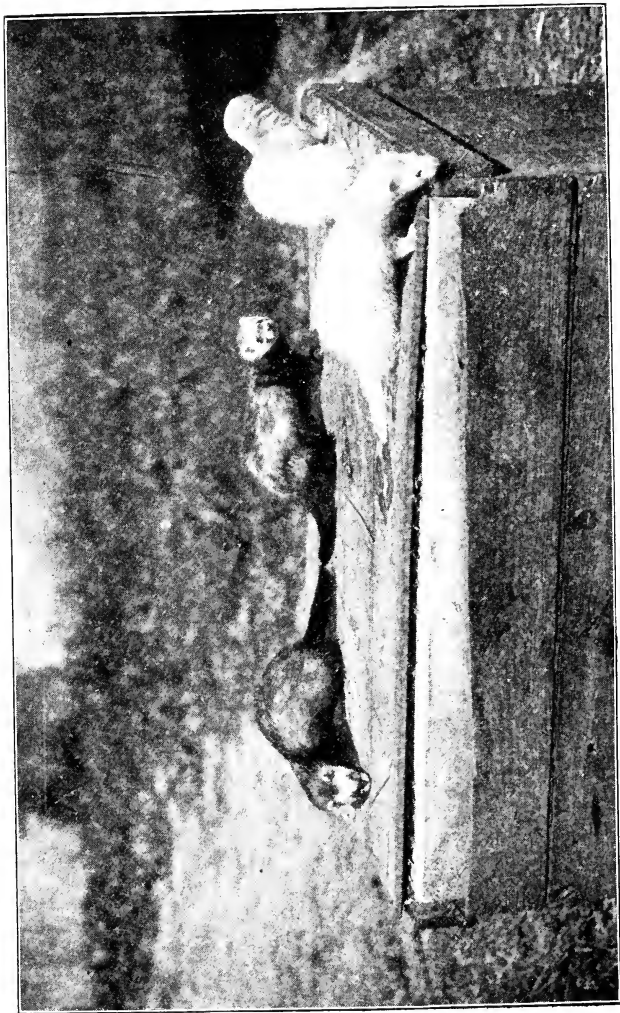




FERRET FACTS AND FANCIES.







THE TWO VARIETIES OF FERRETS.

FERRET FACTS AND FANCIES

A Book of Practical Instructions on
Breeding, Raising, Handling and
Selling; Also Their Uses
and Fur Value

BY
A. R. HARDING



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INTRODUCTION.

NO business of the importance of the ferret industry has received so little attention and notice especially from the press. Fur Raising, Ginseng and Golden Seal Culture, Game Growing, Fish Culture have all been given a good deal of attention from newspapers, magazines and books upon the several industries as well as publications devoted entirely to these special lines. Although the ferret industry, in America, is really yet in its infancy the business is of much more importance than generally realized. Perhaps there is no better way to illustrate the extent to which even now ferrets are raised, sold and used than to call especial attention to Chapter II—Ferretville.

Ferrets are a domesticated wild animal. I have seen more than one raiser pick up, with bare hand, old ferrets, handling or wooling them around. The ferrets apparently enjoying it. At the approach of the owner or raiser they usually come to him, or as close as the wire screen will allow, jumping up or clinging to the wire and otherwise showing their friendliness.

At the present time ferrets are mostly used to exterminate rats and for rabbit hunting. For rats they are much used in barns, granaries, grain elevators, mills, stores, levees, walls, ships or any place where rats are. If rightly used and handled there is no better or quicker way to rid a place of the pests. Where rabbits are doing an injury to fruit trees, etc., ferrets can be used to advantage. Ferrets are also used to some extent on the large Western ground squirrels, gophers and prairie dogs. Some success has also been had in using on mink, skunk, coon and other fur-bearing animals.

The ferret is very similar to the fitch, an European animal, that furnishes tens of thousands of skins to the fur trade annually. In Europe the ferret is sometimes called fitch-ferret where-by many claimed to be half fitch. Some dealers in American furs class ferret skins as "halves"—half ferret, half fitch—and buy on that basis. At the present time the fur value of the ferret pelt is but little, yet the time is not far in the future when it, no doubt, will be much more valuable.

Raising ferrets, like most other lines of business, is profitable for those who are familiar with the nature and habits of the animal, but is apt to prove otherwise for those who know nothing

about it. Information, in this book, was gathered from visiting some of the largest ferret colonies as well as correspondence with many others who raise thousands down to those who raise a very few.

C. R. Harding.



FERRET FACTS AND FANCIES.

CHAPTER I.

HISTORY AND DESCRIPTION.

THE ferret is a native of Africa. The animal was first domesticated in the northern part of that continent, by the Egyptians, hundreds of years ago. Long after its first domestication it was taken across the Mediterranean Sea and introduced into Europe, from which continent it has spread to many part of the civilized world. The first ferrets in America came from Spain, one of the divisions of Southern Europe. Just the exact date that it was brought across the Atlantic Ocean is not known but it was not until late in the nineteenth century, probably about the year 1875. The animal has proven useful and beneficial when rightly used.

There are two varieties—white and dark or brown. The white variety is called Albino or English. It has a somewhat yellowish-white coat of fur and hair and pink eyes. The other variety,

dark or brown, is known as the Fitch-ferret. It has dark eyes and is said to be the result of a cross between the Fitch, a European animal, and the white or common ferret.

Ferrets belong to the Mustelidae family. Marten, weasel, European polecat (don't confuse with American skunk or civet cat, for they are



WHITE AND BROWN OR DARK FERRETS.

of an entirely different family) are close members of the same family, while allied (if not more distant relatives) are otter, badger and skunk. All animals of this species are pretty much the same in form, habits and nature. Ferrets have short legs, elongated, muscular and lithe bodies; they are blood-thirsty, determined of purpose and relentless; hardy and prolific breeders, rather short lived, habits clean. Like all of the

weasel (mustelidae) family they are possessed of a foul odor which they can secrete or produce at will. They, however, are not foul smelling unless roughly handled.

The ferret, according to Chambers' Encyclopedia, is an animal of the weasel family so nearly allied to the Fitch, known as Polecat in the Old World, that many regard it as a mere domesticated variety. It is of rather small size, the head and body being about fourteen inches long, the tail five inches and a half, the muzzle rather longer and more pointed, the head rather narrower and the color is very different, being yellowish, with more or less of white in some parts, there being two kinds of hair, the longer partly white, the shorter yellow. The eyes are pink. It is, however, much more susceptible to cold than the polecat and requires careful protection from it in climates where the polecat is a hardy native. It was imported into Europe from Africa and was well known to the Romans, being anciently employed, as it still is, in catching rabbits, for which purpose it is often sent into their burrows muzzled, or "coped" by means of a piece of string, to drive them out into nets, or, with a string attached to it, it is allowed to seize the rabbit in the burrows and then it is drawn out, holding it fast.

The usual plan, however, is to let the ferret have free range of rabbit holes unmuzzled, the rabbits being shot as they bolt. Attention to warmth and cleanliness is essential to the health of ferrets. They are capable only of partial domestication, acquiring a kind of familiarity with man and submitting with perfect quietness to his handling, but apparently never forming any very decided attachment, and they never cease to be dangerous if not carefully watched, especially where infants are within their reach. If allowed any measure of freedom, they are ready to attack poultry and kill far more than they can devour, merely sucking the blood. They generally breed twice a year, each brood consisting of six to nine. The female sometimes devours the young ones, in which case another brood is speedily produced.

It has been domesticated and raised in confinement a great many years. It is a favorite animal among the English farmers, where a few are kept and raised on nearly every farm for the purpose of keeping the rats away. This custom has been practiced in England for a good many years and many farmers of today do not consider their farm properly equipped without a stock of ferrets. Since being brought to this country, their standard has been raised a great deal

higher by giving due attention to the selection of the breeding stock and by careful mating of the same. The ferret of today, as bred and raised in America, is a slim, very muscular animal and can kill animals much larger than itself. It resembles the mink or weasel in shape and size, having a long, slim body, small head and pointed nose. Having a very flexible body, it can enter very small holes and follow rats in the most difficult places. As already stated, they are of two colors, white and brown. There is no difference in the two varieties as to their breeding and working qualities. It is only a matter of fancy as to color. They are hardy, strong animals and breed well in any climate. The average life for the ferret is from six to nine years. The breeding season is from March to September. One female will sometimes raise from ten to twelve young in one year, sometimes having two litters or even more, but usually less. The ferret will not breed until the following spring. She must be one year old.

In Europe, like America, they are mainly used for rat and rabbit hunting. This animal, according to naturalists, is merely a variety of the polecat, modified by effect of long continued captivity. Readers must not associate the polecat here alluded to, which is found only in Europe,

with the American skunk or civet cat, as it in no way resembles these animals. Fitchet or Fitch Cat, is the name given to the animal throughout much of Europe. The pelt or fur is known to the fur trade as fitch and can be described as consisting of a woolly, yellow under fur, showing through longer, glossy dark hairs. In the Russian skins the under fur is almost white. The body of this animal is about seventeen inches long and the tail six. The fur is of value and thousands are used each season.

Ferrets, as bred and raised in this country, will average around fifteen inches in length of body and tail five. They weigh up to three pounds but the average will be nearer a pound and one-half. In parts of the West there is a species known as the black footed ferret. They often live in prairie dog holes and in some localities have about exterminated the prairie dog. This species is very similar to the brown or dark, other than its feet are black. While found in several Western states, it is not plentiful enough, except in a few localities, to be a menace to prairie dogs and other pests.

The Eastern states, such as Pennsylvania, New York and the New England states are all buyers of ferrets for rabbit hunting. In fact, most all rough or rocky states are users of the

ferret. Many farmers, ranchers, gardeners, etc., especially west of the Mississippi, write ferret owners asking if they have animals that will kill ground squirrels and other pests. Reliable ferret raisers generally recommend best results only for rats or rabbits. Some claim their ferrets will drive out skunk, mink, ground squirrels and other small animals. While the ferret is naturally a fighter, yet their size and strength is limited. Certain animals have a natural dread of the ferret and seek to escape. If several ferrets were put in dens they might rout the animal, yet rats and rabbits are the two on which they are the most used, as both are afraid of the ferret.

