MSU Extension Publication Archive

Archive copy of publication, do not use for current recommendations. Up-to-date information about many topics can be obtained from your local Extension office.

Fur Trapping and Management for 4H Clubs Michigan State University Cooperative Extension Service 4-H Club Bulletin Arnold O. Haugen, F.F. Tubbs Issued November 1946 44 pages

The PDF file was provided courtesy of the Michigan State University Library

Scroll down to view the publication.

FUR TRAPPING and MANAGEMENT

for 4-H Clubs

By ARNOLD O. HAUGEN and F. F. TUBBS



MICHIGAN STATE COLLEGE :: EXTENSION SERVICE

EAST LANSING

Fur Trapping and Management For 4-H Clubs

By ARNOLD O. HAUGEN* and F. F. TUBBS**

Trapping of wild fur animals offers the farm boy a good opportunity to earn income. If he makes an effort to manage game animals so that his catch will remain good year after year, he will be practicing good use of one of Michigan's important natural resources. At the present time the income received from pelts in Michigan amounts to approximately \$2,000,000 annually. About two-thirds of this fur comes from farms of southern Michigan, and a large part of the trapping is done by farm boys and their fathers on agricultural land. Usually fur animals are given no special assistance by the land-owner, and harvesting comes at a time of the year when it does not interfere with farm work. Therefore, the income of this natural resource, amounting to nearly \$60,000 in some counties is mostly profit.

Fur coats made of muskrat pelts frequently sell for \$300 or \$400 per garment. This high price is easily appreciated when we consider that usually about 80 muskrat pelts are required to fashion a woman's fur coat and that the sale price of the garment is about twice the value of the raw furs. Mink coats require about 70 pelts.

Fur animals are closely related to the land and may on occasion damage farmer's crops and animals. However, little is known about the part these animals play in controlling farm pests. Unfortunately, set opinions are often formed about our wildlife through occasional contacts made with them. While individual animals may through chance or habit become destructive to man's interest and must be destroyed, nevertheless, an income may be received from these animals if harvested when the fur is prime.

Fur buyers state there is a large waste of **pelts** because trappers do not know how to properly skin animals and dry furs **or** because they do not confine their operations strictly to the period when **pelts** are prime. Because of those conditions it is believed that this project should be both educational and profitable.

^{*}Farm Game Extension, Michigan State College and Game Division, Michigan Department of Conservation, cooperating.

^{**}Game Division, Michigan Department of Conservation

Cartoons and drawings of animal tracks included are by O. Warbach of the Game Division, Michigan Department of Conservation.

Except where otherwise credited, photographs are by A. O. Haugen.



Fig.1. EIGHTY-SIX PERCENT OF THE FUR HARVEST IS MADE UP OF MUSKRATS.

The wild fur crop is similar in many ways to other crops grown on the farm in that it is one which can readily be increased and the supply maintained year after year. Under normal conditions there is an annual fall surplus over the animals required for breeding stock. This surplus may be harvested. The number of animals which may be taken each year without endangering the future crop varies with each area (habitat) just as each field varies in its ability to produce corn. Each marsh will support a certain number of muskrats just as each pasture field will supply food for a certain number of cattle. Therefore, each marsh is a separate problem. To determine the fur animal population of the trapping area will be one of the activities in this project.

The annual harvest of muskrats from marshes and streams of Michigan is nearly six times as great as is the total harvest of all other fur animals combined. Therefore, this project will naturally deal mainly with the muskrat.

REQUIREMENTS:

- 1. Boys and Girls between the ages of 12 and 20, inclusive, are eligible for this project.
- 2. Project will be carried as part of the winter program starting October 1 and ending March 1.
- 3. A story of the project must be submitted at the end of each project year. This story should include:
 - a. A complete description of your experiences.

- b. Records and observations as requested in the Project Record Book. Some of the questions will require information on the following:
 - (1) Outline map of farm.
 - (2) Inventory of game animals.
 - (3) Animals trapped and pelted.
 - (4) Business record.
 - (5) Description of all management practices.
 - (6) Record of food habits of fur bearers.
- 4. First-year requirements—a; b (1), (2), (3), and (4), of the above must be completed.
- 5. Second-year requirements—a; b (3), (4), (5), and (6). At least one management practice must be carried out on farm.

The story of the project, answers to the questions, and the business and trapping records should be written in the space provided in the Project Record Book. Ask your leader for a copy.

WHAT DO YOU KNOW ABOUT WILDLIFE?

	Test your own or your friend's knowledge of fur trapping and management. If you answer 15 correctly, your knowledge of fur animals is good. If you answer 10 correctly, you are average. If you had fewer than 10 correct, your wildlife education is below average.	
1.	Pasturing of marshes and swales improves such areas for muskrat production.	T. F.
2.	The water level in ponds and streams fluctuates with seasons of the year.	T. F.
3.	It is good game management not to pasture livestock in woodlots.	T. F.
4.	Fence row cover is of little value to wildlife	T. F.
5.	Late spring burning greatly reduces nesting sites for some wildlife.	T. F.
6.	In managing our fur crop it is important that we harvest the annual surplus fur animals	Т. F.
7.	A den of skunks seldom has more than two adult skunks in it	T. F.
8.	Young beavers always leave their home to build a lodge of their own the first fall of their life	T. F.
9.	Muskrat houses usually harbor 8 to 10 individuals	T. F.

10.	Soft maples and white oaks are more likely to provide dens than are red and black oaks	Т. F.
11.	Pelts of raccoons should be dried as cased skins	T. F.
12.	Proper sized stretching boards extend cased skins to their full size but do not forcibly stretch the skin	T. F.
13.	Michigan weasels never turn white in winter	T. F.
14.	Mink skins should always be prepared as cased skins	T. F.
15.	Michigan's annual harvest of muskrats frequently reaches a value of one million dollars	T. F.
16.	Farm boys are unimportant as a group of trappers	T. F.
17.	Most of Michigan's wild fur harvest is taken in the Upper Peninsula.	Т. F.
18.	A water depth of about 6 to 30 inches is most suitable for muskrats	Т. F.
19.	An ordinary lady's mink fur coat is made from about 20 mink pelts	Т. F.
20.	Michigan's annual harvest of muskrats is about six times as great as is the total harvest of all other fur bearers combined	Т. F.
21.	The placing of dead poultry on dumps may teach predators to kill farm fowl	Т. F.
22.	No. 3 traps are ordinarily used for skunk	T. F.
23.	Trapping rights belong to the landowner or leasee	Т. F.
	(To check your answers, see page 42.)	

ACTIVITIES

Before any management practice can be carried on, it is necessary to know what we already have on our farm or project area. Therefore, a survey of the area and an inventory of the wild animals present should be the first activity.

Activity 1—Make A Survey Map of the Area to Be Included in the Project

Legends to be used in map making are shown in Fig. 2. On page 6 of your Project Record Book, make an outline sketch of fields, including crops grown in those fields during the year. Your map will be $8\frac{1}{2} \times 11$ inches.

Indicate whether fence rows are brushy or clean. Show the woodlot and list the chief kind of trees. Trace the outline of streams, roads, and show location of swales, swamps, ponds and other uncultivated wildlife areas. Soil conservation base maps may be used for locating such areas as woodlots, streams, fence rows, etc. Draw this map in the Project Record Book. A sample map is shown on page 8 (Fig. 3).

