



Beavers create their own habitat and in so doing develop an environment that is attractive to other furbearers and waterfowl.

Jack Kirstein photo

IOWA FUR TRAPPING

Tom Berkley
Dist. Game Manager

Although there are 12 furbearing mammals in Iowa having market value, only seven of them are currently in vogue with fashion designers. These are raccoon, muskrat, mink, red fox, civit, coyote and beaver. Last seasons demand for these critters placed an average dollar value that ranged from a low of \$1.02 per muskrat pelt to a high of \$8.73 per mink pelt. The following material is intended to assist the beginning trapper and sportsmen in taking and caring for some of these furbearers.

Mink

Mink are almost as difficult to trap as either fox or coyote. Considerable care must be taken so that traps are clean and well concealed, and that as little human sign as possible be left in the vicinity of the sets. Three sets that have proven to be effective will be described.

When tracts indicate that mink are traveling on land, or across a sand bar, regular dirt hole bait sets are very effective. A fresh chunk of rabbit, muskrat or fish should be used for bait. As mink are not attracted by rotten baits, baits should be replaced every three days. Mink scents are available from commercial outfits and may be used with the bait hole sets.

Mink are often found near springs or farm tile outlets and often use such small streams as travel lanes. Traps should be placed in these small streams in such a manner that the animal will be forced to travel across the trap pan. Look for spots where the stream narrows, or create a narrow travel lane through which the animal must travel. This is done by placing sticks in the stream, leaving a narrow passage in the middle.

Traps are then staked down under one or two inches of water at these spots. Your main concern will be to camouflage the trap. This can be done if the trap has been dyed and is covered by moss or other natural cover.

One of the most effective sets for mink is a bait set made in a cut bank where there is a shelf under water covered by two or three inches of water. A bait hole is dug slanting up hill into the bank for about six inches. The entrance needs to be level with the water line, with half of it above and half below the water. A chunk of fresh bait, either meat or fish, is placed far up the hole, and a trap is concealed under water in front of the entrance.

Other sets include the blind trail set made on travel lanes; cubbys made from rocks with the bait placed in the center and a trap set at each end; and sets worked out for brush piles in which mink might be found. Number 2 traps are recommended for all mink sets as they will kill and thereby reduce losses from ringoffs.

(Continued on page 84)

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CIRCULATION THIS ISSUE 54,471

COMMISSION MINUTES

October 5, 1965
Des Moines, Iowa

LANDS AND WATERS

A report on the Tuttle Lake water level, recreation facilities and history of the area was given by the Superintendent of Waters.

Construction contracts were awarded to Betts and Beers Construction Company of Adair for the reconstruction of Lake Ahquabi spillway at a cost of \$102,247.58 and the reconstruction of Lake Keomah spillway at a cost of \$97,523.10.

A request for a patent on .059 acres of land at Five Island Lake in Emmetsburg was granted to Norman G. Thompson with the stipulation that no cost be incurred to the Conservation Commission.

A request by Fred Wirtjer to construct a lagoon on Black Hawk Lake was denied.

A request by Gilman Randall to lengthen an existing rock dike on the Mississippi River at Guttenberg was denied.

Approval was given for payment for 1.4 additional acres of land on Yeager Slough in Dickinson County at a cost of \$148.60.

FISH AND GAME

Approval was given to change an agreement with Iowa State University on the Cooperative Fishery Unit payments specifying that \$10,000 will be in cash.

A 2.1 acre pond at Eagle Grove was recommended for transfer to that city.

A proposal to trade land from the Dudgeon Lake area to the Vinton Izaak Walton League was made by Harry Rector and Ray Manship and the Commission voted to table the proposal for further study.

A proposal to build a lagoon on West Okoboji Lake which would provide for 62 living units and 80 boat spaces was presented by Fred Weber and Bob Barquist.

Approval for the transfer of a small parcel of land now under license from the Corps of Engineers to the Town of Sabula for construction of sewer plant.

COUNTY CONSERVATION ACTIVITIES

Appanoose County received approval for the acquisition of 1.5 acres of land as a gift located at the north edge of the town of Plano for the use as a picnic and camping area.

Appanoose County received approval for the acquisition of 16 acres of land by a 25 year lease at no cost for the development of an outdoor recreation area for picnicking and camping near Unionville.

Buchanan County received approval for the acquisition of 16 acres of land at the total cost of \$975 to be called the Otter Creek Wildlife Area for the purpose of preserving wildlife habitat near Hazelton.

Cerro Gordo County received approval for the acquisition of 33.23 acres of land at a total cost of \$6 832 as an addition to the county owned Shell Rock River access area.

Cerro Gordo County received approval for the acquisition of 41.8 acres of land at a total cost of \$7,656.48 as an addition to the Wilkinson County Park.

Clay County received approval for the acquisition of 3 acres of land at a total cost of \$1,000 for the development of a highway safety rest area and fishing access to the Little Sioux River on Highway 10.

Humboldt County received approval for the acquisition of 78 acres of land at a total cost of \$19,750 called Joe Sheldon Park for the purpose of developing a county park on the high bluff located on the south side of the Humboldt-Des Moines River impoundment.

O'Brien County received approval for the acquisition of 100 acres of land at a total cost of \$17,500 located approximately three miles southeast of the town of Sutherland for the purpose of developing a multiple use outdoor recreation area surrounding an artificial lake.

O'Brien County received approval for the acquisition of 1 acre of land at no cost for the development of a picnic area in the central part of the county at the north edge of the town of Gaza.

Sac County received approval for the acquisition of 27.9 acres of land at a total cost of \$3,487.50 for the purpose of preserving an excellent piece of hardwood timber located 2 miles northwest of the town of Sac City.

Shelby County received approval for the acquisition of 80 acres of land at a cost of \$10,000 called Mill Creek Park; this area includes an excellent stand of hardwood timber, an 11 acre pond and will be used as a multiple use outdoor recreational area.

Story County received approval for the acquisition of 55.92 acres of land at a total cost of \$24,200 as an addition to Hickory Grove Park.

Winneshiek County received ap-

Conservation Forum

Dear Editor:

I would like to make a suggestion for the IOWA CONSERVATIONIST. Feature each of the state parks with a one sheet part of the COMMISSION MINUTES. This could get a detailed map on one side and descriptive material on the other. As an alternative, if a booklet such as this were prepared, I am sure there would be quite a market for it.

