success.

Traveling west from Decorah the fisherman might try smallmouth bass fishing in the Turl River at Spillville or catfishing the Cedar River at Nashua. Another option is to enjoy the scenery and follow the trail to Clear Lake.

This natural lake of over 3,000 acres is noted for yellow bass and walleye fishing. Travelers and fishermen are invited to visit the State Fish Hatchery and Aquarium located on the north shore of Clear Lake.

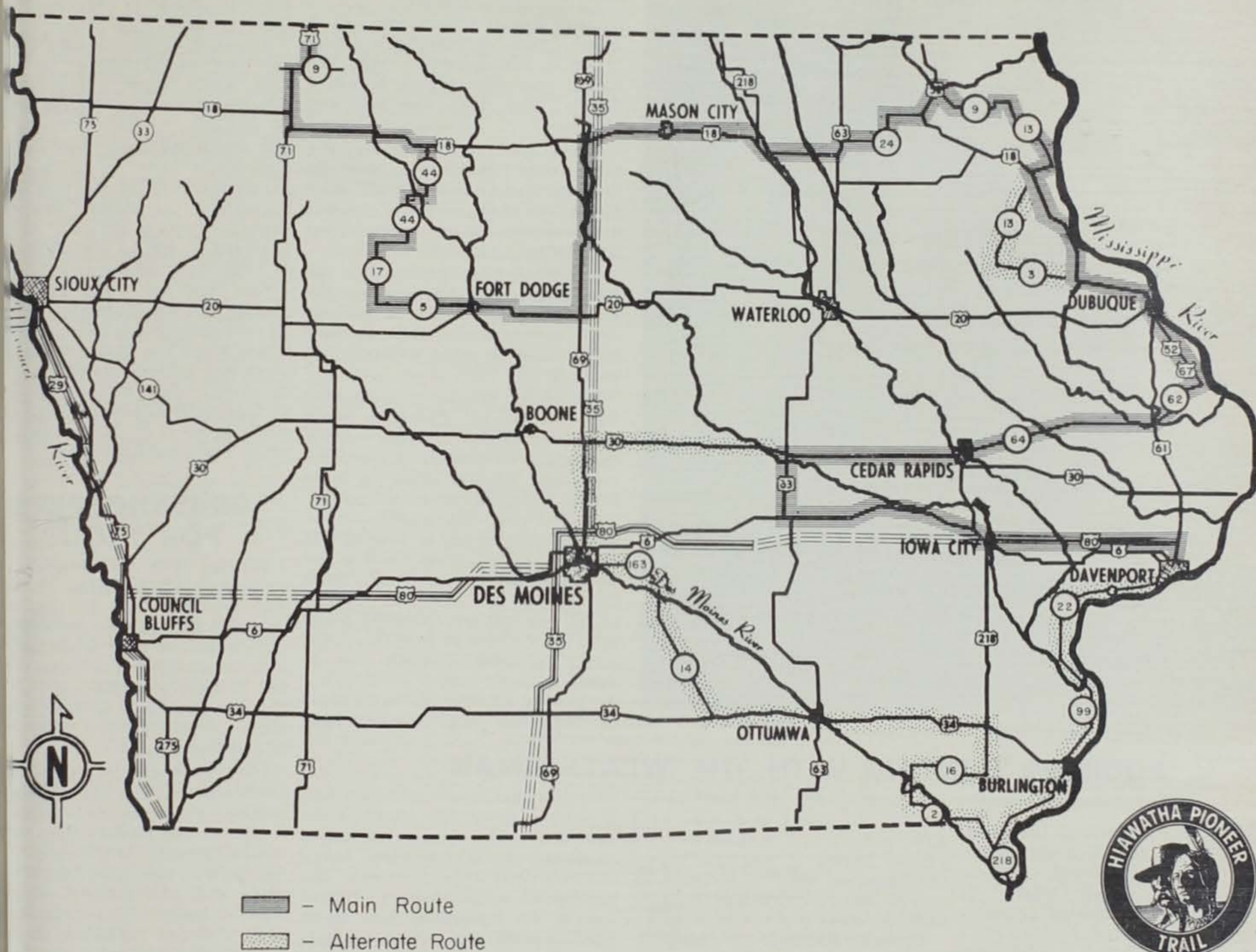
South and west of Clear Lake intersecting highways 69 and 1 is the Iowa River at Belmond, Boone River at Webster City, the Des Moines River at Fort Dodge. In these streams the channel catfish is king.