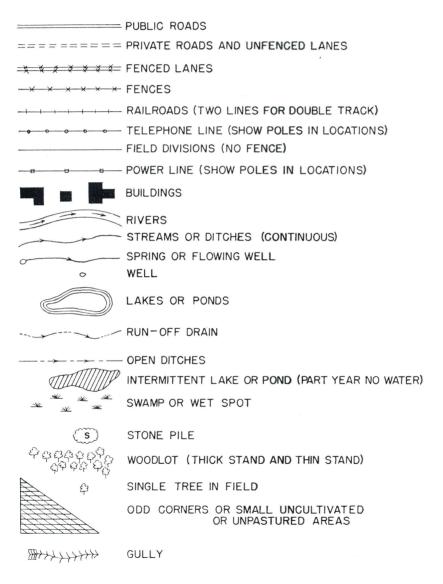
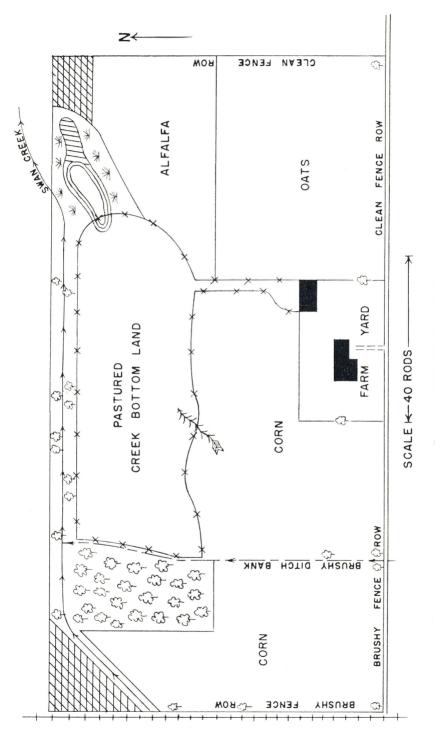


Fig. 2. SYMBOLS FOR MAPPING



F19.3. SAMPLE MAP

Activity 2-Make An Inventory of the Fur Bearers on Your Area

At the end of each breeding season our wildlife population is at the highest point of the year. The fur crop harvested each year should be limited as nearly as possible to the surplus. Some of these animals will be adults, but most of them will be the young of the year. Some of these animals can safely be taken for their pelts, leaving the rest for breeding stock to produce the crop for the next year. This looks like a rather simple procedure, yet it cannot be handled as readily as a farmer handles his stock.

The farmer knows exactly how many sheep or pigs he owns. If he intends to stay in the business of growing these animals, he plans for the production of a certain number each year. As his breeding stock advances in age or dies from disease or other causes, he carefully selects the choicest young to take its place. If the yearly increase eats more food than his pastures and crops will support, he either buys extra feed or reduces the number of animals. This method of handling livestock surpluses has become accurate and workable because for nearly a century agricultural experiment stations have worked out many of the necessary details for handling animals in captivity.

Fur bearers, on the other hand, present an entirely different problem. Seldom does the game manager know the exact number of wild animals on an area. He does not know, nor can he foresee the exact number of breeders needed to produce a large annual surplus. He does not know the carrying capacity of the area because wildlife habitats (living places) are extremely variable.

While in the managing of the fur crop we cannot count, control or actually manage the fur crop with all the exactness of the farmer, fortunately it is unnecessary to exercise this constant care over the wild fur bearers. The net income received from fur does not justify this intensive management.

The three most important things in managing our fur crop are: Save our present fur-producing areas from further destruction; improve areas that were once favorable but since destroyed; and harvest the annual crop.

Regardless of the conditions of the habitat, if it has a supply of animals, an attempt should be made to make the necessary adjustments to produce the best yield for the area.

This inventory of fur resources will necessarily be crude. However, this estimate will be accurate enough to serve the purposes of our fur management program. In making this inventory it will be necessary to bring into play many methods not common in the management of domestic livestock. We must specialize in "reading the sign." All animals leave more or less distinct evidence of their presence. Skunks, weasels, badgers, opossums and foxes inhabit burrows or ground dens. Raccoons use den trees, although ground dens, culverts and hollow logs are also used. Muskrats make houses, while beavers construct both lodges and dams. Holes along banks of streams are

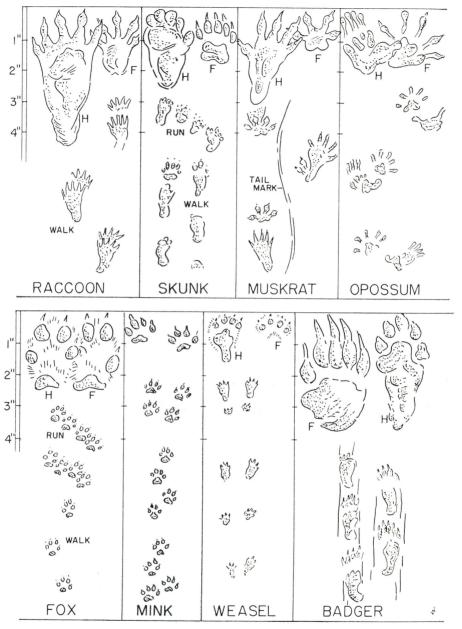


Fig. 4: ANIMAL TRACKS

used by beaver, mink, otter and muskrats. Therefore, the presence of holes, tracks, den trees, beaver or muskrat houses are all indicators of an animal's presence. We must, however, search for more conclusive proof of their actual

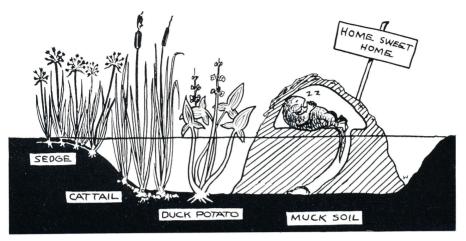


Fig. 5. THE MOST PRODUCTIVE MUSKRAT MARSHES ARE THOSE WITH MUCK SOIL, A PERMANENT WATER SUPPLY, CATTAILS AND DUCK POTATO.

residence and possibly their abundance. Tracks give definite proof of the animals' presence, while trails or runways, hairs at the entrance of burrows or on den trees and scats (manure) are also good indicators. The abundance of the above signs is a relative way of determining populations, yet since it is but an indicator, experience is needed to interpret the information. As one becomes familiar with the conditions necessary for the welfare of the various fur bearers on a particular piece of land, he will be able to harvest a profitable fur crop without reducing the breeding stock.

Abundance of the Various Fur Bearing Species

Opossums, muskrats and skunks are usually plentiful and, in the case of the muskrat, it may be difficult to keep the population low enough so the food supply is adequate to support the animals through winter. A den of skunks in normal times may on an average contain four or five animals. A beaver lodge usually has the adults, the one-year-olds and the kits of the year, making an average of around six in the lodge. Muskrat houses harbor, on the average, three individuals. The average number of raccoons that reach maturity in a family is about three, plus the two adults. Opossums increase rapidly as a family may include as many as six or eight young. Otter are nearly always scarce. Mink and fox, however, have both periods of scarcity and abundance.



Fig. 6. WATER LEVELS SHOULD BE STABLE. MARSHES THAT DRY UP IN MID-SUMMER PRODUCE FEW MUSKRATS.