Ferrets have a large field to work in; they are used on vessels and around wharfs, in mills, elevators, cellars, by farmers, sportsmen and poultry breeders. The cities and country are over-run with rats and the only way to get rid of them is to ferret them out. They are also used by sportsmen for hunting rabbits, mink, muskrat and other game. Buy a pair of ferrets and clear your place of rats. For rabbit hunting you will find them the best paying investment you ever made. They are also used on ground squirrels, gophers and prairie dogs.

The saying "ferret it out" is surely applicable to the four-footed ferret for they can "ferret out"

not only animals much larger and powerful than themselves but are able to enter any den or hole that a rat can, especially the small sized ferret can enter any rat den.

Although ferrets (as the animals are called and best known in this country) are native of a warm country—Africa—they can be raised in nearly all parts of America, the exceptions being parts of Alaska, Northern Canada and the colder and high mountain sections of the United States. Some raisers are inclined to think that the brown variety, wherever raised, have the stronger eyes as more of the white kind apparently go blind or suffer from weak eyes than of the brown variety.

Ferrets that are handled a great deal generally become quite tame. The animal is possessed of more intelligence than usually known. Those kept and handled for months are apt to become so tame that they will not leave even when given freedom but are on hand at feeding time. In several instances ferrets and cats have been known to eat from same dish. Others become so attached to their owner, that they are at his heels much of the time, when he is around the premises. A boy, near Chicago, had a 2-year-old ferret that followed him one evening for miles. Just after dark he started to walk to a place, nearly three miles, on an errand. The errand



FERRETS ARE EASILY TAMED AND HANDLED.

done, which required about ten minutes, he started for home when he met the ferret following on his trail or track, nearly three miles distance. It showed its appreciation quickly when picked up. All know how a dog becomes attached to his master. It seems ferrets have same fondness, at least to some extent. As ferrets hunt by scent and are a keen scented little animal it is not hard to understand how one might become attached to and trail its owner.

CHAPTER II.

FERRETVILLE.



FERRETVILLE, or possibly best known by the name of New London, is located 47 miles southwest of Cleveland, Ohio, on the Cleveland, Cincinnati, Chicago & St. Louis and Northern Ohio railroads. The town had a population of 1,557 according to the 1910 census, with approximately the same now, being only an average Ohio town for general business and thrift. Among the industries may be mentioned banks, brick yards, tile works, flour mills, butter and cheese factory, regalia manufacturing, newspaper, stores, garages and other industries of more or less importance. The country surrounding "Ferretville" is largely devoted to grain growing, dairy interests and stock raising, not overlooking the ferret breeder and raiser.

The ferret business in America was first launched by Henry Farnsworth, at Rochester, a little village of some 200 inhabitants, a few miles northeast of New London. Realizing a few years later that it could be developed into quite an

industry, with his three sons, Levi, Samuel and Ezra, they moved the business to near New London, where the breeding and raising was carried on, on a more extensive scale, raising and selling several hundred if not thousands yearly for some time. Later one of the sons married, another moved (who followed raising for a time) but for some years past none of these Farnsworths have been regularly in the business.

Among those who engaged in the business during the early days were: N. A. Knapp, O. E. Hemenway, R. J. and Will Wood, George Zarker, Kiefer Bros., Olin Washburn, and Clayton Dimick. Some of these perhaps looked upon the industry as a get-rich-quick method, for after a few years with more or less success, most of these raisers dropped out. Others, however, went into the raising, not only in and around New London, but in other towns such as Rochester, Greenwich, Wellington, Ashland, in fact many towns and villages in Huron, Lorain, Ashland, Richland and other nearby counties, but New London became and still is the center of the industry. Within a radius of ten miles of New London, half of the ferrets in America are probably raised.

New London (Ferretville) is pretty well advertised throughout America as the village where

ferrets are raised by thousands. While the industry is one where the demand will probably remain under 200,000 yearly for rat and rabbit purposes, yet as the tens of thousands sold annually go to all parts of America, it puts Ferretville upon the map, so to speak, far and wide.

Gradually, the importance and volume of business being done in ferrets in Northern Ohio was noted by enterprising people elsewhere, who began raising them. The industry spread to other parts of Ohio, also to other states, and even west of the Mississippi River. So many, however, took to raising them at New London, only a few miles from where the Farnsworths were so successful, that that locality produces about one-half of the total number raised in North America. It bids fair to continue doing so.

During the spring of 1915 there was probably a dozen breeders in and near New London, who had from fifty to five hundred females. At that time Held & Anderson had the greatest number, five hundred. The total number of females kept for breeding in the New London territory was around 2,500. This included not only those that make ferret raising a business, but those who keep a few. Add to these probably 1,500 more within a radius of fifty miles and the

total is 4,000 young producing females. Say they raise five each the first litter and the total young is 20,000. Perhaps half or 2,000 are bred again. The second litters do not average so many. It is probable the average will be only $2\frac{1}{2}$ or 5,000. This brings the number raised to 25,000, and assuming that the same number will be kept another year for breeders, would leave 25,000 for sale.

At the highest tide of the industry it is estimated that 35,000 were shipped during a single season. The average is considerable less, being around 20,000 annually. The largest single shipment was one made the season of 1914 of several hundred and valued at \$1,500.00.

Ferret raising, like other enterprises, has its dark side, for all who engage do not succeed — neither do they in other lines. Yet the wonderful success made by a few caused others without any ferret knowledge to engage in the business. Many such, after a year or two, quit. Those who today are making a success, study the animals and look after them closely.

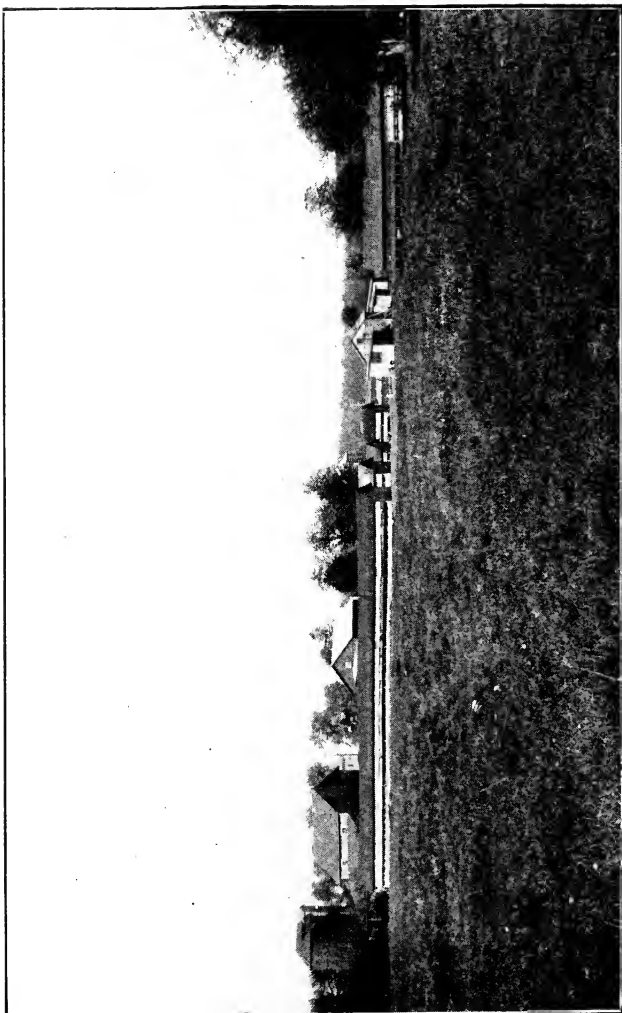
In the first years of the business Mr. Farnsworth arranged with farmers to raise for him, paying 50 cents for the young in the early fall. At that season there was ready sale at \$2.00 each or better, so that it was easy money for the

buyer. It was not long, however, until the farmers learned that there was a ready market at much more than the price Mr. Farnsworth was paying them, so looked elsewhere for sale.

Ohio is noted as well for the diversity as well as for the extensiveness of her industries, and every little while one hears that a new industrial activity has been established or an old one pushed to a remarkable degree. An Ohio man has developed the most extensive ferret-breeding establishment in the United States. He is Fred Held and his place of business is at New London, a little village in the southeastern corner of Huron County.

The records of Held's business (he now has a partner) show that the number of ferrets now annually produced there and sold reaches the high point of 5,000. And they go to all parts of the United States and to foreign countries. The demand not only continues but is increasing, they say, and the business at the Held plant grows with it.

The peculiar industry was started in that vicinity by three brothers living near Rochester, Ohio, a little village over the line in Lorain County — Samuel, Levi and Ezra Farnsworth — whose given names brand them as of New England extraction. Their Yankee instinct led



BIRD'S EYE VIEW OF HELD & ANDERSON'S FERRET FARM.

them into the business and they made quite a success of it, but they did not grasp the possibilities of it as Held did, who, while he got the idea from them, has developed it far beyond anything ever dreamed of by the Farnsworth men.

Originally ferrets were used almost exclusively for killing rabbits, but since many of the states have passed laws forbidding such use of them, in order to protect rabbits, their principal use in states like Ohio is in ridding places of rats. A ferret can go any place a rat can and rats are mortally afraid of them. They fly when a ferret enters their burrows.

As is well known, ships soon become infested with rats, which board them as they are tied up at the wharfs. Wharfs are always infested with rats of large species that live on the refuse from the cargoes thrown out there. It is a frequent sight in the water shipping districts of ports to see rats going aboard by way of the mooring ropes.

Every vessel carries its equipment of ferrets, whose duty it is to keep the holds free from the rodents that, during a voyage, may do extensive and expensive damage to goods in the cargoes. Vessel-owning companies are large buyers from the Held establishment — their orders generally calling for from 50 to 100 animals.