From Fort Dodge the Hiawatha Pioneer Trail leads the fisherman to the Iowa Great Lakes area. Vandalia, the only blue water lake in the state, features excellent smallmouth bass fishing. Northern pike, yellow perch, walleyes and muskies are also abundant in the Spirit Lake and the numerous smaller lakes.

Just north of Spirit Lake, the Hiawatha Pioneer Trail ends its meandering journey through Iowa. Somewhere along its scenic route is fishing to suit you.



THE HIAWATHA PIONEER TRAIL



Guide to Fishing Along the Hiawatha Pioneer Trail

Vicinity	Lake or stream	Fish	Vicinity	Lake or stream	Fish
Port Port Port	Lock and Dam No. 14 Lock and Dam No. 15 Lock and Dam No. 16	Walleye, panfish Walleye, panfish Walleye, catfish (below dam) Largemouth bass, panfish (backwaters)	Guttenberg Guttenberg	Turkey River Lock and Dam No. 10	Catfish, smallmouth bass Walleye, catfish, panfish (below dam) Largemouth bass, panfish (backwaters)
lo lo boro	Lake Odessa Iowa River Lock and Dam No. 17	Largemouth bass, panfish Catfish Walleye, catfish (below dam) Largemouth bass, panfish (backwaters)	Garnaville Edgewood Strawberry Point Strawberry Point Strawberry Point Mederville Elkader Elkader	Buck Creek Elk Creek Maquoketa River Richmond Springs Kleinlein Creek Volga River Turkey River Big Springs Trout Hatchery (Turkey River)	Trout Trout Trout Trout Trout Smallmouth bass, catfish Smallmouth bass, catfish Trout
ngton	Lock and Dam No. 18	Largemouth bass, panfish (backwaters) Walleye, catfish (below dam) Largemouth bass, panfish (backwaters)	Marquette Marquette Harpers Ferry	Bloody Run Creek Yellow River Lock and Dam No. 9	Trout Smallmouth bass Walleye, catfish, panfish (below dam) Largemouth bass, panfish (backwaters)
ngton Madison k	Lake Geode Skunk River Chatfield Lake Lock and Dam No. 19	Largemouth bass, panfish Catfish Largemouth bass, panfish Walleye, catfish (below dam) Largemouth bass, panfish (backwaters)	Yellow River State Forest	Pig Paint-Little Paint Creeks	Trout
nk ngton uqua nd Mills awa	Des Moines River Des Moines River Des Moines River Skunk River Des Moines River City Reservoirs Des Moines River Iowa River Cedar River Iowa River Coralville Reservoir Iowa River Iowa River Iowa Lake Cedar River Wapsipinicon River	Catfish Catfish Catfish Catfish Catfish Largemouth bass, panfish Catfish Catfish Catfish, walleye, smallmouth bass Catfish, panfish Catfish, largemouth bass, panfish Catfish Largemouth bass, panfish Catfish, panfish Catfish, smallmouth bass, walleye, panfish	Decorah Spillville Fort Atkinson Nashua Nora Springs Clear Lake	Upper Iowa River Turkey River Turkey River Cedar River Shellrock River Clear Lake	Smallmouth bass, catfish Smallmouth bass Smallmouth bass Catfish, walleye, panfish (below dam) Catfish, smallmouth bass Walleye, largemouth bass, catfish, panfish, yellow bass, bullheads
loines alltown ster City City Colonies go a Rapids osa	Maquoketa River Lock and Dam No. 12 Big Mill- Little Mill Creeks Lock and Dam No. 11	Catfish, smallmouth bass, panfish Walleye, catfish, panfish (below dam) Largemouth bass, panfish (backwaters) Trout Walleye, catfish, panfish (below dam) Largemouth bass, panfish (backwaters)	Belmond Webster City Fort Dodge Manson	Iowa River Boone River Des Moines River North Twin Lake	Catfish, northern pike Catfish, smallmouth bass, (below dam) Catfish, walleye, smallmouth bass Walleye, largemouth bass, panfish, yellow bass, bullheads
ketta ue ue ue			Emmetsburg	Five-Island Lake	Northern pike, largemouth bass, panfish bullheads
			Ruthven Arnolds Park	Lost Island Lake West Okoboji	Bullheads, panfish, walleye Walleye, largemouth bass, smallmouth bass, yellow perch, panfish
			Spirit Lake Spirit Lake	East Okoboji Spirit Lake	Walleye, panfish, yellow perch Walleye, northern pike, white bass, panfish, yellow perch, bullheads