Yields Per Unit Area

Muskrat marshes, like farm fields, vary in their ability to grow vegetation, the principal food of these animals. A good muskrat marsh, well supplied with water and having fertile soils such as clay, clay loams or muck, and growing dense stands of cattails and sedges or duck potato may at times produce as many as 15 muskrats to the acre which may be harvested. Other marshes with similar water conditions but having soils of poor type may produce from two to ten 'rats per acre. Shallow lakes producing dense stands of vellow water lilies and bulrushes seldom produce more than six or seven 'rats per acre. Streams and ditches also vary in their ability to produce. The best streams, having fertile banks and located near fertile uplands, have been known to yield 20 muskrats per mile. The yield in all instances decreases as the soils fail to produce the correct vegetation or when the water levels fluctuate greatly. The number of houses present in a marsh is not an accurate indicator of the number of muskrats present, vet it is safe to assume that an average of three muskrats live in each house. The number of houses along with such other signs as widespread cuttings or feeding platforms usually give a fairly good picture of the number of animals in the marsh.

Mink are seldom found in great numbers. Often there is a close relationship between the number of mink and the number of muskrats, *i.e.*, the more muskrats the more mink. The mink needs animal food for its existence, and is always found where there are fairly good supplies of other small animals.

On your project map locate all of the dens, both tree and ground, that might serve as homes for fur animals. By looking carefully you will soon be able to determine whether the dens are being used by skunks, badger or fox, and in this manner obtain an estimate of the population present.

Frequently muskrats on an area will increase to the point where they will remove more food than is grown during the year. You must then do one of two things — you must either remove more animals by trapping or you must increase the food supply.

Activity 3—Trap, Pelt, Dry and Market Fur Animals During the Legal Trapping Season

References—"Guide For Trapping" by Harry J. Ladue (Address: Mr. Harry J. Ladue, St. Peter, Minn.); "Modern Trapping" by J. K. Conner (Address: Weatherford Printing Company, Tuscaloosa, Alabama), "Capturing Foxes" by F. E. Garlagough (Address: Superintendent of Documents, Washington 25, D. C.). A small charge is made for each of these publications. Trapping publications available without charge include—"How to Catch More Fur" by Animal Trap Company of America, Lititz, Penn., "Tips to Trappers" by Sears Roebuck & Company, Chicago, Ill., and "Fox and Coyote Trapping Simplified" by the Michigan Department of Conservation, Lansing. It is suggested that your local fur buyer as well as your local conservation officer be invited to your meetings to discuss this activity.

Tend the Traps Regularly

We should be as humane as possible while trapping animals. The steel trap causes suffering even when used right. Muskrat and beaver traps should be placed so that any animal taken will drown immediately. It is impossible to make sets of this kind for animals living on land but we can do away with much suffering by looking after the traps regularly each day. The new stoploss traps now on the market are good and are recommended for muskrats. Kill the captured animals as quickly as possible, but do so without damaging the fur.

Muskrats have some value as food, as well as for fur. Though trappers seldom receive more than 15 or 20 cents per muskrat carcass, the "marsh rabbit" market is an important sideline for trappers operating near large cities.

Primeness and Grading

Pelts of fur animals are nearly worthless during summer, because at this season the fur is not *prime*, as is shown by the blackish areas on the flesh side of the pelt. The fur on such pelts is inferior in quality. Even pelts taken



Fig. 7. TENDING YOUR TRAPS REGULARLY IS PROFITABLE AND HUMANE

during the open season on Michigan's fur bearers are not all fully prime. Manufacturers, however, agree that all Michigan skins taken in the regular trapping season can be used for making good fur products.

The manufacturers say some unprime pelts occur in every month of the year, but that these odd ones can be used for special purposes. The difference in fur quality between December- and March-caught muskrats is small, a fact proved by Department of Conservation tests on the wearability of muskrat fur.

Three important characteristics of quality in muskrat fur are: (1) Size of pelt, (2) density and length of fur, and (3) thickness of skin. Fur manufacturers who specialize in making imitation seal garments pay the highest prices for pelts having dense underfur and few guard hairs (the long, coarse and shiny hairs on a pelt), while others who specialize in making natural muskrat or imitation mink pay top prices for pelts with thin underfur and long dense guard hairs. Certain manufacturers prefer pelts with thick leather and others prefer thin pelts, but exceptionally thick or thin ones are not desired because they need special processing. Since every square inch of fur is used for some purpose or other, all buyers pay close attention to pelt sizes. Fur buyers actually buy for quantity, and later may sort their furs according to qualities. The value of a pelt naturally is less if it is kit (very small) sized,

if it is damaged, if it has been improperly stretched or dried, or if it is an unprime skin obviously taken before the season opened.

Muskrat pelts are graded for size as: 1. Extra large, 2. large, 3. medium, 4. small, 5. kits and damaged skins. Sometimes sizes 4 and 5 are lumped together. Since the emphasis now is upon dyed, tinted and blended furs, color of muskrat furs no longer is necessarily a characteristic of quality. If styles change, certain fur colors may again command premium prices.

In grading furs, not only primeness and size of pelts are considered, but the value is also influenced by the kind of care the pelt had. Although the pelt should be stretched firmly to its full size, yet it must not be forcibly stretched because such forcing makes the hide thin and causes some loss in value. Pelts which have been dried too fast as happens when placed near a fire become grease-burned and as a result have less value. Excess grease and flesh should be carefully removed from all pelts.

Measurements of four commonly used sizes of muskrat are shown in Fig. 8. By comparing the length and width of your muskrat hides you will be able to grade your own pelts for size. Beaver pelts are graded into various sizes, depending on the size as represented by the total of the length plus the width of the pelt. A total of 50 inches or less represents a small pelt, medium pelts are 50 to 60 inches, large pelts are 60 inches and up, and blanket size pelts 66 inches and up.

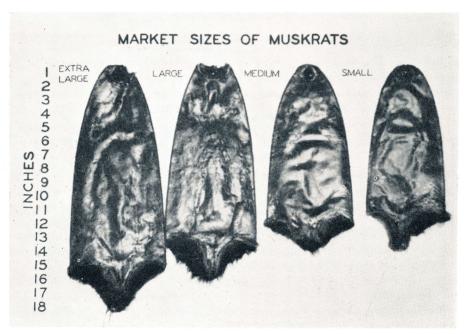


Fig. 8. BY USING THIS ILLUSTRATION YOU WILL BE ABLE TO GRADE YOUR OWN PELTS FOR SIZE.

Activity 4—Improving the Habitat for the Fur Bearers

The Home of the Muskrat

The home of the muskrat is limited to places where the water remains at a rather uniform depth which is sufficient to insure against freezing to the bottom. In Michigan, muskrats thrive best where the water depth is about 6 to 30 inches. The underlying soil should be rich enough to grow thick stands of the muskrat's favorite food—sedges, cattails, and many other water plants. It is with these materials that he also builds his home and small feeding platforms. Along streams and lakes, muskrats have a tendency to dig burrows, the openings of which are generally a little below the surface of the water. If you intend to increase the fur crop, a study of the habitat, food and other factors tending to limit the number of animals must be made. Such a study will show you what you can do to improve the habitat (living place) so as to produce more fur animals.