It is not generally known that the ferret's choice of food is horse flesh. That must be an acquired taste, for, of course, in his wild state and unaided by man, the ferret could never secure such food. Many an ancient horse, useless in other ways, finds a sale at a low price at the Held ferret farms. The matter of providing food for the young ferrets is quite another and more expensive thing. A small dairy herd is necessary for this purpose, for it is found that the little fellows do best, and escape the many diseases that assail young ferrets, when fed liberally on ground whole wheat, liberally soaked in fresh cow's milk.

At the breeding period the mother ferrets are also fed with the same preparation.

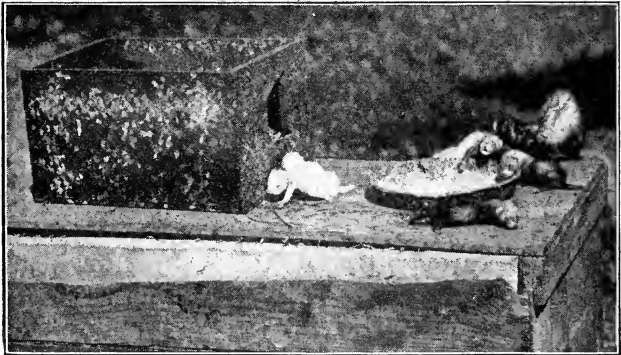
Since the ferret raising industry was begun in Northern Ohio several hundred people in the New London vicinity have been interested in the business. At one time there were probably a hundred who had the "ferret fever" in a single year. It is true that many only raised a few and gave the business up after a year or two, but others devoted their entire time and attention to ferrets. While no accurate figures are available yet several million dollars have been paid to the "Ferretville" raisers during the past twenty years.

CHAPTER III.

HUTCHES AND NESTS.

CONSIDERABLE personal observation, coupled with catalogs from the larger breeders, as well as letters from those keeping a few only, reveals the fact that hutches and boxes are all pretty much along the same general plan. If a person keeps but one or two ferrets, a very good cage, hutch or house can be made from an old organ box, laid flat and cut down so that it will only be about two feet high, which is about right for two pens. With a partition through the middle, this will make two pens about 4x3 feet. They should not be smaller than this for each female to get best results. For the front of the box heavy poultry netting with one-half or three-fourth inch mesh can be used, as one side of the pen should be open. The old riddles out of a threshing separator make very good and durable fronts. The front half of the top of the box should be hinged to make a door. In one of the back corners of the pen should be placed a small box about a foot square to be used as sleeping quarters. There

should be a hole about four inches in diameter in the box to allow the ferret to pass in and out. There should be plenty of clean straw kept in this place for the ferrets, as they seem to be best pleased when sleeping in the middle of a high bunch of straw.



MOTHER, YOUNG AND NEST BOX—PLACED ON TOP OF HUTCH TO PHOTOGRAPH.

According to one, cleanliness is the main point in the care of ferrets. They are an extremely tender and uncertain animal to care for. Their pens should be about three feet high and three by four or five feet, which should not contain more than three or four ferrets; or if one has more room they can give them, it would be

all the better. I have kept fifty in a pen 10x12 feet, but the pen has to be kept perfectly clean at all times. They can not climb up any further than they can jump up and catch hold.

Inside this main pen should be a small box with a three-inch hole in the end, to serve as a nest where they may sleep and enable them to come outside in the air to sun. The main pen should have the bottom well covered with clean earth or chaff to absorb the moisture, and especially in the corners where they leave their droppings; and this earth or chaff should be covered with clean straw. The nest should be supplied with soft straw or dried grass. They will carry in clean nesting and keep their nest clean themselves if given a chance, but a general cleaning of pen and nest should be made at least once a week. Every day or two their feed dish should be scalded out and thoroughly washed.

Another of the small but successful raisers thinks his good results due to the following: Cleaning pen or box every third day, also daily washing dishes that the ferrets eat from. Cleanliness is a preventive of disease and as ferrets' diseases, such as foot rot, are very contagious, and must be guarded against. There are skin diseases, lice, etc., which, while not so fatal, must be avoided if possible and cleanliness of

hutches, nests, and feeding vessels is largely a preventive. If any one thinks that all they have to do to raise ferrets is to throw in some feed, they are mistaken.

A box 4x5 feet will accommodate a pair or a mother and litter. Place some clay or straw in the bottom, clean out often and there will be no disagreeable odor around the pen. Remember that ferrets should not be kept in cellars or any place that is damp. Their pens, hutches or boxes should be in as clean and dry a place as possible, where they get plenty of fresh air. Never cover up the tops of their pens. These are things I had to learn for myself in the last fifteen years' experience in caring for ferrets.

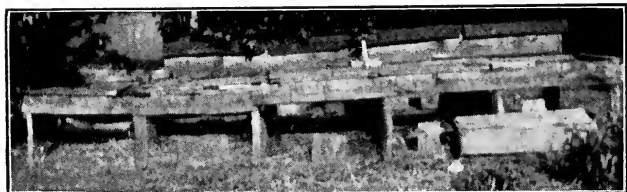
In keeping one or two ferrets, says a successful raiser of years of experience, but who at one time only raised a few, a pen four feet square is about the right size and it should be about two feet high. Cover over the top with one-inch mesh wire, leaving a small door so that one can get at them handy. Put about three inches of good soil (not sand, as sand breeds fleas, and fleas are the worst things that a ferret or a dog has to contend with) in the bottom of the pen. Make a small box nest in one corner, cover on top, with holes for air, also a small square hole for the ferret to go in and out. The cover of this nest

may be taken off in the summer or warm days. Put enough straw in the nest for the ferret to burrow in and you will find that in this way they will do better than by throwing the straw in a heap in one corner.

The ferret will use one corner of the pen and this should be cleaned up every day, so there will be no dampness, as dampness causes what we call foot rot, and is a bad disease for a ferret to have. If not taken care of, the feet become very tender and sore, the toe nails grow very long, and, in fact, the whole foot rots. This disease may be cured by this simple remedy: The foot should be soaked in warm water until the scab becomes spongy, then take a little lard with powdered sulphur and turpentine mixed together, apply this freely to the feet and after a few applications the disease will go away. If they are cared for properly, they will not have this disease. Dampness is what causes it. Change the earth in the bottom of the pen once or twice a year; also have their bedding changed often and the ferret will do well.

The description here given is recommended by one of the largest raisers of Northern Ohio who has been a successful ferret man for many years. Where only a few ferrets are kept for hunting or rat killing a good hutch can be built

out of a dry goods box. A box 3x4 feet in size will be ample room for a pair or even more. A handy hutch can be built and placed in your back yard by cutting the box down to thirty inches high. Nail cleats or posts in the corners, on one side let the posts stick up two feet above the top of the box, then nail a plate on these posts, put on a board roof. The boards are nailed to the plate and to the back of the box,



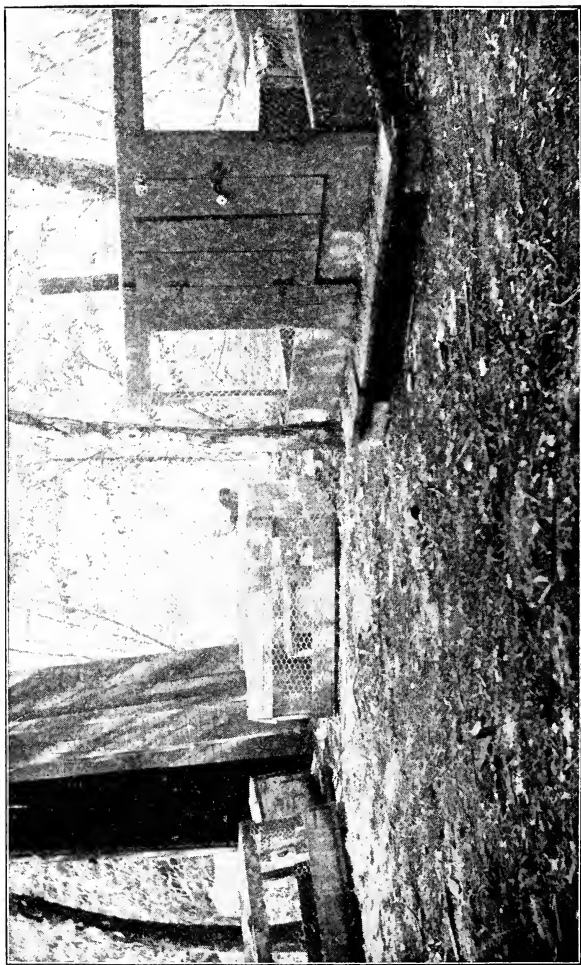
SUMMER HUTCHES OF A NORTHERN RAISER.

side up the gable ends, and you will have an opening of two feet, which gives you room to feed and clean out.

Make a screen door out of one-half inch mesh poultry netting; this will give plenty of air. You can hinge this door so it will drop down if you wish. We would place this hutch in the shade in hot weather. This makes a good hutch for summer or winter, if you have some out-building to place it in, make a wire lid on the box instead of the board roof.

If clay is handy, fill in four inches deep; if not, shavings or straw will do. Make a nest box. You can keep them in fine thrift in such a hutch and there is no danger of them getting out.

This plan is followed by a party who raises several dozen each year. A ferret should not be kept in a dark, dirty barrel or box, but should be kept in a light, clean, airy shed. My pens are about five feet long and four feet back from the front. I generally put a shed roof on about six feet high at the front and five and a half at the back. The building can be made as long as one desires. This building should be cemented and about one foot of dirt put on top of the cement. About two feet from the top of the dirt I build my nests by placing a ten-inch board along the back of the pen. I next place a board about five inches wide on top of my ten-inch board and then place a cover over this on hinges. This makes a nest about five inches high by ten inches wide by five feet long. Saw about three inches square out of the five-inch board in front of the nest for the ferrets to go in. Put four-inch board from these entrances down to the front of the pen. I leave the upper half of the pen open on the front for light and air. One-half inch mesh wire screening may be used to enclose this upper part. Each pen containing twenty square feet



FERRET SHED AND HUTCHES—AN IOWA RAISER.

(say 4x5) is large enough for eight ferrets. One female will do well in each enclosure with a litter.