Iowa hunters harvested 1,440,000 bushy tails last year.

George Tovey Photo

SQUIRREL HUNTING WITH THE WEATHERMAN

Ron Schara

September 12 marks the opening of Iowa's 1964 squirrel season. Iowa sharpshooters will again be scanning the forest ceiling in search for that "master of invisibility," the squirrel.

A prime prerequisite for successful hunting is knowledge of the animal hunted. In nature, all wild creatures, big and small, have scores of their own peculiar habits. Knowing as many habits as possible adds a new element of satisfaction in your hunting.

Hunting in the fall months gives the hunter two advantages. First, the year's highest population of squirrels occurs in the fall. This is, of course, due to recent production occurring in early summer. Secondly, squirrel activity is greatest in fall months.

Activity is the key word in squirrel hunting. Only when squirrels are active are your chances good for hunting success. If the weather is bad (for squirrels) or the time of day is wrong (for squirrels) then you might as well stay home and shine your gun.

The in-born habit of caching food for winter keeps squirrels active throughout the fall. This doesn't mean squirrels store food 24 hours a day. A squirrel is diurnal, that is it is only active in daylight hours.

Active Periods

Studies have shown that squirrels,

in autumn were most active during the hours of 6 a.m. to 9 a.m., and from 11 a.m. to 12 noon (Hicks 1949). It was also shown that greatest squirrel activity occurred at temperatures ranging between 40-49 degrees Fahrenheit.

Probably the most influential environmental factor affecting squirrel activity is wind velocity. According to Hicks (1949), activity was greatest during winds of two miles per hour. Activity was least in winds over nine miles per hour. It was also found that light rains, drizzles and mists were moderate in their affect on activity.

There is a great deal to know about the curious tree acrobat; the best way to learn is by experience.

Squirrels are, of course, found in wooded areas. Their home is the timber; and as anyone who has seen a squirrel race through the tree tops can testify, a squirrel knows every crotch, twig, hole and branch in his area.

Squirrel Homes

Squirrels use two different types of "homes." One type is leaf nest, the other is a den tree. The leaf nest is composed of twigs and leaves; and is usually built during the summer. They use the leaf nest primarily for loafing spots and quick protection from enemies. Young squirrels are usually raised in den trees because of the better protection afforded there.

One lesson to keep in mind when

OPERATION ARCHERY CHECK

Ron Schara

"My string broke just as I shot." "Did you ever have a bow break in your hands?" "Half the season was over before I saw a deer." "The light was bad and I missed."

Every year, comments like these come from bowhunters. Much of the agony that comes from situations like these, could be avoided if the archer did some pre-season preparation.

The bow, that you've had for three years, should be checked for slight cracks, warping or general worn condition. A bow breaking in the face is not a pleasant experience.

An archer shoots no straighter than his arrows. Check to make sure your arrows haven't warped during the off-season. Also, check for slight cracks, chips or loose nocks. They can all mean trouble.

Of all the equipment to be checked, the string is a must. It receives the most wear and is the weakest part of the bow. Check the string for wear or fraying at the bow tips and knocking point. It is a good idea to carry an extra string on hunting trips, just in case.

There would be no excuse for missing your target in bad light

if an archer would practice under the conditions met while hunting. If you use a tree stand, practice from trees or elevated areas. your shooting in timber, early morning or evening hours.