The muskrat habitat, because of its importance and ease of management, is used here as an example. The problem of muskrat management is not one of producing two muskrats where there now is only one, but rather of saving more of the muskrats already in the marsh in the summer. We say this



Fig. 9. EACH SPRING AND FALL YOUNG MUSKRATS MOVE OUT TO FIND A LIVING PLACE OF THEIR OWN.

because only one-fourth to one-third of the crop of young lives to the trapping season.

The first question to come to one's mind should be: "Is this marsh producing the largest possible muskrat crop?" If the marsh is not producing a good crop, then perhaps it can be improved.

Management measures which are considered practical for increasing the number of muskrats include the following:

- 1. Keep a good supply of water (6 to 30 inches in depth).
- 2. Protect the food plants from grazing by livestock or grow food in patches.
- Provide the necessary shelter or platforms for muskrats to build houses on.
- 4. Where it seems necessary, limit your trapping.

The maintaining of a good water supply in marshes and streams during the summer drought seasons is very important in managing muskrats. Information shows that the greatest loss of muskrats, prior to the trapping season, occurs in late July, August and early September, when thousands of shallow marshes dry up. These dry periods (bottleneck periods) are not unusual, but are much more severe in some years. It is an exceptional year in which dry periods do not occur.

In many cases we can hold more water in the marsh by partially blocking the drain. In this instance a dam can be made with labor as the only cost.

Landowners can do more than anyone else to increase muskrats since they control the use to which the land is put. It is for them to say whether a particular marsh or stream will be kept as is, improved or destroyed. The Conservation Department sets seasons and trapping methods which will permit harvesting a safe number of animals, and searches for better management methods and demonstrates those found practical. Trappers are also an important influence in managing our fur bearers.

Where good muskrat food such as cattails is abundant, the marsh will support many more animals than where such food is scarce. The winter food supply available during the time of year when the surface of the water is frozen is especially important.

Refuges

Some marsh managers have used a system of refuges to avoid removing all the muskrats from a marsh. If the marsh is large, having 10 or 15 acres, they often set aside as much as 10 percent of the area as a refuge where no trapping is allowed during that year. The rest of the marsh is then trapped heavily, an attempt being made to take all of the muskrats possible. In this



 \mathcal{F}_{19} .10. REFUGES IN A PART OF THE MARSH PREVENT OVERTRAPPING.

way, the small refuge area protects the necessary breeding stock for the coming year. In using this method it is best to rotate or change the parts of the marsh that are closed to trapping each year, making certain that no one part is a refuge for two years in a row. Most farm boys will not need to leave any refuges as they will not be able to overtrap an area.

Food Fatches

Some ponds offer a place for muskrats to live but do not grow the necessary food. Such areas may be improved by planting a food patch of corn next to the water-covered area. Reed's Canary grass has been reported by some to be a good food supply for muskrats. The size of the patch will depend upon the number of muskrats in the marsh.

Platforms for Houses

Where the water is slightly too deep (2 to 3 feet) for muskrats to build houses, the 'rat population can at times be increased by providing brush platforms for the animals to build their houses on. This can easily be done when the marsh is frozen by piling the brush on top of the ice at the desired spots. When the ice goes out the brush will settle into place.

Farm Practices

There are many farm practices which help fur-bearing animals. These animals, like other wildlife, need suitable places to produce and raise their young, protection against enemies while feeding or playing, refuge from bad weather conditions, and plenty of food at all times of the year. On the average farm such places must not interfere with regular agricultural practices.

Luckily, many good farming practices are also favorable to fur and game animals. Space does not permit a good description of each. Michigan State College Extension Bulletin 218 mentioned in the reference list on page 39 covers this point. On nearly every farm there are places not suitable to cultivation or pasturing. Such areas include odd corners, eroded spots, swales, pot holes, and stony outcrops. If protected from unnecessary cutting, pasturing or burning these areas are soon used by wild animals. Good farming practices which also encourage wildlife are: 1. Do not pasture woodlots. 2. Cut only trees which are ready for cutting. 3. Plant windbreaks. 4. Stop erosion by protecting such areas from cultivation and pasturing and by planting to conifers and shrubs. The burning of hay fields, pastures, swales and

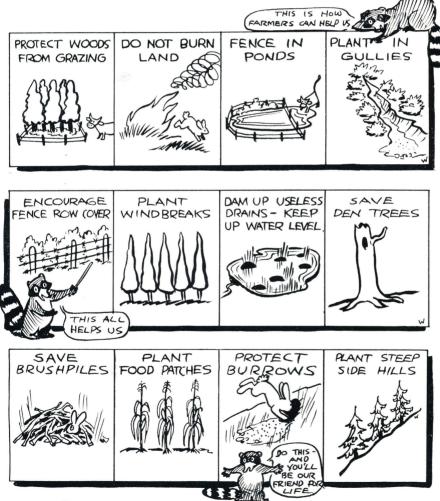


FIG. 11. HELPFUL HINTS FOR WILDLIFE.



Photo by F. F. Tubbs.

Fig. 12. SUCH MARSHES PRODUCE MANY DOLLARS WORTH OF FUR, AN EXTRA INCOME ON THE FARM



Photo by D. L. Allen.

marshes on the farm is usually not a good farm practice. By not burning such places you can save much wildlife cover. Good soil is needed to grow a good stand of vegetation; therefore, soil-building practices are favorable toward the production of fur and other game animals.

If a pond must be used as a watering place for livestock, it is best to fence the pond so the stock can get to the water at only one point. The fenced part will then serve as wildlife shelter. Fences bordered by plants such as multiflora rose, honeysuckle, and coralberry are excellent and are to be recommended where wildlife is considered.

HOW MANY ANIMALS SHALL WE TRAP?

The present system of legal trapping seasons usually saves enough animals for breeding stock. It is seldom that a whole area is trapped out unless mild weather stays throughout the entire open season. Here again we must use judgment. In a season of open trapping weather, it would be well to plan to save "seed stock." These measures will be discussed later. This applies mainly to areas where the muskrat marshes are rather far apart. If the country-side is dotted with small marshes and ponds, there is little danger of cropping the population too severely by trapping. The following spring the individuals remaining in isolated places may distribute themselves over the entire area and by the next fall the marsh is likely to have its normal crop of fur.

Because the muskrat breeds fast, it is never safe to close the season for more than a year at a time. To do so may increase the animals to the point where they will eat all the plants available for their winter food supply, oftentimes reducing the amount of food to such a point that it will take several years for the food plants to come back in.

Experience has shown it is difficult to estimate the number of 'rats that can be taken from any locality. Our open seasons are generally long enough so that if trapping conditions are favorable, a high percentage of the population can be trapped. However, it seldom works out that way. Nearly always during a 30-day fall season there will be many days when trapping conditions are not suitable for catching the animals and in this way a good percentage of the 'rat population is saved.

What has been said of the 'rats also applies to other fur bearers, such as the skunk, mink and raccoon. Real cold weather usually stops the movement of such animals as the skunk and raccoon. Prolonged periods of cold will make it impossible for a trapper to make heavy inroads on the 'rat population.

CONTROL OF OUTLAW INDIVIDUALS

Muskrats often travel to the fields to eat farm crops, including vegetables. Since the muskrat is trapped for its pelt and profit, a certain amount of such damage can well be overlooked. Muskrats like farm animals change ordinary farm crops into cash, so judgment is needed in dealing with this type of a damage problem. Foxes, skunks, opossum, mink and weasels may need control at times if they make a habit of raiding poultry yards or houses. Your Conservation Officer should be contacted for a permit to trap or shoot outlaw game or fur animals in the closed season. Control is possible by correctly placing steel traps about the enclosed yards or buildings. Shooting is also effective but does not insure that the right animal is being taken. Remember that every fur bearer killed out of season cuts into the fur profits; therefore, it is important that you make as few mistakes as possible.