Raising ferrets is not difficult for those who know how. They must be attended to regularly, pens or hutches kept clean and at about a certain temperature. If the weather gets very warm, the covering on the nest or breeding box must be partly removed. The box in which the female has her young has no lid or top on, that is, no board, but is topped or capped with straw. When the weather gets unusually warm, part of this covering is removed. If the young sweat much, they are too warm and if allowed in that condition long, will become diseased and die. In fact, a few sweats are fatal.

Where a few only are kept, the pen, hutch, box, or whatever the females are kept in must be sheltered from the sun. A shed of some kind should be used where the air can circulate during very warm weather and where during cold spells the doors can be closed. Letters From Raisers, Chapter XIV, contains a good deal of additional information about hutches and pens.

CHAPTER IV.

BARNS AND SHEDS.

THOSE who raise ferrets on a large scale find it advisable to have weather proof buildings in which the ferrets are kept, hutches built, boxes and nests made, etc. Buildings used by such raisers and breeders vary from small sheds to large and handsome barns. While the large and more up-to-date building presents a much more prosperous appearance, yet, no doubt, the shed usually affords as comfortable quarters for the animals, which seems to be all that is necessary. In fact, considerable inquiry seemed to substantiate this view. In other words, raisers with the largest and best buildings were not always the most prosperous and successful. In one instance, at least, a fine barn built especially for the ferret industry is now seldom used for that purpose.

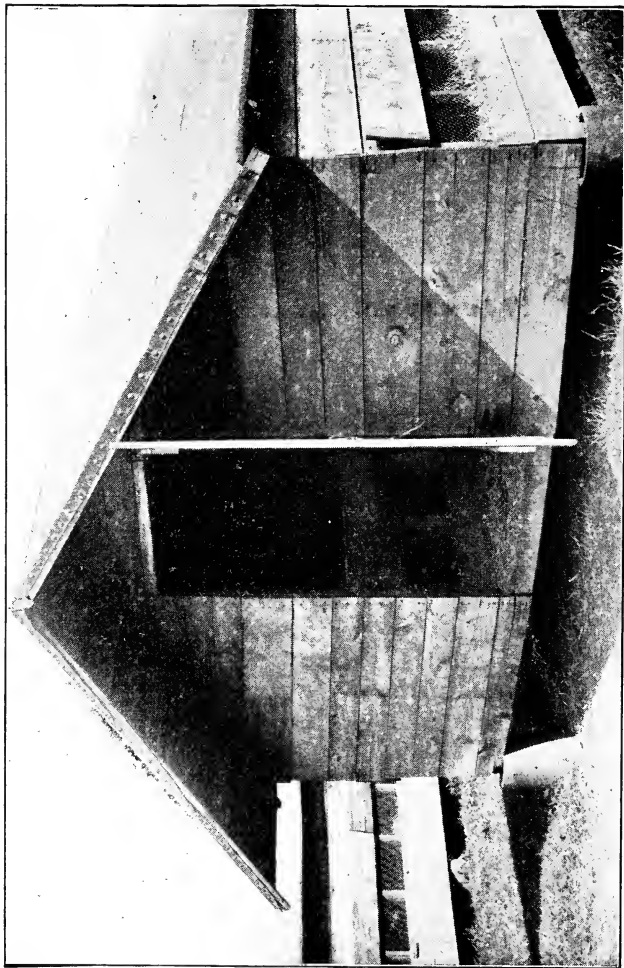
Without giving the matter much thought one would, at first, naturally suppose that the larger buildings would be best suited to successful ferret raising. Why? Because the large and high buildings would be cooler in the summer as the animals would be considerable dis-

tance from the roof. Again, the better built buildings would be warmer during cold weather, and feeding would be much easier under one roof. But there is another side to be considered. Suppose disease was to break out among the ferrets. Would it not be better to have several small barns or sheds in preference to one large building?

Raisers of experience have found it advisable to establish their ferret farms two, three or even more miles from cities, towns or villages, largely as a precaution against distemper. Ferrets will contract the disease from dogs, which is usually severe. Dogs are not allowed around the buildings or even upon the farm of most ranches. We are now speaking of those endeavoring to raise thousands or at least hundreds yearly. Those who raise only a few can afford to take chances in keeping them in or near a town or city.

There are various plans or ways of building barns or ferret shelters. A building suitable for say 50 females and young can be built for probably \$100. Yet another breeder might spend three times as much upon a building no larger—just as one man builds a house better than another.

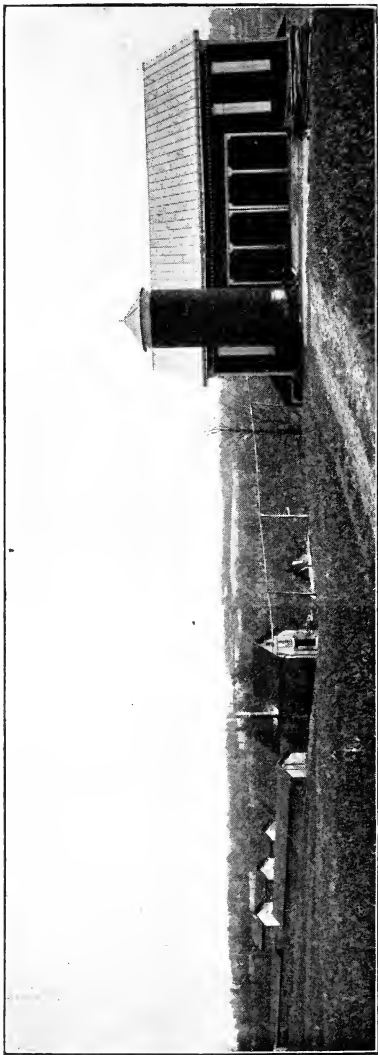
During the spring of 1915, when the writer visited the Held & Anderson ferret farm, where



END VIEW OF FERRET BARN OR SHED, ALSO SIDE AND INTERIOR ARRANGEMENT.

500 females and 100 males were kept, they were in one shed which was 12 feet wide and 100 long, $4\frac{1}{2}$ feet at eaves and about 7 at comb of roof—just high enough for a man to walk through the center aisle or alley. This aisle was about $3\frac{1}{2}$ feet wide, on either side of which were 50 pens $2 \times 4\frac{1}{2}$ feet. This was one of six similar barns or sheds but all ferrets were then in one building so as to be more easily fed and cared for. Ends of these sheds were to the east and west with sides to the south and north. This plan of building gave sunshine to one side and row of pens, half of the day, providing of course that the sun shone. A hinged board along the outside could be raised to allow more air or ventilation during very warm weather. This board, or door, was kept closed during cold or stormy weather.

Perhaps the most complete and up-to-date ferret buildings and equipment in America is in Ashland County, Ohio, the property of Chamberlain Bros., Ashland, Ohio, which was under the management of C. M. Sackett when this splendidly equipped and handled establishment was visited in the spring of 1915. A pretty good idea can be had of their equipment and manner of conducting same from the bird's eye view which includes barn, silo, cook house and three ferret

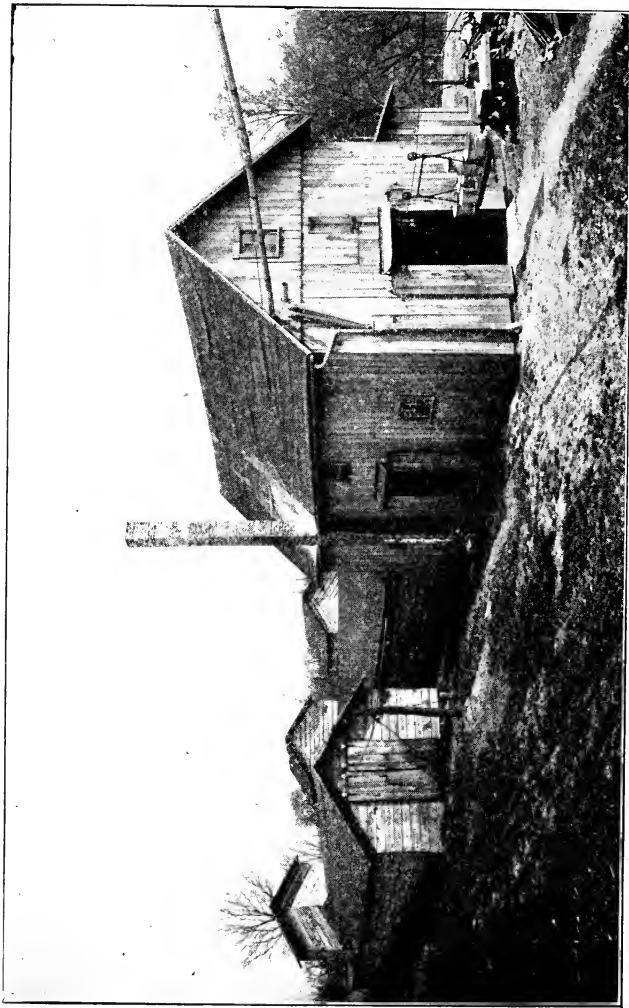


BIRD'S EYE VIEW OF CHAMBERLAIN BROTHERS FERRET FARM.

barns. Each of the three barns are 200 feet long, 12 feet wide with a 4 foot aisle and contain 200 pens 4 feet long by 2 feet wide and 30 inches high. The front or aisle end of each pen has an 18 inch strip of $\frac{3}{4}$ inch netting. In the center of each barn is a straw shed 12 x 18 and 8 feet higher than balance of barn where straw for the ferret pens is stored making it convenient to get when needed.

The barn and silo are important parts of the ferret colony for in the barn cows are kept and in the silo cow feed thus supplying milk for the ferrets. The cook house (the building with the chimney) is 16 x 30 feet, two stories. First floor is used for cooking, grinding meat, and grinding wheat into graham flour, etc.; the upper floor is a work room where shipping crates are made as well as much other work done.