A smart hunter usually checks the area to be hunted at least twice before opening day. Consequently, the hunter knows where he is going, where the trails are and where the food sites such as corn fields are. An archer knows his area usually sees game throughout the season. The most important rule in choosing an area is to BE SURE to ask permission to hunt from landowners.

Last but not least, know animal you are hunting. Find an area to hunt can be much easier if you know the likes and dislikes and movements of game. an archer, you've placed yourself at a great disadvantage; the best you can do is to be prepared for that "one-a-season" shot.

GRASSHOPPERS FOR TROUT

Fishing with grasshoppers can be a worthwhile method of catching the wary lunkers that have outfoxed the summer fisherman.

This time of year, when the seasonal trout fisherman drops his rod in favor of a gun and the season for picnickers is over, excitement for the fall trout fisherman is just beginning.

His fun begins with the grasshopper. The old problem of catching grasshoppers is much easier in the fall months than during summer's heat. In the early morning hours, the grasshoppers come stiff and groggy from night's cooler temperatures. Their stiffened condition, they are picked off the grass and buried as one would pick raspberries. A better collect your day's supply however; for as the sun begins its upward journey, grasshoppers resume their naughty habit of jumping just before you grab.

With grasshoppers in hand, can be fished on the water surface like a dry fly or below the surface like a wet fly. Most fishermen use a size 14 or 16 hook and hook insect underneath the "cock" making sure to bury the hook in the body of the grasshopper. you have a good supply of "pers," it is wise to use a fresh one at different intervals. The pling and wiggling a live grasshopper performs, whether dry or wet, can entice the nonchalant trout.

Insects provide approximately 10 percent of a trout's diet. Fishing with grasshoppers places the odds in your favor.—R.S.

The Rocky Mountain sheep, commonly known as the bighorn, probably the most sure-footed of all animals for his hoofs are and sharp-edged, and conceal the bottom.

APPING—

(Continued from page 67)

ings, the chains, and the drag. sure that the traps are firmly ided, so that they will not tip ler an animal's weight. Place around the jaws, using care t no dirt collects under the pan. ce the 5-inch by 7-inch pan h over the pan and under the s of each trap. A slit in one of the pan cloth permits the rger to be free of the cloth, and res positive operation when the is depressed.

he next step is to cover the ire set with fine dry earth, ng the sifter. This is smothered r with a small twig; and when pleted, the traps should be ered with not over 1/2-inch of ed dirt. If the dirt from the ach is not suitable, it may be essary to remove this dirt from area and bring more good dirt using the ground cloth for both rations and using care to leave e sign in the vicinity. It is l to collect a quantity of dry h during early fall so that it be on hand for the winter's oping.

The scent post itself may be a nk of rotten wood, fox drop- gs, or dry cow or horse ma- e. Either is good, if it is rotten dry so that it will absorb and l the scent. This is placed be- en the traps, and about ten os of scent is placed upon it. n, after a careful check to see no sign has been left, the ted set may be left to do its k. Additional scent is added y other day."

Dirt Hole Set

ne of the most successful fox over a long period of time has i the dirt hole bait set. Only No. 2 fox trap attached to a e is required.

his set is made adjacent to a p of grass, low stump or other ct that will force the fox to oach the bait hole on the side re the trap is located.

n area of soil approximately nches across and 2-inches deep aded up with a trowel. The e is driven in the center of spot so that it is flush with the bottom of the excavation. The hole is dug at the edge of the vation adjacent to the clumps rass. This hole is approxi- ly 5-inches deep and 2-inches ss. The trap is then set and ed so that the pan is 6-inches ont of the bait hole and is so ed that the hinges of the trap in line with the bait hole. pan of the trap is covered a cloth and the traps cov- with sifted dry dirt. The com- ed set should appear as much ssible as a place that a fox or r wild animal had actually ed something there.

Predators Not All Bad

edation by foxes and coyotes important proof of the bal- of nature. Remember that all and all coyotes are not bad are beneficial to man through

DOES YOUR SHOTGUN FIT?

Jack Kirstein

After knocking down his limit of pheasants, the old man with the ancient pump gun turned and grinned.

"Cain't shoot a gun that don't fit," he said. "If she's a fitter, she's a hitter!"