R. D. J.
Cedar Rapids

Such booklets have already been prepared for thirty-one of the major state parks. These are available at check in stations at many of the parks. They may also be obtained by writing to the Public Relations Section, State Conservation Commission, East 7th & Court Avenue, Des Moines, Iowa 50308. All requests should contain the names of specific parks in which you have an interest. A copy of "Iowa's State Owned Recreation Areas" is mailed to those who want information on all the parks.—Ed.

Dear Editor:

I am a resident of North Dakota but will be attending Iowa State University this fall. I would like to know if I must buy a non-resident hunting license to enable me to hunt upland game birds in Iowa, or do I have a special non-resident student license I would need to buy? What license will I need and how much will it cost?

J. T. S.
Turtle Lake, North Dakota

An individual that has resided in the State of Iowa for a period of thirty (30) days is classed as a resident for the purpose of purchasing hunting and fishing licenses. If you reside at Iowa State for thirty days you can purchase a resident hunting license at a cost of \$2.50.—Ed.

Dear Editor:

Would you please inform me if it is in violation of the laws of Iowa to fish with an electric or electronic device (Fish lure). This device is no way, shape or form, catches, stuns, stupefies, injures or kills the fish. It merely attracts the fish by one or more of the following:

1. A minute buzzing sound that operates from 30 to 300 cycles per second.
2. Small light bulb.
3. Granulated fish attractor pellets.

E. S. C.
Mt. Prospect, Ill.

Section 109.76 of the Iowa Code states . . . it shall be unlawful to use any artificial light or electricity in the taking or attempting to take any fish.

As your fish call is a device using electricity and to some extent artificial light, it is the opinion of the Law Section that its use is prohibited by law in the State of Iowa.—Ed.

proval for the acquisition of 23.02 acres of land by a renewable five year lease costing \$15 per year for the development of a picnic and camping area in the vicinity of an existing cave.

Appanoose County received approval for a development plan for the Plano Recreation Area consisting of one and one-half acres of land for picnicking and limited camping use and the existing school building to be used as a community meeting place.

Delaware County received approval for a development plan for Coffin's Grove Park near Manchester to be developed for picnicking and camping.

Winneshiek County received approval for a development plan for Glenwood Cave Park for picnicking and camping use.

Winneshiek County received approval for the acquisition of 126.03 acres of land at a total cost of \$24,639.85 for the purpose of constructing an artificial lake and multiple use outdoor recreation area approximately 2 miles southwest of Calmar.

GENERAL

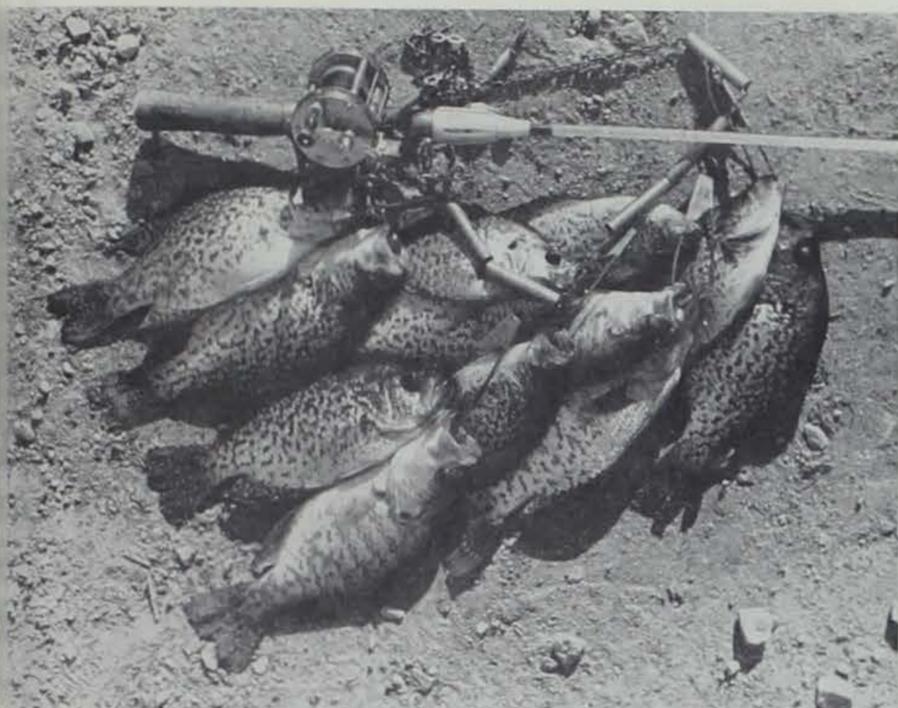
Travel was approved to the Fed-

eral Aid Coordinators Meeting at Omaha; the Missouri River Basin Committee meeting at Kansas City; State Boating Law Administrator's Meeting at Philadelphia; Outdoor Recreation and Planning Meeting at St. Louis; the Pretrial Hearing of the Iowa-Nebraska Boundary Dispute Case at San Francisco.

The purchase of uniforms for Conservation Officers was discussed and the Commission asked that bids on uniforms be obtained.

Information items included Badger Creek Watershed Meeting; Lake Manawa Construction Permit Stipulation on a lagoon design; Dedication of the Indian Village at Sutherland; the Three-Mile Creek Watershed Meeting; a report on the experimental teal season; the Central City Reservoir Project; the handling of checks in the issuing of deer licenses; the use of native animals for the Des Moines Children's Zoo.

The Public Relations Section was granted approval to purchase space and travel to out-of-state sports shows at Omaha, Kansas City, St. Louis, Chicago, Milwaukee and Minneapolis.



Throughout the fall, successful fishermen take advantage of changing water conditions.

FISH GET READY FOR WINTER, TOO

Jim Mayhew
Fisheries Biologist

With the waning of autumn, wild animals seem to sense the approach of winter's isolation. One has only to observe the flocking of birds, marsh animals building dens, or squirrels caching nuts to realize that this is a busy but unstable period of frenzied animal activity. Even man, usually with the prodding of the little woman, busies himself securing his shelter against the rigors of winter. The life scientists term this a reaction to changing environment.