At the right hand side, and near the front of the cook house, is a shed under which a pit about 5 feet deep, 4 long and 2 wide has been dug and cemented. When an old worn out horse is killed, or one in good flesh is accidentally killed or dies, it is bought. The hide is taken off and carcass cut up, when a layer of meat, then a layer of ice is placed in the pit. This is repeated, layer after layer, until entire carcass is packed in. The pit has a double cover and meat so

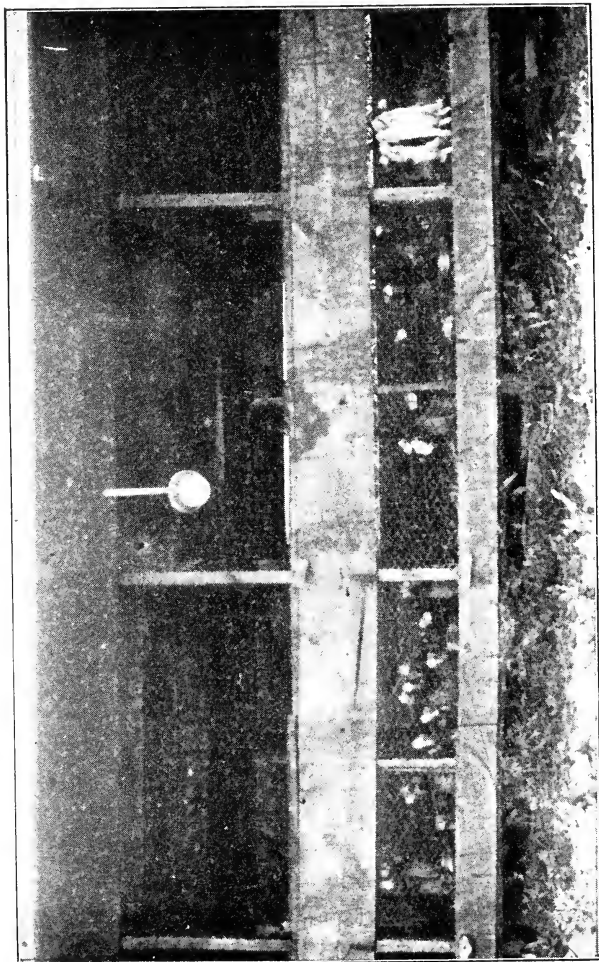


COOK HOUSE AND THREE FERRET BARNS. WELL ARRANGED AND SPLENDIDLY EQUIPPED.

packed, even in hot weather, will keep for more than a week. Several fresh horse skeletons lying about bore evidence that these raisers fed considerable horse meat, especially during the winter months.

A good many people are inclined to brag and overrate their own business whether ferret raising or some other. The Chamberlain Bros. Ferret Colony, C. M. Sackett, manager, has been running for twelve years, that is the manager had had that many years experience when the writer visited them. Chamberlain Brothers, some years ago, evidently saw that the business had great possibilities. One of the brothers is a successful merchant of Mansfield, Ohio, and the other conducts a store on the farm where the ferrets are raised. The following description of their buildings and plant is taken from their catalog:

“Our buildings are of the most up-to-date plans, completely equipped. Fine pens with wire fronts and backs, drop doors, automatic litter carriers with steel rod tracks, for the purpose of keeping the barns clean and sanitary. In our cook house we have an engine, feed grinder, meat grinder, saws (as we manufacture all our own shipping crates), meat pit and Chaldron cookers, also have tracks with feed car running from the



ONE OF RALPH WOODS' FIRST OR SUMMER PENS.

cow stables directly through the cook house into the ferret barns. This car is used to move the milk from the stables and the meat and mush from the cook house to the feeding pens, which enables us to do a great amount of feeding quickly and in a sanitary condition. We have 600 pens, which give us room for 4,500 ferrets."

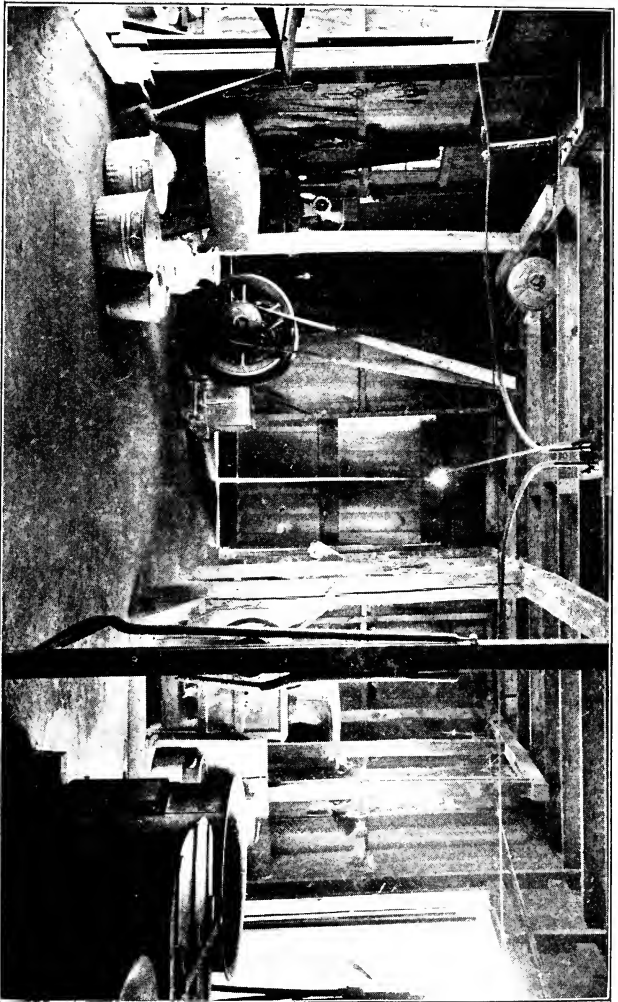
The ferret business according to Ralph J. Wood, of Huron County, Ohio, is not learned in a day. Although he is an old hunter and trapper having trapped as far back as the 70's and familiar with the habits and nature of animals, he still learns something new about the ferret raising business each year. In 1900 when he first began raising he kept them in outdoor pens but now he has three buildings each fifty feet long in which are one hundred and fifty single pens. The open or outdoor pens are all right for summer and fall but not to be recommended for winter.

CHAPTER V.

FEEDING AND MANAGEMENT.

LIKE most industries, vocations or businesses the man, boy, woman or girl that makes a success knows what they are doing,—are acquainted with what they are doing. The same applies to successful ferret raising. They must know the habits of the animals and be quick to detect their peculiarities. Ferrets must be looked after and fed daily. This, however, is no more than poultry, pet or other live stock requires.

That experience counts for much in this business the following bears out: One raiser of years of experience, who has raised several thousand in a single season, said that he walked through his sheds every evening during the summer months and from the squeal or cry of a young ferret could tell whether it was right or wrong—in nest or out. Sometimes they get out of the nest and into the straw. If quite young, chances are that they will not be able to get into the nest again. In such instances they are dead by morning.



INTERIOR VIEW OF AN UP-TO-DATE COOK HOUSE, SHOWING CAULDRON COOKERS, WHEAT GRINDER, MEAT BLOCK, ETC.

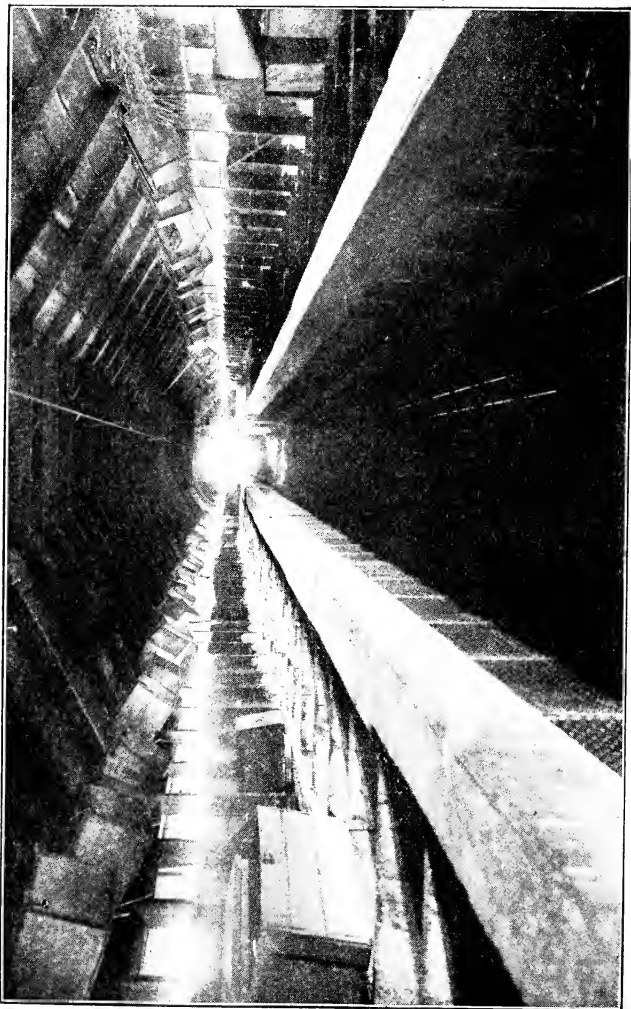
The staple food for ferrets should be bread or mash, made of whole wheat and milk. If you feed meat in hot weather, feed only a little at a time. Do not feed salty meat, as salt is fatal to ferrets. Feed them bread and milk and fresh meat and be careful not to let them have anything that has cornmeal in it, as it will in time kill them. Ferrets should be weaned at about eight weeks old as the old ones then will fight them. A good food for them is fresh meat, milk, oatmeal and milk, gravy and occasionally fried eggs. Except when the females have young, feeding once a day is sufficient. They should be fed only what they will eat up clean before the next feeding time, which should be in the morning. During hot weather if the same amount of feed sours, it will be best to reduce the amount and feed twice daily. They should have fresh meat once or twice a week and should be fed only what they eat up clean. Any kind of game animal, such as rabbit, bird and muskrat are good for them, but it is dangerous to feed the common rat to them. Beef or horse meat, and bread and fresh milk are good, but salt will kill them. Fresh pork is good, but do not give them more than they will eat up clean at a time.

In caring for ferrets you should have a clean, dry place and it should also be roomy. For bed-

ding you should use fine hay or rye straw; never use oats straw; also have their feeding part light, When out hunting, the head of game caught is all right to be fed to a ferret.