Much damage by predators can be avoided by not dumping dead poultry, lambs, pigs or carrion on the fields near farm buildings. Such refuse should be buried if possible, because dumping is an unsanitary practice and serves to attract certain predatory animals about the premises. Once such animals have developed a taste for domestic carrion, they may start to raid the farm yard.







Fig. 13. SOMETIMES INDIVIDUAL OPOSSUMS, FOXES OR WEASELS GET A TASTE FOR POULTRY.

BEFORE YOU BEGIN TRAPPING

When getting ready for the trapping season these steps should be taken:

- 1. If you plan to trap on land other than that upon which you live, buy a trapping license.
 - 2. Get a copy of the trapping laws and study the fur regulations.
- 3. If you plan to trap on property other than your own be sure to get the landowner's permission.
- 4. There are several types and styles of traps, each one being made to capture a certain size animal. Buy the size trap recommended for the fur bearer that you are trapping.

Size 0 weasel, ground squirrel and barn rat
Size 1muskrat, skunk and mink
Size 1½mink, skunk and opossum
Size 2fox and raccoon
Size 3fox, wildcat and coyote
Size 4coyote, otter and beaver

- 5. Before traps are set, their trigger pans should be properly adjusted so that when set on "hair trigger" their pans will be level with or slightly below the jaws.
- 6. The ability to set traps is definitely an art which can be learned only by practice. Each boy should make a study of the habits of the animals which he wishes to trap. In this way he can become familiar with the home of these animals, the trails used, and the best possible spots for traps.

TRAPPING METHODS*

Fox traps should be free from any strong smell, oil and grease which can be removed by boiling them in clear, clean water. New traps especially should have such treatment. After having been boiled, traps should be handled only with clean gloves, and when not in use can be kept free of odors by being buried in the ground. Traps can be freed of rust by being boiled in a solution of hardwood ashes and water. Chips or crystals of logwood** when added to the water in which traps are boiled will give the traps a black color and serves to prevent further rusting. Dark-colored traps are most useful in fox and coyote trapping. Boiling in a solution of either soft maple bark, hazelnut hulls, hemlock bark, walnut or butternut hulls, wild sage, willow tops or balsam boughs will also color traps.

In coloring traps, place in a 5-gallon can ½ pound logwood crystals and 3 pounds logwood chips. Fill full of water and boil down to 4 gallons. Add the traps and boil for one hour, then let simmer until the traps take on a deep black color. If you want your traps really black, let them stand in the logwood solution 3 days. This solution will color 50 to 75 fox traps or 100 small traps.

Trap lines should be visited at least once every day. If your traps are not checked regularly many fur animals will be lost from the traps. Some animals are real good at getting out of traps.

Baits and Scents

Many trappers use baits and scents. The experienced trapper will first study the habits of the animal before selecting the scent to be used. Muskrats are attracted by vegetables such as turnips, carrots and apples, while beaver come to tender branches of poplar, aspen and maple. Skunks and opossum can be baited with cheese, fruits, mice, or raw meat of any kind. Mice,

^{*}Much of the information on trapping methods was contributed by Predatory Animal Control Officers, Derrell Kniss and Karl Brushaber of the Michigan Department of Conservation.

**May be bought from trappers' supply houses or at some drug stores.

chicken heads, or any bloody meat is best for weasel and mink. A number of commercial scents can be bought on the market. The purpose of baits and scents is to attract the animal's attention and lure it to the location of a set.

Formulas for lures or scents recommended by Derrell Kniss, Predatory Animal Control Officer, Michigan Department of Conservation, are listed below.* With this information, you should be able to mix your own.

FOX LURE

Put into a bottle the urine and gall of a fox. To every 3 ounces of the above add, 1 ounce glycerin, and 1 grain corrosive sublimate, shake well, let stand 10 days. The anal (rectal) glands of a fox may also be included in the scent.

COYOTE OR WOLF LURE

Same as above but use parts of coyote or wolf instead.

BEAVER LURE

Mix together 1 ounce beaver castor, $\frac{1}{2}$ ounce ground nutmeg, $\frac{1}{4}$ ounce cloves, ground fine, 10 drops oil of cinnamon, and 1 drop essence of peppermint. Add a few ounces of alcohol and let stand for week or 10 days.

MUSKRAT LURE No. 1

Mix 1 ounce muskrat musk with 20 drops oil of rhodium and 10 drops oil of anise.

MUSKRAT LURE No. 2

Mix 20 drops oil of rhodium, 20 drops oil of anise, 2 drops essence of peppermint and 1 ounce glycerin. Shake well and let stand week or 10 days.

RACCOON LURE

To 1 ounce fish oil add 1 ounce honey, 10 drops oil of rhodium, and 20 drops oil of anise. Shake well, let stand 10 days.

^{*}Most of the items used to mix the lures may be bought from your local drug store.



FIG. 14. SCENTS INCREASE CATCH BY LURING ANIMALS

MINK LURE

To the musk sacs of two mink, add 1 ounce fish oil, and 1 ounce glycerin. Mix well and let stand week or 10 days.

OTTER LURE

Mix 1 ounce fish oil and the musk of one mink. Let it stand a week or 10 days before using.

WEASEL LURE

Mix 1 ounce fish oil, ½ ounce assafetida, 10 drops oil of rhodium, 5 drops oil of anise, and the musk of two weasels. Mix well, let stand 10 days.

SKUNK LURE

For a skunk lure, mix 2 ounces fish oil, $\frac{1}{2}$ ounce assafetida and the "stink" glands from two skunks and let stand 10 days. This lure will also work on either fox or badger.

FISH OIL

Fish oil is easily made and need not be bought. Cut into small pieces the bodies of fish, and place them in a glass jar, leaving the cover loose, so air can escape. Place this in the sun where the fish will decay. Pour off the oil that forms. This foul-smelling oil is attractive to most fur animals.

Fox Trapping

Fox can be trapped with little equipment, however, really successful fox trappers use a variety of equipment about as follows:

- a. Pack sack or pack basket—to carry the trapping equipment in.
- b. Hatchet—to make the sets with and for driving trap stakes.
- c. Trowel—for digging and making the sets.
- d. Gloves (can be cotton or rubber)—to prevent getting human scent on traps.
- e. Wax paper bags—to carry dry dirt, or ant hill dirt to cover traps with.
- f. Jar or bait can—to carry bait in if bait is used.
- g. Canvas or wax paper—to cover trap pans with.
- h. Sand screen—for sifting dirt and sand to cover the trap (1/8" mesh).
- i. Container—for the lure bottles.
- j. Ground cloth—not so much to stand on, as to carry away the excess dirt on.
- k. No. 2 or 3 traps. (No. 2 coil spring or No. 3 double spring.)
- 1. Iron trap stakes, small roll of wire and a canvas bucket are very handy.

A number of fox sets are described for your convenience.