In an aquatic community there are also certain environmental changes occurring with the shortening of daylight. These changes are probably more severe in the aquatic environment than any other form. Likewise the reaction of fish to environmental change is more severe than other animals. This is because the entire metabolic processes of fish life is controlled by environmental physical and chemical factors. All of the so-called "cold-blooded" animals are identical in this manner.

The Changing Environment

Much like the seasonal changing of terrestrial habitat, aquatic habitat also undergoes certain physical and chemical changes with the changing of seasons. Mostly it is just more difficult to observe because of the difficulty in seeing below the surface of the water. Except for scientific study, this is an isolated world.

During the entire summer, the lake was stratified into three separate thermal layers (See IOWA CONSERVATIONIST, April, 1963). This resulted in isothermic stagnation and complete deoxygenation of the hypolimnion (bottom layer). Throughout this period fish in the lake are crowded and crowded into the epilimnion and thermocline (top two layers).

With the coming of autumn and declining atmospheric temperatures, surface water temperatures are also slowly cooled. This changes the density of the shallow water stratum more quickly than the deeper warmer stratum, and becoming heavier simply sinks through the less dense levels. This causes a series of convection currents and reduces thermal resistance to the minimum. Surface temperatures continue cooling and sinking into lower levels until the lake is homothermous at 39.4° F., or at maximum water density. Without thermal resistance a slight breeze is sufficient to mix the water in the lake from surface to bottom. This is called the fall overturn.

Reaction of Fish to Changing Environment

Fall overturn is a very unstable period for fish life. As a result of dissipation of thermal and chemical stratification the environment is expanding daily. For several months the entire fish population was confined to a very small portion of the total volume of the lake. Probably the greatest reaction to this is vigorous and abrupt changes in vertical movement as water temperatures decrease.

Since 1958, detailed studies have been conducted at Red Haw Lake near Chariton to determine the depth location of fish throughout the four seasons of the year. Experimental gill nets were placed in the lakes from late summer until the termination of fall overturn to determine depth distribution of fish life in this period. These nets were marked at two foot intervals so when a fish was caught it could easily be noted what depth the fish occupied. More than 1,650 fish were netted during the study of fall overturn.

The relationship of depth distribution and rapidly changing environmental conditions varied greatly with individual species of fish. Some species, such as bullhead and bluegill, expanded quickly into the freshly

oxygenated hypolimnion, closely following the location of the thermocline as it descended and finally disappeared. Other species closely paralleled the changing water temperatures in different stratum as if they were seeking a certain isotherm. This was particularly true of crappie. During summer stagnation 70 percent of the crappie were found within 9 feet of the surface. In the first fall netting period, September 20, when the lake was stratified from 18 to 26 feet, 85 percent of the crappie were caught above the thermocline with concentrations of fish at the 0-4 and 6-10 foot depth interval. By the next netting period, October 14, the lake was no longer stratified. On this date there was a definite movement of fish toward deeper, warmer strata, with the highest frequency of occurrence at the 0-2 foot, 4-6 foot, and 14-16 foot intervals. On the last netting period during fall overturn, November 14, movement was even more pronounced into the deeper regions, with the greatest concentration of fish at the 16-18 foot interval. During winter stagnation no crappie were found above the 14-foot level.

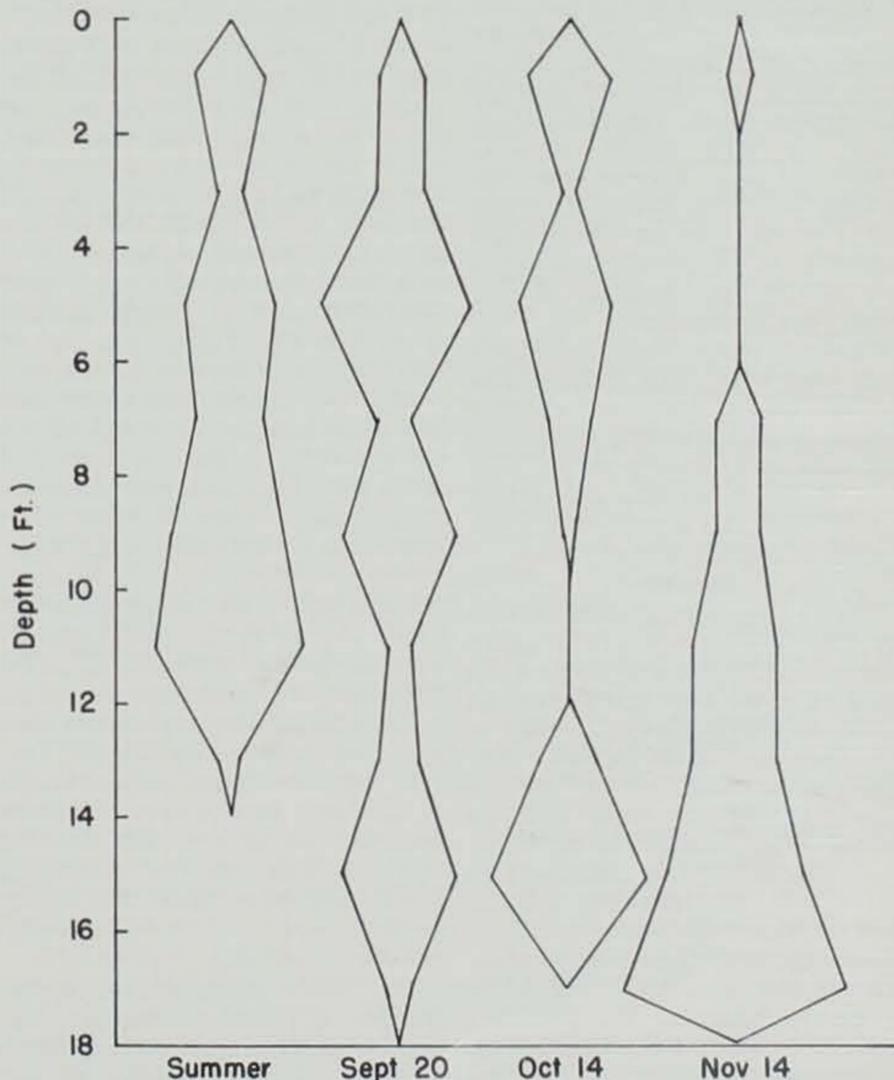
The vertical movements of such species as channel catfish, golden shiner, and bullhead was in the opposite direction, or toward the cooler, shallow water stratum. In the case of bullhead, the first change in vertical location was identical to the crappie, in other words toward the deeper levels, but then in the last netting period they were caught most frequently in the shallow levels. During the winter all bullheads were concentrated within six feet of the surface.