Different foods are fed by the various raisers but it appears to us that the graham mash, fed with milk is the best all-round feed. Bread and milk is also to be recommended. Meat may be fed, although they get along well without it and if fed too liberally may cause ill effects. Salty meat must never be fed, neither should it be tainted or decayed. The chapter on Breeding explains how to feed the female and young.

Those who have followed the ferret raising business for years, either on a large or a small scale, recommend the "graham mash" as the principal food. It is made from whole wheat ground or mashed. The mash is made much the same as regular cornmeal mush, that is, cooked with water to which has been added a little salt—about the same as for table use. At feeding time this mash is mixed with milk. About a quart a day is sufficient for four, five or six ferrets or what is usually kept in one pen or hutch during the winter season. Some use skim milk but right there is where many make a mistake. For strong, healthy ferrets, milk as taken from cows should be fed, that is, not skimmed.



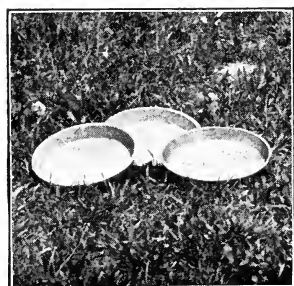
INTERIOR VIEW OF ONE OF CHAMBERLAIN BROTHERS' FERRET BARN.

One of the large and successful raisers feeds as follows: During winter the stock kept for breeding is fed milk in the morning, no mush and meat in the afternoon. In other words milk only in the morning and meat only in the afternoon or evening. After the mating and until young are born no meat is fed but the graham mush. After young are born then the graham mush with milk and ground meat. The young will learn to eat the mush and milk also the ground meat as soon as they leave the nest. Many ferrets are killed by too much meat and young especially must be fed but little at first. A piece as large as a hen's egg ground up is plenty to begin on for a litter of five or six.

Where large numbers are kept, the graham mash fed with milk is not only the cheapest but most convenient feed. Some feed meat occasionally but during hot weather it may cause bloat. Ferrets are very fond of horse flesh and the larger ferret establishments buy old worn out horses for about \$5.00 each. The hide is worth considerable so that the meat costs little or nothing other than the work connected with the slaughtering and feeding. A piece as big as a hen's egg is enough for each ferret. Remember that it is best to feed meat but once or twice a week. Some successful raisers feed little or no

meat, finding the graham mash a splendid all year round feed.

Pans used for feeding should hold only about a quart. They can be six, seven or eight inches



FEEDING PANS.

in diameter but should be only about one and one-half inches high. The experienced raiser knows how much they will eat up clean, but does not overfeed, yet they "lick the platter clean" before next feeding time which does away with all washing of pans. If this was not

done, that is all the food eaten, pans would require washing before each feeding.

Ferrets learn when they are to be fed and will come when called. This, of course, they only learn after becoming familiar with the call of the owner or one in charge. In the ranches where ferrets are kept over winter they come readily at their call. This may be bun! bun! bun! or ferry! ferry! ferry! or whatever suits. They soon learn just as cats come to the call of kitty! kitty! kitty!

Never handle a ferret roughly; pick them up gently and in so doing you will have very tame ferrets, as they like to be handled in a gentle way. When a ferret comes out of a hole, do not make a grab as soon as her nose appears, but wait until she gets all out and then pick her up. If not, you will have one that will become shy and not come out as it should.

Their average life is from three to five years. A ferret's natural diet in its wild state is meat, but bread soaked in milk is a good food. For one ferret give about a cup of milk with a small slice of bread broken in it once a day, also a small piece of meat two or three times a week. Keep all salty food away from them, as salt is hurtful.

People in general seem to think the ferret is a wild, unknowing animal; but experience has been to the contrary. I have known ferrets to be raised under an old barn and when milking and feeding time came, could be called like cats.

It is very important that hutches, boxes and other places, or enclosures be carefully watched and kept clean. They must be so built, arranged or located that they are warm during cold and wintry weather. Ferrets are very susceptible to cold. A window or other opening allowing draft will prove fatal. The hutches or building where

kept must be on dry ground. It is also best to have the floor a foot or so above the ground.

Northern Ohio, so far, has been the locality where the greatest numbers are raised. This is not because that particular locality offers the best climate or other advantages for successful raising, but rather from the fact that there is where the industry started and many others soon followed. No doubt there are other portions of Ohio and other states as well that are better adapted to the business by having a more favorable climate—not so much changeable weather. Again there are localities where there is much rain, air continually damp or changeable so that the business would not be apt to be successful or profitable.

CHAPTER VI.

BREEDING.

PROPER care and handling from the time the female comes into heat until the young are old enough to wean, is a critical period in ferret raising and here generally hinges success or failure. Methods followed at the various ferret farms are somewhat different, partly owing to numbers kept, yet the general procedure is much the same, whether a few jills (females) only or hundreds are kept.

When the farm or ferret colony is an extensive one, the female (also known as doe or jill) is put in with the buck and left for 24 hours. The coming into heat signs are much the same as a bitch. One breeder says that during this period the female resembles a sow pig. The period of swelling lasts a week or longer. When the proper time arrives to take the male, the exposed swollen part of the female will be about as large as a grain of corn.

To further explain we will take a farm where say 100 females and 20 males are kept. Straw

and other litter should be removed from the floor of a buck's pen or hutch, before a female is put in. Suppose ten are in heat and are put with ten males in ten separate pens. They are left together for 24 hours when the females should be removed and placed in two pens, five females in each. Next day select ten more females but put in with different males. Keep this up until all have been bred. The object in using bucks every other day is to allow a day's rest. Experienced breeders say this means healthier and stronger stock as well as larger litters. Record should be kept of the date bred and in a week all females should be again examined. If they are not with young, swelling remains and the female is put with the male again. There is no difficulty in determining whether it is necessary to put with the buck the second time.

The object in putting five females together in one pen or hutch after being served by the buck is for convenience in feeding and caring for them. They can be left together for thirty days. At the end of that time they should be separated, each placed in a pen or hutch about 3 x 4 feet, provided with a nest box about 12 x 14 inches and 10 inches high, filled with wheat straw. The



BREEDING BOX,
OR NEST FOR
MOTHER AND
YOUNG.

nest box has a hole in one end near the bottom, large enough to run your hand and arm in. This box is filled with straw which should be pressed down firmly and a sort of a nest made. The female will now take possession. As she begins to shed about ten days before the young are born, she begins to line the nest with her hair and fur. The nest is nicely lined and completed in time for the young—a provision of nature. All straw other than in the breeding box was removed when the female was put in the pen or hutch 12 days before the young were born. The female carries her young 42 days. Breeding females should be fed twice each day while with young and the same after they are born.

The date that mating should begin is quite important. Those who are experienced are of the opinion that it is best not to mate until the period of heat or swelling has developed several days for large litters. Some females, mainly large, healthy old ones may come in heat late in February, but where large numbers are raised, the first are bred about the middle of March. One large and successful breeder makes it a rule

to breed the first on March 17th, St. Patrick's Day.

As the females are pregnant 42 days, the man who makes a business of raising ferrets watches closely when they are born and evens up the young. The number produced in a litter varies from 1 to 15, seven, eight or nine being common, with now and then one producing ten, eleven, or more. Others vary from two to six. A female, having only one, two, three or four, if strong and healthy, is given one, two or more from another litter. This should be done within 24 hours after she litters for best results. The female usually has only six or at most seven teats. Any not sucked will soon dry. Therefore it is best to place all young intended with her soon. The object in distributing the young is that each little fellow may have a teat of his own.

When a second litter is desired, wean as soon as the young are old enough to eat. The female will come in heat again anywhere from ten days to two weeks. The young are grown at three months and can generally be weaned at about two months or as soon as they eat. Before weaning "straw up," when the mother will make a nice nest for her young. The only straw that had been given was in the nest box but before

removing the mother and nest box, straw should be placed to a depth of two or three inches in the pen. Here, the mother, as already stated, will make a nice nest. Wheat straw is the only kind that should be used.

Nature does wonders. A big litter will usually open their eyes in four weeks while a small one may not until they are six weeks old. Why? Because the mother is not able to supply the large litter with nourishment and in the wild condition they must hustle for themselves, which is impossible until they can see. The box is taken away after the young are big enough to run around. Young ferrets are carried by the old one in the same manner that a cat carries kittens, by the nape of the neck, if she wishes to remove them.

First litters, where rightly handled, generally run 7, 8 and 9, whereas the second are apt to be only 3, 4 and 5. Sometimes a third litter has been produced within a year.

While ferrets live to be six or eight years of age and maybe longer, yet they are a short lived animal. The best success in breeding is with yearlings. If two-year-olds are bred the per cent of deaths will be greater than with the yearlings. A successful breeder said that if he kept two hundred females for breeders, one hundred one

year old and the other hundred two years old, that the number of deaths would likely be twice as many among the two-year-olds. Further he said that the yearlings would raise as many if not more young than the two-year-olds.

In some parts of the Old World, where ferrets have been bred and raised for hundreds of years, a report has been spread that a female in heat not allowed to be with a male will die; also males not allowed with females will die. Inquiry among breeders in America does not bear out such reports. The fact that ferrets are short lived, whether bred or not, probably was the foundation for the assertion which seems to have originated in Europe.

Judging from the fact that the first litter is about double that of the second for best breeders, females from the first litter should be kept. The fact that some ferret raisers produce an average number of young per female much larger than others, leads to this belief, although no one so stated. In fact there are certain things in connection with the business that raisers seem to wish kept from the public.