BURIED BAIT FOX SET—If properly set and baited, one of the best fox and coyote sets is the dirt hole or buried bait set. Where possible this set should be made in open woods clearing, open fields, bare pastures and sand blows because foxes and coyotes commonly hunt and play in such places. This set is not only more effective if made in the open, but will keep at a minimum the number of dogs, cats and other farm animals taken.

The buried bait in the dirt hole set is an imitation of where a coyote or fox has buried a piece of meat, the same as your dog does. With a narrow trowel or other digging tool, dig a small hole about 6 inches deep and 2 or 3 inches across for fox and 3 to 5 inches across for coyote. The dirt taken from the bait hole should be spread back naturally, just as if a fox or coyote had dug it. Remove sod, lumps, stones and excess dirt some distance from the set. Now make a hollow in the pile of loose dirt you piled in front of the bait hole,

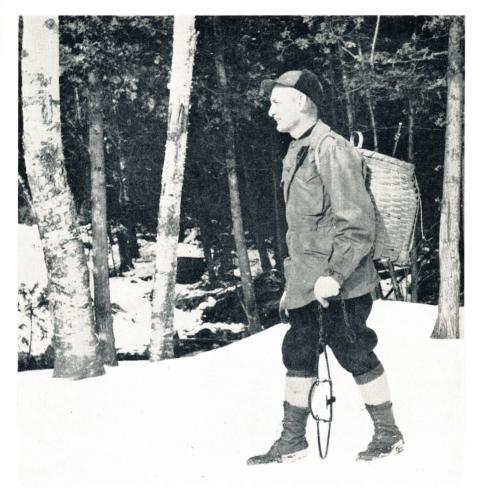


FIG. 15 FOX TRAPPING CAN BE ENJOYABLE AS WELL AS PROFITABLE.

this hollow being made to set your trap in. It should be located so that the pan of your trap will be from 4 to 6 inches from the mouth of the bait hole. Fasten the trap by driving a stake through the ring of the trap chain and down into the earth directly under the trap. Place the set trap in the excavation, cover the pan with a piece of wax paper, cloth or canvas, tucking the same down inside the jaws, making sure the pad cover is always under the trap jaws (see Figs. 16, 17). If the cloth or paper is over the jaws of the trap, a fox will be able to pull out of the trap. With a trowel, or sifter if the dirt is lumpy, cover the trap with dirt at least ½ inch deep and be sure to take out all stones, lumps and sticks that might foul the trap. The ground should be made to look exactly as it did when the hole was first dug.



Fig. 16. BURIED BAIT FOX SET.

FIRST-AFTER MAKING YOUR
BAIT HOLE AND FASTENING THE
TRAP AS DESCRIBED IN THE TEXT
PLACE YOUR TRAP IN A
HOLLOWED OUT SPOT 4 TO
6 INCHES IN FRONT OF THE
BAIT HOLE.

SECOND-COVER THE PAN WITH A PIECE OF CANVAS, CLOTH OR WAXED PAPER. KEEP THE CANVAS TUCKED UNDER THE JAWS.

THIRD—NOW SIFT DIRT OR SAND OVER THE TRAP UNTIL THE ENTIRE SET IS COVERED TO A DEPTH OF 1/2 TO 3/4".



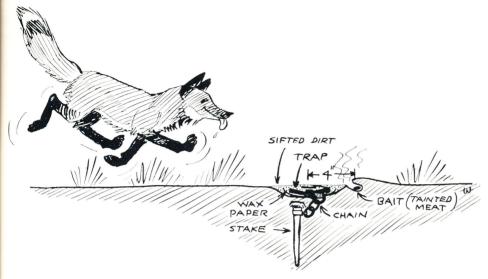


Fig. 17. THIS BURIED BAIT FOX SET IS ONE OF THE BEST FOR FOX OR COYOTE.

When bait is used, it should be tainted and cut into pieces about the size of a walnut. The bait can be tainted flesh of house-cat, porcupine, skunk, muskrat, woodchuck, red squirrel, beef, horse, etc. Place the bait in the hole with a trowel or small stick and cover it lightly with dirt. Next put a few drops of fox lure on the edge of the bait hole. The dirt hole set can be used with both bait and lure or with either one alone.

In cold freezing weather, dirt taken from ant hills can be used to cover the traps, as this dirt is dry and will not freeze until it has been rained on. It is well to collect a supply of the ant hill dirt early in the fall and store it in wax paper bags. In making the dirt hole set with ant hill dirt, put a piece of heavy wax paper under the trap to keep it from freezing to the ground. Set the trap pan as low as possible so that it will spring with a light touch and cover the whole trap with the fine ant hill dirt. In this case it is not necessary to put any canvas, cloth or wax paper over the pan of the trap.

In freezing weather, anti-freeze compounds made up of 50 percent glycerin and 50 percent water scented with fox urine can be used as a spray over the set. Never use a trap smaller than a No. 2 for fox.

SNOW SETS FOR FOX—The urinating post or urinating place set is one of the best of the snow sets. Put a few drops of fox urine or natural fox gland lure on the top of a small bush or stick. It should not be more than 10 inches or a foot above the snow. Hide the trap about 6 or 7 inches from



Fig. 18. FOX SNOW SET.

FIRST—SET YOUR TRAP ON TOP OF A PIECE OF WAXED PAPER PUT IN HOLLOWED OUT SPOT IN SNOW.

SECOND — PLACE A PIECE OF WAXED PAPER OVER THE PAN BUT UNDER THE JAWS SIMILAR TO THE CANVAS PAN COVER IN Fig. 16. NOW COVER THE ENTIRE TRAP WITH LOOSE SNOW.

the base. Put a piece of heavy waxed paper under the trap to keep it from freezing down. Cover the trap naturally with snow and brush out all tracks with a branch (Fig. 18). In the snow set fasten the trap to a hardwood drag which must be buried in the snow. Whenever possible, make such sets when snow is falling.

SNOW SET—NUMBER 2—Freeze or tie a small piece of tainted meat, that has been scented with a good fox lure to the pan of a No. 2 coil spring Victor fox trap, or to a No. 3 double-spring Victor trap and bury this about 6 inches deep in the snow near the fox runs or old fox dens. Set the trap with hair trigger. The fox will get caught digging for the bait.

Blind sets can be made in trails where the foxes run, on logs over ravines or streams and at holes in fences.

MOUND SET—The mound fox set can well be used on farm lands, this being one of the best sets where dogs are to be avoided. In summer make conical mounds of dirt about 20 to 30 inches high along fox runways and trails. For winter trapping the mounds are sometimes made of horse manure, in which case they will not freeze.

A few days before the traps are set, hollow out a hole on the top of each mound and then place the trap on top of the drag or stake in this hole. Cover the trap pan with a piece of waxed paper, canvas or cloth, being sure to tuck the paper or cloth under the trap jaws. Cover the drag and trap with dirt,

chaff or sawdust or whatever the mound is constructed of. After the traps have been set a few days, place bait of some kind about 15 or 20 feet from the mound. One of the best baits is a dead house-cat, but the carcass of any small animal such as skunk or porcupine will do. Fasten the bait down so that other animals cannot carry it away. It may be placed in a tree or on a fence post not more than 75 feet away. Wherever the bait is placed the fox will jump onto the mound to look at or for the bait (Fig. 19).

Muskrat Trapping

In general there are three main types of sets for muskrats, one in marsh areas with little or no water, one in open water areas, and the third kind under ice. In marsh sets where there is no chance to set the traps so the captured animal will drown, the use of stop-loss traps is very important (Fig. 20). Where possible the trap should be set in about 2 inches of water on feed beds or in runways.