What This Means to Fishermen

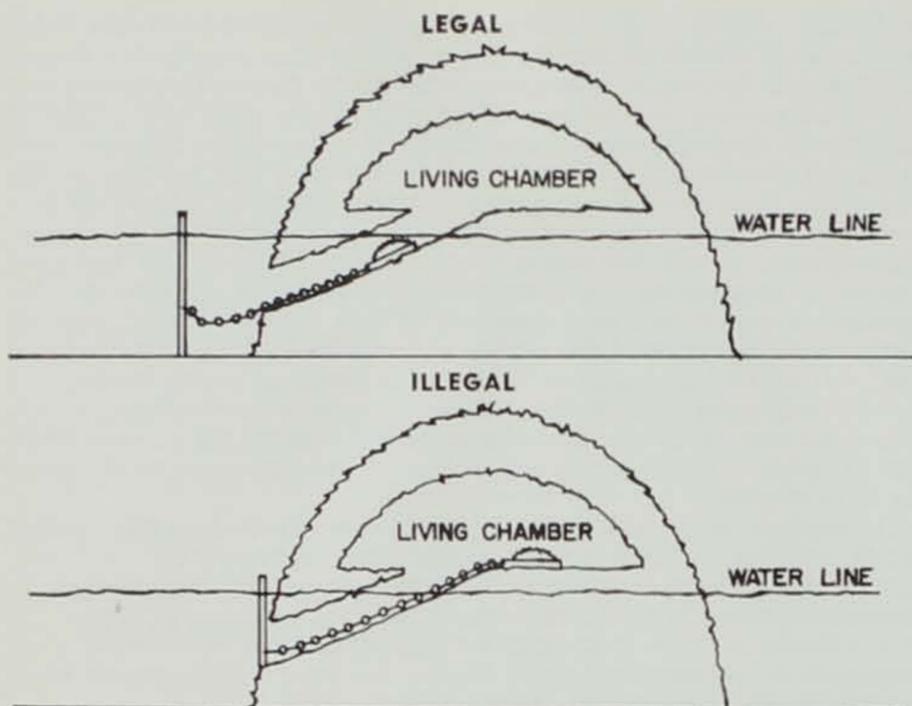
Success, particularly when it comes to fishing, cannot be based wholly upon the fact that one angler is luckier than another. There is little doubt that the term luck is really based on knowledge of fish habits. We could all learn a great lesson from this premise. That is, success does not just happen, rather it is the culmination of constant observation, profit from mistakes, and a desire to understand aquatic communities.

It is obvious from the Red Haw Lake studies that changing environmental conditions have a profound affect on fish, particularly in their vertical movements and depth distribution in relationship to temperature and dissolved oxygen content. Crappie and bullhead seem to be affected to a greater extent than most species. Largemouth bass and bluegill are apparently not affected in depth distribution other than a progressive movement of these species from shallow to deep regions of the lake.

Every angler should be aware of these changes in the depth location of fish and be constantly adjusting the depth at which he fishes.



Graphical Representation Of Crappie Distribution During Fall Overturn



Iowa's Attorney General recently ruled that a trap placed within the entrance of a muskrat house was legal as long as it was beneath the waterline and not within the living chamber.

IOWA FUR TRAPPING—

(Continued from page 81)
Muskrats

Muskrats make up the bulk of fur pelts taken in the state each year and is important to both the farm boy and the professional trapper. Found in nearly every stream and marsh area, rats primarily feed on roots, aquatic vegetation and tender twigs along stream and pond banks. It is easy to locate lanes used by the animal as it leaves the water, or to find logs which he uses to climb out on the bank. It is here that rats may be readily taken. The traps, No. 1½, preferably with the stop loss device, should be staked out in deep water so that the animal will drown when trapped. It is illegal to trap inside muskrat houses, but traps may be effectively used near the house by being placed in the runs as travel lanes leading to and from the houses, or directly in the opening of the house (see illustration.)

Muskrat sized Conibear traps work very well. This trap catches the rat behind the head causing instant death. Animals caught in this trap will usually be in very good condition, as they are unable to fight the trap as they are when caught in regular steel traps.

Beaver

Beaver trappers generally find the Conibear trap to be very efficient. It works very well when trapping operations are carried on under ice and is placed in front of den openings or in a run. The Conibear is designed to catch a beaver behind the head with an impact great enough to cause instant death. If the trapped animal should live following the impact of the trap jaws, drowning follows quickly. This trap is without a doubt the most humane one devised to date.

Almost all sets for beaver should be made at the slides that the animal are using, as sets made on dams and in den entrances will often spook the entire colony and

cause them to leave the immediate area.

Slides are easy to find, as they are the places regularly used by the beavers when leaving and entering the water in search of food. Some slides may be as much as six inches deep from long use.

If one can find a slide that leaves at least three feet of water, a set may be made that will drown any beaver that is taken. Equipment needed for a good drowning set consists of beaver wire (telephone wire or smooth No. 9 wire), a locking device, an anchor, and a pair of traps such as those described.

After locating a good slide above deep water, fasten one end of the running wire to a strong root, or stake it solidly near the spot where the slide enters the water. The wire is then treaded through the hole in the short end of the locking device and an anchor such as a rock, piece of metal, or a sack filled from ten to twenty pounds of sand is fastened to the end of the running wire and tossed into deep water. The two traps are then wired to the long end of the locking device. Set the traps and place them below the slide in about four to eight inches of water. The jaws will be parallel with the direction of the slide. It is not necessary to cover the traps with any thing. However, it might help if the traps have been dulled with dye.

The logic of this set is quite simple. When the steel hits the beaver's foot, he turns and attempts to dive into deep water. When he reaches the end of the running wire in deep water, the locking device prevents his return to the surface and drowning quickly occurs.