Apparently, for the old man, his rusty-tubed shooting iron was a fitter. What about you? Is your shotgun right for you? Does it fit?

Bob Allen, the Iowa member of the match-winning four-man U. S. team at the 1951 World's Championship in Monte Carlo gives us these important tips:

A shotgun has two sights, just the same as a rifle. To shoot a rifle, you merely line up the two sights and squeeze-off. The same thing applies to shotguns, however, the rear sight of the shotgun is the pupil of your eye.

You wouldn't shoot a rifle with a wobbly rear sight, so it is important that your eye lines up on the shotgun exactly the same for each shot. Fit of the gun governs this, and more specifically, the placement of your cheekbone on the comb of the stock.

Check Yourself

To check your own gun, stand in front of a mirror, close your eyes, throw the gun to your shoulder with your cheek tight to the comb, and aim blind at a point directly in front of you in the mirror.

Now open your eyes, and look down the reflected image of the barrel in the mirror into your own eyes.

Do this a number of times; and if you find that your eye is consistently to one side or the other, then the thinness or the thickness of the comb must be altered to fit you.

If your eye is too low and you find yourself looking at the back of the receiver, you must raise the comb. If your eye is too high and you are seeing the front foot or so of the barrel, you must lower the comb.

Raising and fattening the comb can be done by adding a lace-on comb pad, using one of the commercial self-adhering comb pads, or by building it up with plastic wood, adhesive tape and padding,

their rodent control, and may create stronger populations of game birds and animals by preying on the weaker specimens. In addition, many more days of recreation are provided Iowa sportsmen in hunting and trapping these "var-mints." It is hoped that the information in this article might assist a farmer in removing an individual predator which is causing losses to livestock or poultry and that it might aid a sportsman or trapper to enjoy additional outdoor recreation provided by fox and coyote trapping.

gluing on a wider or thicker comb, or many other methods.

Lowering or thinning the comb can usually be done by sanding.

Measuring "Pull"

One error in fitting a shotgun is measuring the "pull" or stock length of the gun by measuring from the crook of your elbow to the first pad of your trigger finger.

Do it if you must, but remember the gun is not used in this position and you will learn little if anything by such an exercise.

Pull or stock length is actually governed by the length of your neck. This applies to fit in the cheek-down gun-to-shoulder position. In this position, the length of the stock is most nearly correct when the distance from your nose to the knuckle of your thumb resting over the top of the stock is between an inch to an inch-and-a-half. A stock should be long enough to keep you from hanging your nose with that thumb knuckle and yet short enough to permit swinging the gun quickly and easily to your shoulder.

Measuring the nose-to-knuckle distance is the sure way of doing this.

If the distance is too great, sawing off the stock butt is necessary. If too short, you can try adding a recoil pad which will lengthen the stock and reduce the jolt at the same time.

Measuring Pitch

While working on fit at the butt-end of the stock, you can check pitch by standing your gun, trigger out and butt flat on the floor,

in a nearly square doorway or against a wall.

Measuring at the choke end of the barrel from the center of the bore to the wall or doorway gives you the pitch.

If the barrel stands out from the wall, you have down-pitch. If it touches the wall you have zero pitch. About one and a half inch down-pitch is preferable for the average man. The purpose of pitch is to make sure the stock comes up onto your shoulder easily and stays there when you place your cheek down to the comb.

Pitch is governed mostly by the shape of your shoulder. A big, fat man with rounding chest would presumably take more down-pitch than the skinny flat-chested fellow who might want zero pitch.

There are many other refinements for the advanced shooter to consider in getting his gun to fit, such as balance, grip, etc.; but if you can master-fit yourself on these first important points, your gun will be more of a "fitter" and therefore more of a "hitter."—Reprinted by request, Iowa Conservationist, November, 1962.

ATTENTION! Hunter Safety Instructors

Hunting Safety Instructors are reminded to renew their Instructor's credential cards. The old card expired June 30, 1964. The credential card can be renewed by writing the State Conservation Commission, East 7th and Court, Des Moines, Iowa.