Traps along creeks and ditches should be set in 2 inches of water at the bottom of runs or slides, at the openings to drain tiles, and in any narrowed sections of the water. In such places a picket of sticks will force the animal to travel over the trap (Fig. 22). In all cases the trap stake should, where possible, be set through the trap chain on a slant into deep water. Any muskrat taken will then dive into the deep water and will be drowned as

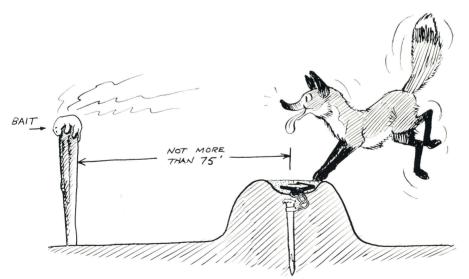


Fig. 19 THIS MOUND SET FOR FOX IS A GOOD ONE TO USE ON FARMS WHERE DOGS ARE TO BE AVOIDED.



Photo-Michigan Department of Conservation.

Fig. 20. STOP-LOSS TRAP. THE EXTRA SPRING OR GUARD STOPS LOSS OF 'RAT'S BY PREVENTING THE CAPTURED ANIMAL FROM CHEWING OR TWISTING ITS LEG OFF.



Fig. 21. MUSKRAT OR MINK SET IN TILE. PLA(E YOUR TRAP IN ABOUT 2 INCHES OF WATER.



FIG. 22. PICKET FENCE SET FOR MUSKRAT AND MINK. THE PICKETS FORCE THE ANIMALS TO TRAVEL OVER THE TRAP.





Fig. 23. MUSKRAT TRAPPING UNDER ICE.

SLOPING BOARD SET— SET TRAP ON CLEAT NAILED TO BOARD AND FASTEN BAIT 3 OR 4 INCHES ABOVE TRAP.

SHELF SET— SET TRAP ON A
SHELF WITH BAIT ABOVE. IN EITHER
SET SHOVE THE BOARD DOWNWARD
UNTIL TRAP AND BAIT ARE UNDER
WATER AND BOARD STICKS IN
BOTTOM OF POND.

the chain will slide down the slanting trap pole, thereby preventing the 'rat from returning to shallow water.

Trapping under ice is a little inconvenient but can be done with considerable success. To make such a set, select a board of which the length will depend on the depth of the water. About half way up on the board, two or three nails can be arranged for holding the set trap in place. An extra nail for holding the bait (carrots, apple, parsnip) is set about 2 or 3 inches above the trap (Fig. 23). The board is then shoved through a hole in the ice and set on about a 45° slant by forcing the lower end into the mud bottom of the creek or pond. A similar underwater set can be made by placing the trap in the crotch of a willow or dogwood sapling.

Mink Trapping

In mink trapping one must be certain not to leave any human scent at the set. Locations of many traps can be the same as for muskrats. Traps can be placed in the mink's line of travel such as in culverts, tiles and hollow logs extending into the water.

A bait set is often used along creek or ditch banks. For this set a 3-inch hole is dug to a depth of 10 inches at the water's edge. The back end of the hole should be about 2 inches above the water level. A small piece of fish or muskrat carcass is then placed at the back end of the burrow to serve as bait. A few drops of lure may be placed on the bait. The trap should be set in about 2 inches of water at the mouth of the baited hole. If possible, anchor the trap so the animal will drown. A solid stake is recommended because a raccoon is often taken in such a set.

Skunk Trapping

For skunks, traps are usually set in the entrance to their den. The trap should be set in a small hollow dug into the ground and should then be covered with fine grass or chaff.

Removing Captured Animals

Upon finding the animal in the trap, one should kill the captured animal as quickly as possible. This should be done carefully and as humanely as possible. When trapping muskrat, mink or beaver or any other animal living in water, the trap should be set so that the captured animal will drown. Great care should be taken in killing the animal so as not to damage the fur and, in the case of larger animals, to prevent injury to the trapper.

Trapped animals can be humanely disposed of without damage to the pelt with the aid of a snare which can be made from a wire and a piece of pipe. In killing foxes, it is important not to spill any blood near the trap or the location will be spoiled for further trapping. A well-aimed blow on the skull

is satisfactory for killing most small animals. Be sure to keep the animal's pelt as clean as possible.

In killing skunks, never shoot them or hit them on the head as they are sure to scent when killed in this manner. A long stick may be used to break the skunk's back, in which case he will not scent. He should be hit squarely on the middle of the back. In some cases a long stick can be used to carry the trap and animal to water where the animal can be drowned. It is also reported that a copper noose can be used on a pole for hanging the skunk with little chance of having the animal scent.

Skinning

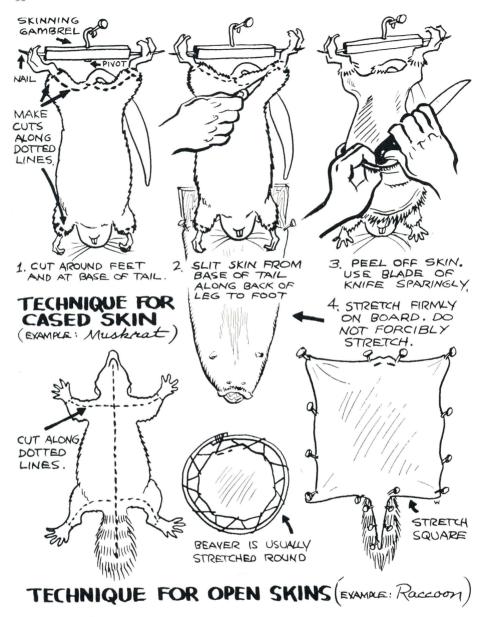
Upon returning from the trap line the trapper should immediately prepare to skin the day's catch. Depending on the animal, skins are either prepared as open or cased skins. As a rule, raccoon and beaver are prepared as open pelts, while the skins of other animals are cased.

OPEN-TYPE SKINNING—The animal to be skinned may be fastened to the side of the building or some other stationary object by means of a nail driven through each hind foot. Many trappers use a skinning gambrel that greatly simplifies this hanging procedure. A cut is then made in the pelt from the point of the chin straight to the tip of the tail. Side cuts are then made from here to the soles of the feet by the shortest route (see Fig. 24). The skin should then be peeled rather than cut off the body. A sharp knife may be desirable in making the opening cuts, but if a dull knife is used for finishing the job of skinning there will be less likelihood of cutting the pelt.

CASED-TYPE SKINNING—The animal is hung as before. The skin is split down the back of each hind leg to the base of the tail. Split the tail along the under side to the tip in all animals except the muskrat and opossum. In these forms, cut it completely loose from the tail. Remove the skin from the feet and continue with the pelting by peeling loose first from the tail and rump, then forward over the body and head as one would remove a slipover sweater. In the case of the fox, the front legs can be split all the way down to the toe nails, removing all bones. The fleshy part of the fox's ear must be removed. Special care should be taken in skinning around the eyes and nose.

Stretching, Drying and Storing Pelts

When the skinning job is finished, the pelt should be placed on a drying board or wire stretcher. Salt and other chemicals should never be used on fur skins. Beaver and raccoon are simply tacked on a flat surface with the flesh side out. The case skins are placed on drying boards or frames with the flesh side out. If the skin has much fat or flesh on it, this must be removed.