Two baits that may assist the trapper in taking beaver are tender twigs of willow, cottonwood, or other succulent vegetation that the beaver might find attractive. Place the bait at one side of the slide just above the water line.



Beaver slides are easy to find and are preferred trapping spots.

Scent that might be used is the beaver castor itself. This gland is found on beaver of either sex, and is located in two greenish white wrinkled musk sacs under the hide near the vent. The castor should not be confused with the oil sacs. The latter, when pressed, yield a yellowish oil. A pair of castors from one beaver will make enough scent for many traps sets.

To make the scent, place the castors from which all flesh and tissue have been removed in a clean glass jar. Then add two ounces of clear glycerine and 2 grains of corrosive sublimate. These materials act both as preservatives and as an anti-freeze for the castor.

Scent is best used on the end of a stick one inch in diameter. First, mash one end of the stick with a hatchet. Then push the mashed end into the beaver castor mixture and twist around. The castor that remains on the stick is sufficient. The stick is stuck in the slide with the treated end sticking about six inches above the water line. This will attract beaver that might otherwise swim past the slide.

In the event of shallow streams, or considerable beaver activity on the banks above sandbars or other shallow areas, beaver may be taken in the described traps by solidly staking the traps and placing them in the water at the bottom of shallow slides. It might be necessary to remove enough river bottom at the trap site so that it may be placed from six to eight inches of water. This permits the beaver to swim over the trap with his front feet, yet be caught by the pushing hind foot.

The No. 44 Blake and Lamb trap will often catch the hind foot of the beaver above the first joint.

This makes it impossible for the animal to wring out to chew his leg off.

When making these shallow water sets, it will be necessary to check the traps as early as possible in the morning, and possibly once during the night. This is the only way to avoid lost animals.

Preparation of Pelts

After spending much effort and time in catching predators and furbearers, Iowa trappers lose from ten to twenty percent of the real cash value of their pelts through careless skinning and preparation. The most common mistakes in handling raw furs are in skinning, stretching, or improper fleshing which results in grease burns.

There are only two methods of skinning and preparing pelts taken in Iowa. These are cased and open handled. And of all animals taken only the beaver should be open handled.

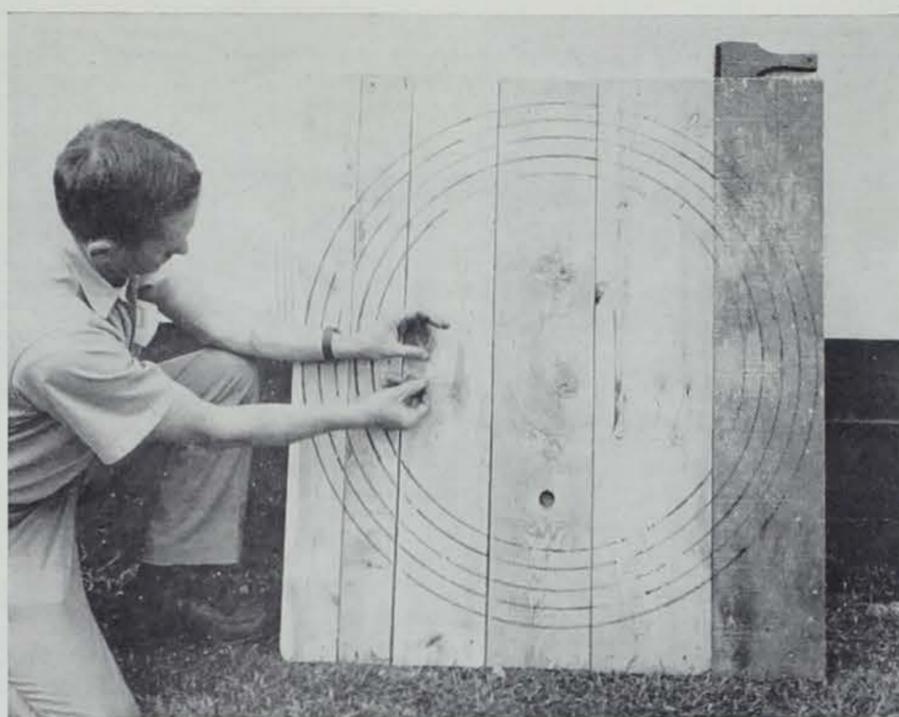
To case the pelt of coyote, fox and mink, remove it from the animal in the following manner. The cut is started in the middle of the foot pad of the hind foot and continue all the way along the back of the leg to the vent. The same is done with the other back leg. Skin each hind foot out by peeling the fur of the leg loose with the fingers and pulling the skin off the foot until the second toe joint is reached. It is quite often necessary to use a knife to remove the fur from the foot and toes. After reaching the second toe joint, cut through it with a knife. The feet will then be skinned out, with the skin retaining only the first toe joint and toenails. It is necessary to remove the feet, as any meat left would cause the fur to rot.

Next, cut around the vent and

(Continued on page 85)



From left to right: skinning, fleshing and tail splitting knives. Each is designed to do an efficient job of preparing pelts.



This beaver stretching board is about 40 inches square. Notice the various sized circles that have been drawn on the board. They act as guidelines in stretching the beaver pelt into the familiar round shape. Number four box nails are used at one inch intervals to secure the pelt to the stretching board.

Jack Kirstein photos

IOWA FUR TRAPPING—

(Continued from page 84)

up the bottom side of the tail for an inch or so until the base of the tail can be worked free. Grasp the naked part of the tail and pull the hide from the tail bone. The tail of fox and mink may be left as skinned; the tail of skunk and raccoon should be split from the base to the tip. An old umbrella rib may be used to insure a straight cut.

Now pull the skin off the carcass toward the head, using the knife when necessary. When the front legs are reached, start to free them from the hide at the body and working the skin off from there down. The skin of the front legs should be split from the elbow to the foot pads to permit the removal of the leg and foot bones of fox and coyotes.

The hide is then worked down to the head. Here use your fingers to expose the base of the ears. With the knife, carefully cut the hide free of the head, using care to cut under the eyelids so that openings are not enlarged. Lips should be cut from the jawbones close to the teeth and should remain attached to the pelt. The hide is completely removed when the cartilage is cut through at the base of the nose.