HUNTING PROSPECTS—

(Continued from page 65)

Iowa, being an agriculture state, has approximately 97 per cent of its land privately owned. Close cooperation between the Iowa sportsmen and the Iowa farmer is a prerequisite for continual enjoyment of the fine sport of hunting.

For 1964, here briefly is the status of the various game seasons which are now established:

PHEASANTS:

The Ringneck pheasant is the No. 1 game species sought by the Iowa hunter. Prior to the 1963 pheasant season we looked to the year 1958 as being Iowa's banner pheasant season. In 1958, 1,548,500 birds were taken, and the average pheasant hunter in Iowa made four trips to the field in search of the wary ringneck. Due to the tremendous increase in the pheasant population in 1963, the longest pheasant season in Iowa was established. Results of that season show that Iowans enjoyed the largest pheasant season, both in bag and in days hunted. In 1963, 1,874,500 birds were bagged, and the average hunter made five and one-half trips to the field.

One-fifth of the trips and 20 per cent of the total kill were made in the 12 day extended period. The surpluses were there. The hunters were there, and they were allowed to enjoy a fine sport without a detrimental effect to the brood stock.

The prospects for the 1964-65 season indicate that hunters can enjoy equal or better hunting than they enjoyed in the 1963 season. The counts indicate that the hen index in 1964 was 11 percent higher than in 1963. Pheasants noted on the roadside counts increased 20 percent over 1963. Surveys showed there were fewer roosters recorded; but the number of hens sighted per mile increased 44 percent. In general the 1964 pheasant season population was up substantially from 1963. The pheasant season in Iowa opens November 7, 1964, and ends January 3, 1965, both dates inclusive. Shooting hours are from 8:30 a.m. to 5:00 p.m. Bag limit, three cock birds, possession limit nine cock birds. Hunting is permitted state-wide, except an area south of State Highway 92 from Muscatine to Knoxville, and east of State Highway 60 from Knoxville to the Missouri line. It was felt in choosing the closed area, a highway boundary was more significant in establishing a definite line, than were the county boundaries as had previously been established.

QUAIL:

Iowans can look forward to one of the best quail hunting seasons in years. The state-wide whistle count this year increased 78 percent over 1963. The state-wide sight count of quail increased 96 percent over 1963. In view of increased reproduction success, the 1964 quail season was liberalized to allow the Iowa sportsman to har-

vest the greater surplus which will be available. The quail season opens October 31, and extends through January 3, both dates inclusive. The hours are from 8:30 a.m. to 5:00 p.m. The bag limit is eight birds with a possession limit of 16 birds. The open season on quail in Iowa was extended to state-wide this year, following the review of the censuses which had been conducted for the past ten years in northeastern Iowa. The results of these censuses indicate that the quail population in northeastern Iowa varied directly with the environmental conditions from year to year. The years of favorable environmental conditions indicated higher quail populations. There are many isolated quail populations in northern Iowa and to allow the Iowa hunter to harvest the surplus in these isolated areas, the season has been extended state-wide.

RABBITS:

The cottontail rabbit population is again on the increase. Iowans last year harvested 2,100,000 rabbits. Favorable winter conditions are the primary factors in bringing about an increase in the rabbit population. Many Iowa hunters are not taking advantage of the fine rabbit hunting which is available early in Iowa. Many people are of the impression there must be snow on the ground before rabbit hunting can begin. In reality a greater portion of the rabbit population is available to the Iowa hunter early, than is available later in the season. The toll of nature's environmental conditions play an important part in reducing rabbit populations. The rabbit season opens September 12 and extends through February 21, both dates inclusive. The hunting is permitted state-wide from 6:00 a.m. to 6:00 p.m. with a bag limit of ten, and no possession limit. The highest population areas for rabbits are in 1. south-central, 2. western Iowa, 3. north-central, and 4. eastern Iowa, respectively. The cottontail rabbit is a major game species with state-wide distribution. Hunting pressure for the cottontail rabbit should be increased during the early part of the season to enjoy a greater portion of the surplus which is available at that time.