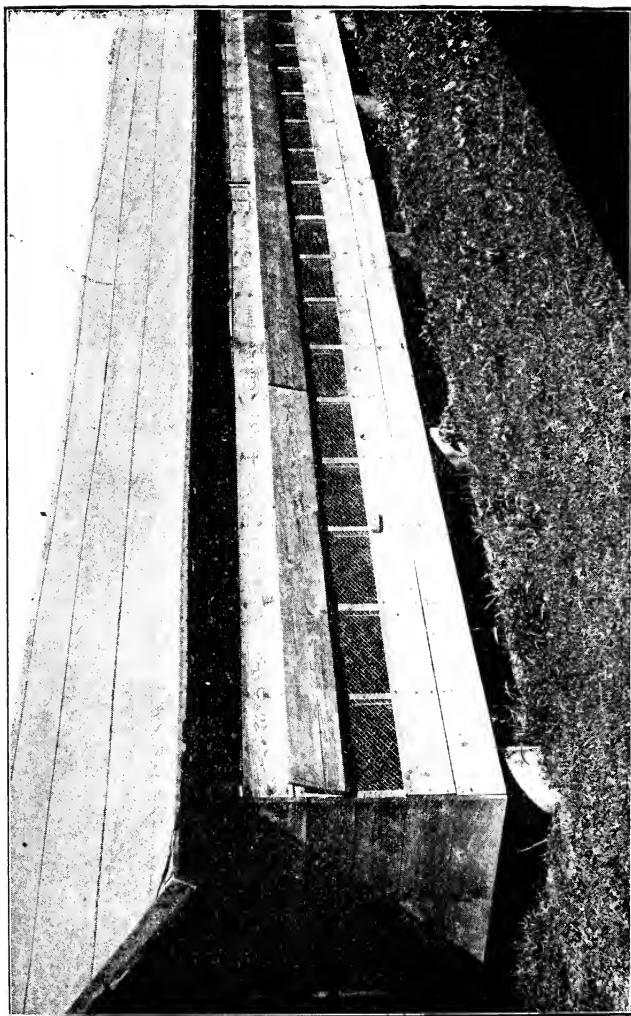
For large litters I am of the belief that both females and males selected from the first litters should be kept. True, this will mean keeping a few months longer than if taken from the second,

but the larger average in number produced will surely more than make up the additional keeping expense.

Ferret raising, to be successful, on either a large or small scale, requires head work as well as much manual labor, yet the business is one that offers more than ordinary wages. The information so far applies more especially to those raising large numbers. By far the majority will begin in a small way, keeping say from one to a dozen females, so that the balance of this chapter will mainly be of interest to beginners or those who keep a few only. Much of this information was gathered from observation as well as correspondence so that there is considerable repetition of methods already explained.

The male and female must be kept separate in the breeding season and only one ferret in the pen with the young, or they will destroy them. They will breed three times a year if handled right, but it is not advisable to breed more than twice, as the third litter would be too small for market during the hunting season and would have to be kept about a year before they could be marketed, which would not pay.

When a ferret has young ones, they must be watched so the mother will not cover them too deep in the straw, as this causes sweat, which is



SIDE VIEW OF ONE OF HELD & ANDERSON'S BARNs OR SHEDS SHOWING ARRANGEMENT TO LET IN AIR ON HOT DAYS.

dangerous to the young ones. After they get their eyes open, which will be in about six weeks, they can be weaned. Open up the pen on warm days so they can run about and get in the sun.

The main diet of the ferret is bread and milk, with raw meat occasionally in the form of a rabbit head or a bird, or in fact, any animal. They are especially fond of rabbits and young chickens, sparrows, woodchucks, etc. They should be fed raw meat quite frequently while they are nursing the young, as they sometimes become blood-thirsty and eat the young if they can get no meat.

One raiser who breeds a few each season writes as follows: A ferret carries its young for six weeks and has from one to twelve in a litter; the average seems to be from three to seven. The young do not open their eyes for about six weeks, but should be fed milk as soon as they will drink it, which is at about the age of two weeks if a large litter, four if a small one, as the mother's milk seems to practically cease. I heard of several cases where beginners let the young starve to death because they didn't feed before the eyes were open. If a second litter is desired take the female away from the young as soon as they will eat good (about six weeks) and in a week or ten days she will be ready to breed

again. It is advisable to keep a pail of sand scattered in the bottom of the pen, especially during hot weather. Dirt is not advisable as it soon becomes dust and does not seem to agree with the ferrets. In winter straw is preferred. The pens should be cleaned frequently. The ferret is a very clean animal if you will do your part in cleaning the pen and supplying fresh bedding for it. It is also a very healthy animal if the pen is kept reasonably clean.

Another party who has raised a few litters each season calls attention to the following: Give the female plenty of fresh meat and she will never eat her young unless you have the male so near that they can smell or hear one another. Do not look at the young ones for a week or more because she may become angry and kill them or bite the disturber. The young ones are blind for six weeks and are generally born about May. If weaned early, the mother will generally have another litter. There are generally from five to twelve in a litter and sometimes as many as eighteen. The smaller litters are the strongest, therefore, there is generally as much profit from the small as from the large litters.

When the young ones start to crawl from their nest, a little bread and milk can be fed every day. Be sure and remove all the bread

that they do not eat, because it will get sour and this will make them sick.

Give the pen a great amount of fresh air and sunlight, but never let them get sick. If their eyes or neck swell up, wait until it gets soft and then lance it. Keep the ones thus treated from the rest, as they will eat the unfortunate one.

A ferret in good, healthy condition will generally come in condition to breed about February. The buck should be left with the female about one week, unless you have several females, then leave only a day or two with each, then they should be separated and the female left entirely to herself. They carry their young six weeks and during this period they should be fed all the fresh raw meat they want; most any kind of raw meat will do, but under no circumstances should meat containing salt be given them, as it will kill them.

I have bred them twice during the same year but nine out of ten will only breed once. The only way I was able to do it, was to take the first litter of young away from the old ferret as soon as they were large enough to crawl out of the nest themselves and go to the dish to eat. About May the old ferret would be ready to breed again. They usually have from four to eight in a litter. It must be understood that this applies

only to a strong, healthy ferret having the best of care.

In breeding, according to one small but successful raiser, you should have strong, healthy ferrets; also good working ferrets and avoid in-breeding as much as possible. As a rule, ferrets breed twice a year but often only once, and they generally have from five to seven in a litter, but sometimes more. The breeding season is from the last of March to the first of October. As soon as this time arrives you should separate your ferrets. Place each one in a box or hutch which should be large and roomy and then watch for the period of oestrus, and when that comes upon her, put her in a hutch with the male and let her remain two days and then take her out and put her in her own hutch by herself, which of course should be large and roomy, so she can have plenty of exercise. Give her plenty of clean, rich food, such as new milk, bread, oatmeal, and fresh meat of any kind except pork.

The habits of the ferret during breeding season are about the same as the dog. The female carries her young about 42 days. About one week before her litter arrives, her hutch should have a good cleaning and then it should be dried and a bed of fine hay or straw put in for a nest and this should be all the nest she should have

until the young are four weeks old; but if the nest becomes dirty, remove the dirt without disturbing the young ones. This should be done when the mother is out feeding.

Great care should be taken in bedding, as a great many young ferrets are lost in careless bedding. You should have enough bedding so that she can hide her young but not enough to get lost in. Do not let them sweat or they will die. The male should not be with the female in breeding season as he will be sure to kill the young.

The young ones are born with their eyes closed and will remain that way till they are six weeks old. If the young appear hungry before they come out of their nest, soak bread in new milk and let them suck it and after they have sucked the milk out, take the bread out of the nest. When the young are ten or eleven weeks old, wean them by putting the mother in another hutch by herself. If any of them get weak and sick, try to build them up by putting them in another hutch by themselves and then give them plenty of new milk and bread.

Breeders have their own individual idea as to the best size for the different animals ferrets are to be used on. There are three sizes—large, medium, small. The general opinion seems to be

that medium size are best for rats and rabbits. On the other hand many small ones are used for these animals. Those favoring the small say that if they catch a rabbit underground chances are that rabbit will come out with ferret clinging to it; also that they can more easily follow small rats in the dens: All seem to be agreed upon the larger, old and more savage fighters for mink, skunk, coon, gophers, prairie dogs, etc.

A good type of the ferret is: Sharp or pointed nose; long, slim, muscular body; short legs; good sweep in the turn of the animal's neck and body. Blunt-headed, thickly-set ferrets, are not of the proper type and generally of little or no value. Ferrets must be strong, active, healthy and hardy. These are the kind from which to breed. Again do not breed weak or sickly animals, nor bad workers, but bear in mind that these or other traits, or pronounced characteristics, whether good or bad, in the male or female, will show in the young often to an increased extent. Know your stock and by careful breeding you can produce a strain showing improvement with each generation.

Owing to cold and late springs, of recent years, breeding has been later than usual in most of the ferret colonies. Ferrets cannot stand severe cold and do not come in heat, even

when provided with good warm shelters and nests, as soon when cold weather hangs on in the spring. Most ferrets have been mated the past few years, in latitudes similar to Northern Ohio, during the month of April and a fair per cent not until toward the end of the month. I am inclined to think that in Kentucky and similar climates, such as Southern Ohio, Indiana, Illinois, Missouri, etc., that they would come into heat at least two weeks sooner. If such proves to be true southern raisers would have considerable advantage.

CHAPTER VII.

HANDLING AND TRAINING.

ALTHOUGH ferrets naturally are of a rather tame and gentle disposition yet if never handled are somewhat wild and shy. Many young ferrets, probably the majority, sent out by those engaged in the business have had little or no handling, although they are fairly tame, having become so mostly through feeding. All hunters know that unless dogs are handled and trained they are not of much use. Same applies to ferrets, however, only to a certain extent for their nature is to hunt and they require little training, yet the inexperienced will want to know how to proceed. The following therefore is offered:

The beginning, that is, handling and even training to a certain extent not only for rabbits, but rats and other pests, is so much the same that no distinction for various animals will be made here. The chapters treating on rabbits, rats, other pests and fur animals will give additional instructions how to proceed.

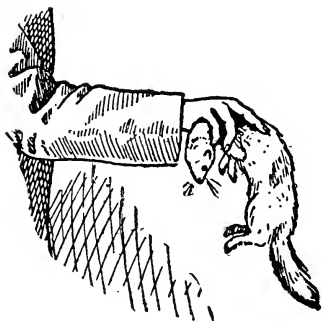
Most ferrets should be weaned at about three months of age, which is the time to begin hand-

ling. Some may be cross at first, biting at every chance they get. If impossible to handle with the naked hands, use a pair of thick gloves that they cannot bit through. A ferret bite, so far as known, is not poisonous. It is best however to take no risk.