Surplus meat and fat should then be removed from the hide by using a rounded knife or an ordinary tablespoon. Exercise caution and avoid puncturing the hide. The pelt is then ready for the stretching process.

Other furs that are cased, such as the muskrat and opossum, are handled in much the same manner, the only difference being that the tails and feet should be left on the carcass. To do this, cut the hide at the hair line at both tail and feet.

The beaver is open-handed and

stretched round. A single slit is made from the vent to the top of the lower jaw. The feet and tail are cut from the carcass at the hair-line. The hide is removed with the help of a knife, beaver hide is secured very firmly to the body by muscle and gristle. Therefore, it is often recommended that considerable meat and fat be left on the hide to be fleshed after skinning; and it is generally easier to do a neat fleshing job when there is more meat on the hide to hold on to while fleshing with a dull scraper or spoon. Remember, all possible meat, flesh and grease, must be removed from the hide before stretching.

QUITS HUNTING

Mrs. Myrtle Littleton was getting along in years. She didn't feel as spry as she used to.

So she decided to give up one of her outdoor sports, hunting. That was when she was 82.

Today, Mrs. Littleton goes fishing almost every day the weather is good. On other days she concentrates on a new hobby—painting. Mrs. Littleton is 83 "going on 84."

Wearing a old wide-brimmed straw hat and carrying two fishing rods and a milk carton of night crawlers, Mrs. Littleton hikes from her home to Birdland Lagoon on the Des Moines River, about 15 blocks away and tries her luck fishing.

And she has good luck too. "Caught a couple of bullheads yesterday that went 10 inches," she said.

The elderly woman, whose husband passed away "years ago", said she went hunting until last year.

"I've shot everything from a bolt-action .22 to a double-barreled 12-gauge shotgun to a .30-30 deer rifle", she said, "and was a pretty

The familiar round shape of a pelt comes from stretching, not skinning. The pelt is stretched on a board large enough to handle it, or, it may be done on an inside wall if the temperature is not excessive. It helps to draw a circle on the board a little larger than the pelt to serve as a guide for stretching. Be sure the fur is dry before stretching it, as dampness might cause the fur to mold. Drive four nails through the edge of the head of the pelt about one inch apart. Stretch the pelt lengthwise as tight as possible and drive several tacks along the bottom edge. Then stretch one side of the pelt and tack; then the other side is stretched in as nearly a perfect circle as possible. The hide should be tacked at one inch intervals all the way around. Some of the grease remaining may be removed by scraping after stretching has been completed.

Cased hides may be stretched on wire stretchers purchased from trapping supply houses. Satisfactory ones may be made from boards cut to shape, however. These stretchers should be of various sizes to fit various sizes and kinds of pelts. Stretch pelts only to natural size, as overstretched pelts will be thin and of low quality.

To permit the skin to properly dry, pull the skin over the stretching boards fur side in. Secure all edges with tacks. After drying, the pelts of skunk, muskrat and raccoon are left skin side out. The skins of fox and coyote should be turned fur side out and replaced upon the stretcher when they are partially dried. The skin should still be flexible when it is reversed.

fair shot too. Hunted mostly squirrel and rabbits and could usually outshoot the men.

"But I figured I was getting a little too old to be out tromping around fields, so I decided to stick with fishing," she said.

Mrs. Littleton said she took up "painting by numbers" several years ago to occupy her spare time, then began doing her own oil paintings.

"I do mostly landscapes—you know, mountains, the seashore, cornfields," she said. "I sold two large paintings for \$10 each—one was of a shucked cornfield in the fall. I enjoy painting."

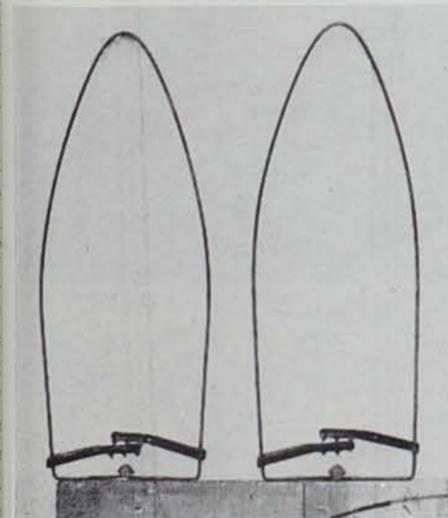
Her advice on staying young? "Not enough people get outdoors. You can't live cooped up all day. People need "fresh air and sunshine," she said.—Reprinted from *Washington, Iowa, Journal*.

The pika, a member of the rabbit family, is one of the few mammals rugged enough to spend its entire life in the high, barren mountains of western America.

The badger's long claws provide its most important means of defense and securing food.