SQUIRREL:

The 1964 prospects for squirrel hunting in Iowa are up over 1963. Iowans harvested 1,440,000 grey and fox squirrels in Iowa during the 1963 season. It is anticipated from the survey records, that a greater portion of squirrels could be harvested this year. The squirrel season in Iowa extends from September 12 to the Friday before deer season opens. A bag limit of six and a possession limit of 12 squirrels are allowed. Survey records indicate that hunters are under-harvesting the grey and fox squirrels. All too often squir-

rel hunting is forgotten when other seasons open. This is a fine game species and most certainly the surplus should be enjoyed by Iowa sportsmen.

DEER:

Iowa's deer herd increased again this year. Surveys indicate a fall population estimate of 36,694 deer. This is the highest fall deer population on record. Consequently 4,000 additional gun permits will be issued, or 16,000 in all. In addition to the increase in permits, a change has been made in the zoning for deer hunting. It is hoped to encourage the hunting of deer in the higher population areas. In view of these higher population areas, the zones have been established as two-day and four-day zones. The two-day and four-day zones have been based upon public highways rather than county lines. It is felt that the delineation of zones by public highways is a greater help to the Iowa deer hunter than was the county zoning. County lines are often hard to determine in dense timber.

Make Arrangements Early

Make arrangements now with your farmer friends for hunting privileges on their land. Your local Conservation Officer may be contacted for information regarding the prospects on public shooting areas in his territory. A booklet is available from the State Conservation Commission listing the various game management areas throughout Iowa which are open for hunting. In the event you are interested in hunting on a public game management area, please address your request to the Iowa Conservation Commission for the Public Hunting Access booklet.

We are looking forward to one of the best hunting seasons in recent years. Don't forget your license and duck stamp; and remember game surpluses cannot be stock-piled. The planning you do now will make a much more enjoyable hunting season.

DID YOU KNOW?

Sea birds are known to drink salt water in preference to fresh. Land birds, however, need fresh water.

* * *

The ptarmigan's color changes with the seasons. In winter they're white, except for eyes, bills and claws, which are black. In summer, their backs and wings are grayish brown.

* * *

The mud minnow can survive freezing in ice during winter, reviving when the spring thaw comes.

* * *

The shrew eats the equivalent of its own weight every three hours.

* * *

The ocelot gets its name from the Latin "ocellus" meaning a small eye. This refers to the animal's being marked with small spots or "eyes."

World's Championship Goose Calling Contest

The 14th Annual World's Championship Goose Calling Contest will take place in the City Park, Missouri Valley, Iowa, on September 26 and 27.

The community sponsored event located in the heart of the go flyways, will include a mammal parade, a sport show, dog retrieving act, shooting exhibition, other outdoor recreation events.

The junior events and eliminations in the senior class will take place on Saturday, September 26, with the senior finals the following day.

The event attracts the top-notch goose callers from states along flyways. Contestants from Arkansas, Louisiana, South Dakota, Missouri, Nebraska, and Iowa have entered. Lyle Leth of St. Paul, Nebraska, is the defending senior champion.

The major prize is a \$1,000 U.S. Savings Bond donated each year by W. A. Schemmer of Logan, Iowa. Trophies and valuable sporting goods items are presented to the runners-up.

Entry blanks may be obtained by writing Harold Alger, Missouri Valley, Iowa.

CONSERVATION CONFERENCE DATE ANNOUNCED**Hugh Kent**

The Fall Conservation Conference for Teachers will be October 9-10, at the State Camp near Luther, Iowa. The theme of this year's conference is "Effective Conservation Teaching—How to Do It." 75-100 teachers from all parts of Iowa are expected to attend.

Sherry R. Fisher, Chairman of the State Conservation Commission, will speak to the conference Friday evening. Conference notes will be Paul F. Johnson, State Superintendent of Public Instruction.

Three concurrent sessions will be held Friday afternoon during which selected teachers will learn techniques for teaching conservation in classrooms and door laboratories. Geology ecology field trips will be held Saturday morning to illustrate door teaching.

Reservations for the conference are being accepted by Mr. Charles Ballantyne, Extension Soil Conservationist, Iowa State University, Ames.

The conference is sponsored by the Iowa Conservation Education Council, the State Conservation Commission, Iowa Department of Public Instruction, with the Conservation districts of Iowa operating.