F19. 24

Some trappers prefer to do this before placing the hide on the drying board; others place the hide on the board and when it has started to dry use a dull knife or piece of glass to scrape off all the fat and tissue. Some trappers even use a clothes wringer to squeeze off excess fat.

Drying boards or wire stretchers should be chosen to fit the skin. Do not try to fit the skin to the drier. Use the board or frame that will slide into the skin without being forced, yet will fill the skin without wrinkles. The purpose of these boards is to dry the pelts properly, not to stretch them. Drying should not be too fast or the hide may crack. Never place the skins near a hot stove or furnace.

If the pelts are to be stored they should be put in a room with a low temperature, near freezing if possible, and should be placed so that they will be safe from rodents or insects which might destroy them.

The average trapper will probably sell his season's catch to some local fur buyer, who in turn ships to one of the many large fur dealers. If the trapper sells to a local dealer, shipping requirements need not be followed. However, a club member may wish to sell directly to some fur house. In that case he should observe the following procedure in packing the hides for shipment.

- a. Each hide should be separated by paper.
- b. Never fold the pelts.
- c. Wrap the package well.
- d. List contents of the package on the outside wrapper.

REFERENCES

- Farmers Bulletin 1879. "Ponds For Wildlife," Superintendent of Documents, Washington 25, D. C. 10 cents.
- Yearbook Separate 823. "Trapping On The Farm," Superintendent of Documents, Washington 25, D. C. 5 cents.
- Bulletin P3. "Fur Bearers and Game Mammals of Iowa," Agricultural Extension Service, Iowa State College, Ames, Iowa.
- Bulletin 18. "Pennsylvania Wildlife," Pennsylvania Game Commission, Harrisburg, Pennsylvania. 25 cents.
- Conservation Bulletin 12. "Improving the Farm Environment for Wildlife," Superintendent of Documents, Washington 25, D. C. 10 cents.
- "Hunting and Trapping Laws" Game Division, Michigan Department of Conservation, Lansing, Michigan.
- "Planting of Food Patches for Wildlife" Game Division, Michigan Department of Conservation.
- Extension Bulletin 218. "Producing Wildlife by Good Farm Land Use," Michigan State College Bulletin Office, East Lansing, Michigan.

- Wildlife Leaflet 194. "Publications on Trapping," Superintendent of Documents, Washington 25, D. C. Free.
- "Michigan's Million Dollar Muskrats" Game Division, Michigan Department of Conservation, Lansing, Michigan.

For information on individual problems write to the authors of this project.

Pamphlets on trapping methods and pelting can occasionally be secured from mail order houses and large fur buying companies.

SUGGESTIONS FOR DISCUSSIONS AND ACTIVITIES AT 4-H CLUB MEETINGS

- 1. What are the best methods of pelting fur animals? Pelting demonstration.
- 2. Where and how should the pelts be dried?
- 3. What items determine the price received for pelts?
- 4. Short talk on care of furs by local fur buyer.
- 5. Discussion of trapping experiences.
- 6. The effect of early spring and late fall burning of swales and marshes on wildlife.
- 7. How to keep a business record of trapping.
- 8. How are fur garments made from the pelts? If possible, ask a local clothing dealer to discuss fur articles at your meeting.
- 9. Using mail order catalogs determine how many different trade names for furs such as Hudson Seal are listed. From what animals did the fur originate?
- 10. Discuss the breeding habits of the fur animals in your community.
- 11. Report on how to determine when a pelt is prime.
- 12. How to make trap sets. Take a field trip to a farm or marsh to discuss places for making sets.
- 13. Trapping laws. Invite your local Conservation Officer to discuss these regulations at your meeting.

- 14. Take a field trip to a nearby muskrat marsh and discuss possible fur management activities.
- 15. What relationship exists between fur animals and farming operations in your community?
- 16. Make individual reports on food habits of various fur animals found in the community.
- 17. If possible, visit the Swan Creek Wildlife Experiment Station near Allegan, the Rose Lake Wildlife Experiment Station near Bath, the Cusino Wildlife Experiment Station near Shingleton, or the W. K. Kellogg Bird Sanctuary, near Battle Creek.
- 18. Discuss values of fur animals to the farm other than for the pelts.
- 19. Conduct a "Professor Quiz" night using questions concerning fur animals.
- 20. Make plans for either individual or club exhibits for your local fair or achievement day.

EXHIBITS

It is necessary that the 4-H Club member exhibit some of his work at Achievement Days and local fairs. This exhibit may include several or all of the following:

- 1. Survey map of the farm.
- 2. Display of various sized traps and drying boards used in the project.
- 3. Food habits chart of the fur animals.
- 4. One or more pelts* which were taken during the legal trapping season.
- 5. Photographs of fur animals and their habitats.
- 6. Project report with all questions neatly answered.
- 7. Any other material which the club member believes is related to the project.

^{*}The present fur laws require that within 5 days after the close of the legal trapping season each trapper must report to his local conservation officer the number and species of all pelts on hand.

Answers to "What Do You Know About Wildlife?" on page 5

- 1. False. Pasturing destroys much of the muskrat food bordering such areas.
- 2. True. Water levels fluctuate with the seasons of the year, being highest in spring and lowest in late summer.
- 3. True. Pasturing of wood lots destroys the ground plants necessary for food and cover for game.
- 4. False. Fence row cover is very important to wildlife, especially when hay and grain is cut in adjoining fields.
- 5. True. It also destroys the first litter of young and helpless cottontails which ordinarily are born in early April.
- 6. True. Surplus fur animals must be harvested or they will go to waste like unharvested grain crops.
- 7. False. Skunk dens frequently have several adult skunks in them.
- 8. False. Beavers do not leave home until they are about two years old.
- 9. False. It is ordinarily believed there are three muskrats to each lodge in a marsh.
- 10. True. Soft maples and white oaks more often have hollows in them. Red and black oaks do not rot out as quickly to form dens.
- 11. False. Raccoon skins should always be prepared flat.
- 12. True. Forcibly stretching a skin makes it thin and decreases its value.
- 13. False. Michigan weasels commonly turn white in winter.
- 14. True. Mink skins, like those of muskrats, are cased.
- 15. True. Michigan's harvest of muskrats commonly reaches ½ to ¾ million animals a year.
- 16. False. Farm boys make up the most numerous age group of trappers in Michigan.
- 17. False. About 90 percent of Michigan's fur value is harvested in the lower peninsula.

- 18. True. It is in a water depth of 6 to 30 inches that the muskrat and its food thrive best.
- 19. False. It takes about 70 mink skins to make a lady's fur coat.
- 20. True. Eighty-six percent of Michigan's fur harvest is made up of muskrats.
- 21. True. Placing dead poultry on dumps invites predators to develop a taste for farm fowl.
- 22. False. A No. 1 trap is best for taking skunk.
- 23. True. Although fur and game animals belong to the state, the right to control trespass belongs to the landowner or leasee.

Cooperative Extension Work in Agriculture and Home Economics. Michigan State College and U. S. Department of Agriculture cooperating, R. J. BALDWIN, DIRECTOR EXTENSION SERVICE, Michigan State College, East Lansing. Printed and distributed under acts of Congress, May 8 and June 30, 1914.