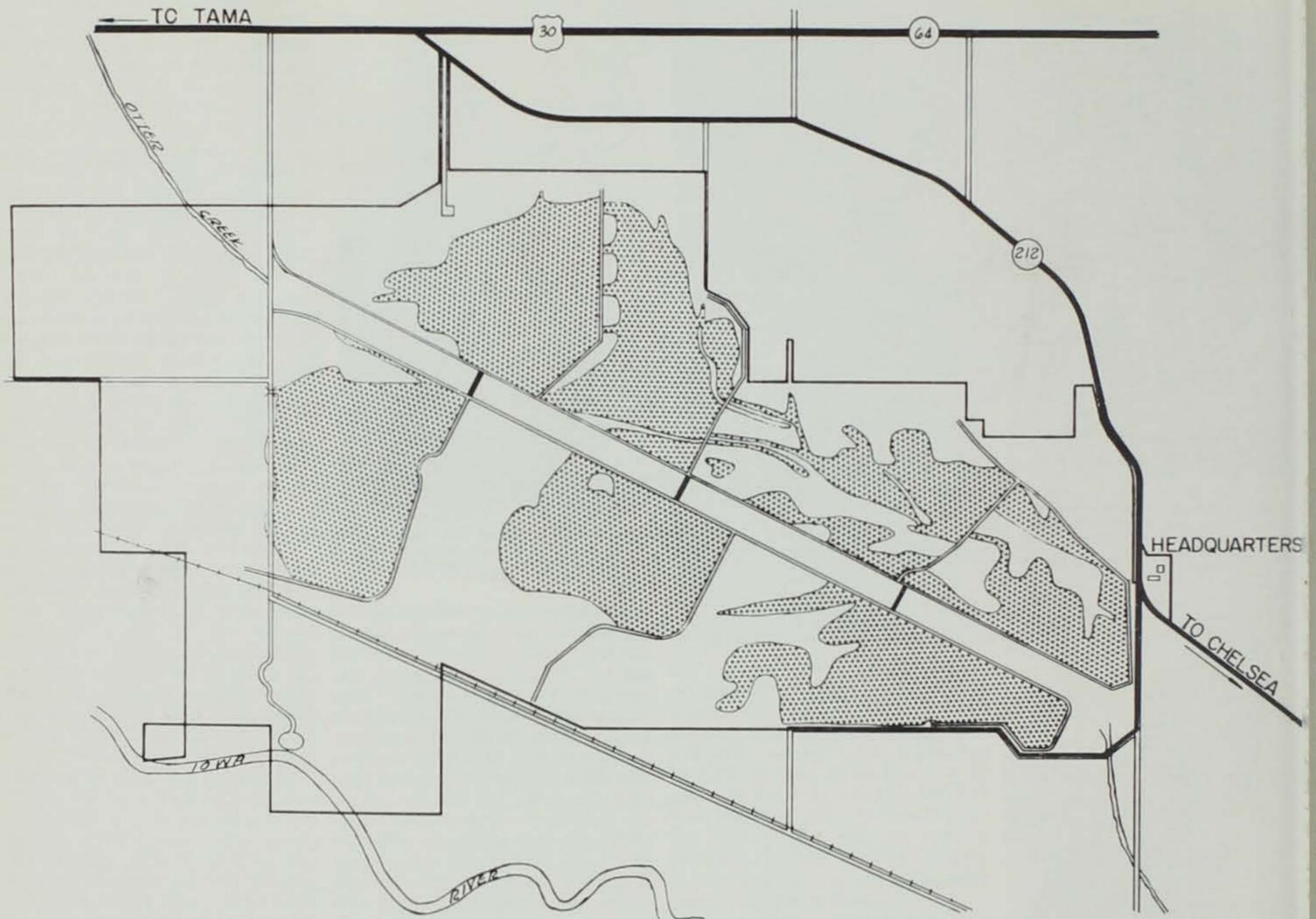
Use an undersized wooden stretcher to hold the pelt during fleshing operations. An ordinary paint scraper may be used for fleshing.



Commercial wire stretchers may be used to case pelts. To avoid pelt damage, be certain to select a stretcher that fits the pelt.

The barn or screech owl is often called the "feathered cat" because it is a great foe of mice.

Rats are the most prolific of all mammals and if living conditions are suitable, a female will breed throughout the year.



The above map of Iowa's newest marsh locates the relocated channel of Otter Creek, the steel piling dams, the seven individual marshes, Unit Management headquarters and the boat ramp on the Iowa River.

OTTER CREEK MARSH

John A. Fish, Asst. Supt. of Federal Aid

One of the Conservation Commission's most ambitious projects for waterfowl and upland game hunting is underway in Tama County. A 2,285 acre area known as Otter Creek Marsh is located about seven miles east of Tama and Toledo and just northwest of Chelsea. For the sportsman of east central Iowa, the new marsh area will fill a long felt need.

Land for Otter Creek Marsh was purchased and is being developed through the use of Pittman-Robertson funds which comes from a federal excise tax on sporting arms and ammunitions and Iowa hunting licenses. Three-fourths of the money being used is federal; the balance comes from license fees. So in one way or another, the Iowa hunter is footing the entire bill and is proud to pay his way.

Otter Creek, which lends its name to the area, meanders diagonally through the entire project from northwest to southeast, finally emptying into the Iowa River just above Chelsea. Because of flat topography and heavy soils in the valley which remain wet a long time, most of the lands had suffered frequent crop failures. Several landowners had attempted to drain their own lands, but the excavated ditches were either inadequate or without proper outlet.

Conservation personnel had anxiously eyed the area for a long time. When Pittman-Robertson funds became available in 1957 a preliminary investigation was started. An exhaustive hydrology study of the 17,500 acre watershed was made to determine the type of development best suited for the area.

Many long and tedious sessions among game management people, biologists and construction men were held before final plans were worked out. When completed, the plan was submitted to the Fish and Wildlife Service for approval for Federal Aid funds. After federal approval was given, a team of land appraisers began to evaluate the current value of the twenty-one tracts which had to be purchased. Negotiations started immediately after the appraisal was completed.



Otter Creek: quick to flood; slow to drain.

Jim Sherman photo

By 1962 all tracts, which included several entire farm units, had been purchased.

Since then, all the farm buildings contained on the property have been sold at public auction, removed by purchasers and the debris cleaned up. Commission employees constructed new fences for the 1 1/2 mile long boundary. All the old interior fences have been removed.

Not only is Otter Creek Marsh one of the biggest game management developments undertaken in recent years by the Conservation Commission, it has taken more imagination and skill in developing useful habitat than any other. To provide proper stream flow in all kinds of weather, a new 500 foot wide channel for Otter Creek will be dug diagonally across the tract. Its total length will be approximately four and one-half miles. On either side of the new channel, dikes will be built. Specifications call for them to be 75 feet wide at the base, 20 feet wide on top, and five feet high.

Water flowing down Otter Creek will be impounded in the new

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Jim Sherman photo

New fish and game management unit headquarters at Otter Creek.

OTTER CREEK MARSH—

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channel by steel pilings driven across the channel at three different sites. Each will be equipped with stop-log structures which will create desilting action whenever they are pulled.

Each impoundment will serve as a reservoir from which water can be diverted through inlet structures into seven individual marshes. These marshes will be created by erection of wide and low dikes which will create 880 acres of water ranging in depth from one to two feet deep at designed levels. Outlets similar to the inlets will provide manipulations of water levels for good marsh management and for drainage.

When floods of unusual magnitude occur, and this happens frequently in the Otter Creek watershed, the entire complex of dikes and marshes are expected to be under water. For this reason, dikes and other structures have been designed to survive floods with minimum damage due to over-topping.

The upper portions of the area will be managed to provide habitat for such upland game species as pheasant, quail and rabbits. Winter cover plantings at strategic places will be established. These will be about 200 feet minimum width and oriented to protect game from prevailing northwest winter winds. Adjacent to this protection will be food patches consisting primarily of corn. All crops still standing in March will be flattened to make it readily available under most early spring weather conditions.

As the area is on a natural flyway for migrating geese, attention will be given to attracting and holding them for central Iowa hunters. This will be accomplished by planting large fields to winter wheat. Geese will find mud flats for nesting and watering throughout the marsh impoundments.

Furbearing animals, especially muskrat and mink, will be present in large numbers. This will give trappers an excellent opportunity to pursue their favorite sport as well as put money in their pockets. Trapping will be by a permit system in order to regulate harvesting.

Timber along the adjacent Iowa River bottoms provide good deer and squirrel hunting. An access road, parking lot and boat ramp have already been constructed in this area.

In connection with Otter Creek Marsh, a new fish and game management unit headquarters has been established on the area. An office, work shop and equipment storage building, as well as a new dwelling have been built for use by a unit manager. The manager has been trained in fish and wildlife management and is responsible for directing the operations of the unit.

Contractors expect the construction work to be finished by 1967. The development and management of the area by unit personnel will require several additional years to complete their plans.

With completion of the planning phase for Otter Creek Marsh, the Commission is free to direct its attention elsewhere. Acquisition and planning work is already underway for the next major marsh development. It is located in southeastern Story county and will be known as the Hendrickson area. And as is the case with Otter Creek Marsh, development will be made possible through fees and taxes paid by the active hunter.

The antelope, a native American, has no close relatives, nor has it ever had any on other continents.

Some snakes have been known to live for one to two years without food by absorbing the fat of their own bodies.

A newborn bear cub is smaller than a new porcupine.

The Sparrowhawk's name doesn't mean anything because he rarely attacks small birds. His favorite foods are grasshoppers and other large insects.

The otter's favorite pastime is sliding. During the winter months a mother and her young will spend hours every day sliding down steep creek banks,



Jim Sherman photo

Wanted: Return of Deer Collars

Keith D. Larson
Game Biologist

In the wooded hills and valleys of Iowa there is a big surprise awaiting the woodland hiker or hunters this fall. Something less than 88 deer are parading around the woodlands wearing colorful neckties. Actually, they are collars of plastic rope; the same kind as used for pulling water skiers.

These collars were placed on these deer as part of a research program of the Conservation Commission. One objective of the study is to learn about the movements of white-tailed deer. Just how far deer travel seasonally and annually in the various habitat types is not known. This information is essential as an aid to censusing the deer herds of Iowa. Also, the effect of excessive localized hunting pressure on deer movements might be measured in this way.

How It's Done

The deer that wear these collars were not roped and hog-tied or anything like that, in order to place collars on them. Collaring deer is never as difficult as that. A special device which is called an "Automatic Tagging Device for Deer" is used. The device is set in well-used deer trails and the deer collar themselves. Deer frequently walk around sets, however, and the detour becomes a new deer trail.

If the set is chosen with care the deer will move along the trail and place its neck in a loop, which breaks after it closes, and in three steps the deer is wearing a fashionable collar. Deer cannot get hung up in these sets. In fact, the loop frequently breaks before the collar return it to the Conservation Commission or the local conservation officer. There is an aluminum numbered band on the collar which identifies the location where the deer was tagged. When a collar is returned, the location and date of the kill should be given. Tagging or collaring is done in the winter, and most collars will be returned during hunting season. The primary results obtained from this study

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Jim Sherman photo
Some of the estimated crowd of 700 spent time examining the recent excavation following dedication ceremonies designating the Indian Village site as a National Historic Monument. Excavations made by Dr. Marshall McKusick, State Archeologist, revealed that American Indians built a fortified village here some 2200 years ago. The site is not usually accessible to the public, as it is surrounded by private land.



Cast in bronze, and affixed to granite, this plaque symbolizes the protection granted to Iowa's only National Historic Landmark. Indian Village is located southwest of Sutherland in O'Brien County.

WANTED: RETURN OF DEER COLLARS—

(Continued from page 87)

will give annual movements: that distance traveled from winter to winter. Some deer might wear their collars for many years and prove secure. This is because of the built-in safety of the device.

Best results have been from sets which are made where trails pass through brush or where a trail crosses a road. Wherever deer are used to feeling brush on their necks or are distracted by the need to cross a road without being seen, are the best places to make sets.

In an initial test, a deer was seen to move through a set at top speed and the set worked perfectly. Most deer would be moving more slowly and the device works at any speed. Occasionally, a deer will trigger a set, stop immediately, and then back out of the loop to go around the set.

Hunter Participation

If a hunter bags a collared deer, he should remove the collar and provide additional information on long term movements when they are brought to bag. There will be a few casualties from car accidents and miscellaneous causes of collared deer which will occur in other seasons which will tell of seasonal movements of deer.

The Program

This winter, there will be 700 devices set by local conservation officers and biologists in a full-scale attempt at tagging deer in every county. Collars of different colors will be used in adjacent counties and in some instances in adjacent deer yards where deer are thought to move from one area to another and intermingle.

Deer don't know where the county lines are but the officers must not count deer twice if they range across county lines. The use of different colored collars in adjacent deer habitats will therefore yield some information on deer movements continuously, from day to day,



Jim Sherman photo
Iowa recipients of the 1965 National Merit awards in Conservation are Mr. Kirkpatrick and Mrs. Betty McDowell. Kirkpatrick is assistant farm news editor at radio station WHO, Des Moines. Mrs. McDowell was recognized for her work in teaching conservation in the Eldora school system.
Mr. E. B. Speaker, director of the State Conservation Commission presented the awards at the annual Fall Conference on Conservation Education at the State Camp on October 8.



and from season to season. Results of this study do not depend entirely then on the bagging of a collared deer, but if the deer you bag has a collar, turn it in and the date and place of tagging will be sent to you.

Loons have exceptional diving ability. Their legs are placed so far back on their bodies that they can't walk erect on land but move by sliding on their breast. The mole is a morose underground creature and, except at mating time, rarely chooses to live with another member of the species.

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