The first thing to teach the ferret is that you do not intend to hurt it in any way. Handle for several minutes daily and in a week or two they become tame and apparently like to be picked up and handled. They soon learn their owner, feeder and handler, coming to their keeper on sight of him, or when called, providing you have used some call when feeding. Like cats they soon learn their call, but instead of kitty! kitty! kitty! it can be ferry! ferry! ferry! or some such call.

A cross ferret can be picked up in the bare hands, by the tail, then let the front feet touch something. Now slip your hand around its neck, close to the head, so it cannot bite you. A few such lessons and they learn who is master. Be gentle in handling yet hold them firmly until they cease struggling. Never tease or torment ferrets in any way as it tends to make them cross and snap at anything that moves near them; also makes them shy and more trouble to catch.

There is a knack in picking up a ferret. In other words there is a right and a wrong way. The wrong way is putting the hand crosswise of the ferret and grabbing down on its neck. If you miss the hold desired (or maybe the entire animal) the ferret will either bite you or dodge



CORRECT WAY TO HOLD A
FERRET.

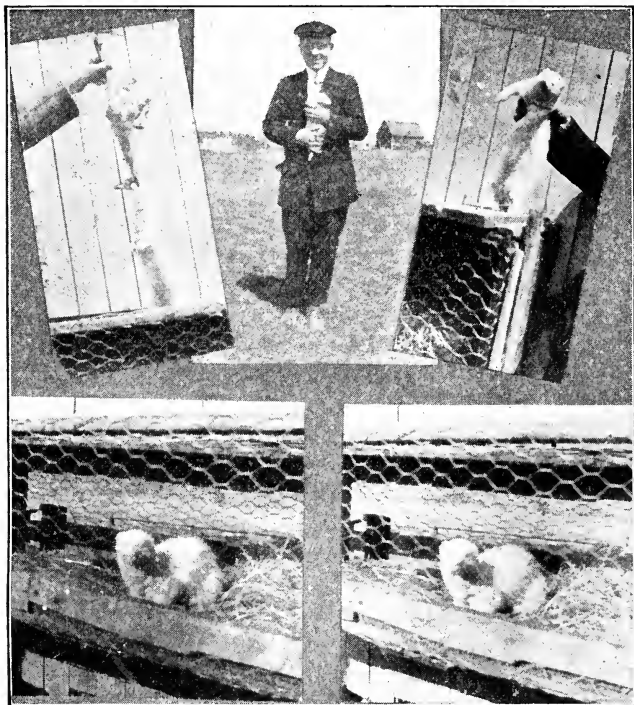
away. The right way is to pass your hand quietly lengthwise over the ferret, your fingers pointing toward the hind quarters, thumb being on one side of ferret, the first and second finger along the back, third and fourth fingers on the other side of the animal. A ferret

handled in this manner seldom bites. If they shy back can be kept up to you with the first and second fingers, which are back of the shoulders.

When a ferret or ferrets have been handled, so that they are no longer shy, can be easily caught, picked up and handled, they are about as good as trained. Remember though the tamer and more they are handled the better. Ferrets

need little or no training for by instinct their nature is to hunt, drive and kill. On the other hand it is from instinct that the rabbit endeavors to get away whether the animal entering the den is ferret, mink, skunk or any other of the flesh eating kind. Same applies to rats as ferrets and they are natural enemies. Thus it can be readily understood, even though a ferret has never been after a rabbit or in a den, the nature and instinct of the two animals are such that training is really not necessary. Simply place the ferret in the entrance to den. After nosing around a little, nine times out of ten, it will enter and explore the entire den before coming out. Perhaps it would not be advisable to do this at many dens in which there was no rabbits. Some recommend that a rabbit be put or chased into the first den tried. This is not a bad suggestion.

If a little actual experience on rabbits is desired, ferrets only four months old, if broken to being handled, easily caught, etc., may be given a trial. Where rabbits are plenty wait until one is run into a den. Now put the ferret at the mouth of den. It perhaps will nose about a little, at first, then go slowly in. The rabbit will, no doubt, soon bolt by the ferret and come out. The rabbit should be caught and held until the ferret comes out when the rabbit may be killed,



ILLINOIS RAISER HANDLING FERRETS. 1. FERRET HOLDING TO A DEAD DUCK. 2. HOLDING A FERRET. 3. CORRECT WAY TO HOLD. 4 AND 5. FERRETS IN HUTCH.

put into the mouth of den, with the ferret. As the rabbit is still kicking the ferret will not realize but that it is alive. It will probably begin eating at the bloodiest part. Let it nose and eat for a few minutes.

Methods of handling and training for rats and other pests as well as for mink, skunk and other animals are given in the chapters on ferrets and these animals. It might be well to repeat here that methods of handling and training are all the same at the start. Young ferrets four months up are good for rabbits; for rats they should be at least six months old; for ground squirrels (large western), gophers, prairie dogs, mink, skunk, etc., only large, old and strong should be used. For this class of work not younger than yearling although two year old would be better.

CHAPTER VIII.

RATS.

THESE rodents are the greatest mammal pests in America. In fact rats do many millions of dollars worth of damage in North America annually. They were introduced into this country in 1775 or about a hundred years before the ferret. Rats not only do an immense financial damage, but as well are the means, or method, of spreading some fatal human diseases. As ferrets and rats are natural enemies, the subject is of sufficient importance to go somewhat into detail.

The United States Department of Agriculture some years ago issued Farmers' Bulletin 369 entitled "How to Destroy Rats," from which the following extracts are taken:

INTRODUCTION.—The brown or Norway rat (*Mus norvegicus*) is the worst mammal pest in the United States, the losses from its depredations amounting to many millions of dollars yearly—to more, probably, than the losses from all other injurious mammals combined.

Several species of rats are known as house rats, including the black rat (*Mus rattus*), the roof rat (*Mus alexandrinus*), and the brown rat (*Mus norvegicus*). Of these the last is the commonest and most widespread in this country. Not

one of these species is a native, but all were imported from the Old World. As their habits in general are similar, the instructions given in the bulletin apply alike to all.

In addition to its destructive habits, the rat is known to be an active agent in disseminating infectious diseases, a fact which renders measures for its destruction doubly important.

Introduced into America about 1775, the brown rat has supplanted and nearly exterminated its less robust relative, the black rat, and despite the incessant warfare of man has extended its range and steadily increased in numbers. Its dominance is due to its great fecundity and its ability to adapt itself to all sorts of conditions. It breeds three, four or even more, times a year, and produces from 6 to 17 young in a litter. Females breed when only 4 or 5 months old. The species is practically omnivorous, feeding upon all kinds of animal and vegetable matter. It makes its home in the open field, the hedge row, and the river bank, as well as in stone walls, piers, and all kinds of buildings. It destroys grains when newly planted, while growing, and in the shock, stack, mow, crib, granary, mill, elevator, or ship's hold, and also in the bin and feed trough. It invades store and warehouse, and destroys furs, laces, silks, carpets, leather goods and groceries. It attacks fruits, vegetables and meats in the markets and destroys by pollution ten times as much as it actually eats. It carries disease germs from house to house and bubonic plague from city to city. It causes disastrous conflagrations; floods houses by gnawing lead water pipes; ruins artificial ponds and embankments by burrowing; destroys eggs and young poultry; eats the eggs and young of song birds and game birds; and damages foundations, floors, doors, and furnishings of dwellings.

MEANS OF REPRESSING RATS.—Rats have developed so much intelligence and such extraordinary caution that attempts to exterminate them have rarely succeeded. The failures

have been due not so much to lack of effective methods as to the neglect of certain precautions and the absence of concerted action. We have rendered our work abortive by continuing to provide subsistence and hiding places for the rats. When these advantages are denied, persistent and concerted use of the methods here recommended will prove far more effective.

RAT-PROOF BUILDING. — First in importance, as a measure of rat repression, is the exclusion of the animals from places where they find food and safe retreats for rearing their young.

The best way to keep rats from buildings, whether in city or in country, is by the use of cement in construction. As the advantages of this material are coming to be generally understood, its use is rapidly extending to all kinds of buildings. Dwellings, dairies, barns, stables, chicken houses, ice houses, bridges, dams, silos, tanks, cisterns, root cellars, hotbeds, sidewalks, and curbs are now often made wholly of cement. The process of mixing and laying this material requires little skill or special knowledge, and workmen of ordinary intelligence can successfully follow the plain directions contained in handbooks of cement construction. Illustrated handbooks are often furnished free by cement manufacturers.

Many modern public buildings are so constructed that rats can find no lodgment in the walls or foundations, and yet in a few years, through negligence, such buildings often become infested with the pests. Sometimes drain pipes are left uncovered for hours at a time. Often outer doors, especially those opening on alleys, are left ajar. A common mistake is failure to screen basement windows which must be opened for ventilation. However the intruders are admitted, when once inside they intrench themselves behind furniture or stores, and are difficult to dislodge. The addition of inner doors to vestibules is an important precaution against rats.

The lower part of outer doors to public buildings, especially markets should be reinforced with light metal plates to prevent the animals from gnawing through.

DWELLINGS.—In constructing dwelling houses the additional cost of making the foundation rat-proof is slight as compared with the advantages. The cellar walls should have concrete footings, and the walls themselves should be laid in cement mortar. The cellar floor should be of medium rather than lean concrete, and all water and drain pipes should be surrounded with concrete. Even old cellars may be made rat-proof at comparatively small expense. Rat holes may be permanently closed with a mixture of cement, sand and broken glass, or sharp bits of crockery or stone.

On a foundation like the one described above, the walls of a wooden dwelling also may be made rat-proof. The space between the sheathing and lath, to the height of about a foot, should be filled with concrete. Rats can not then gain access to the walls, and can enter the dwelling only through doors or windows. Screening all basement and cellar windows with wire netting is a most necessary precaution.

OLD BUILDINGS IN CITIES.—Aside from old dwellings, the chief refuges for rats in cities are sewers, wharves, stables and outbuildings. Modern sewers are used by the animals merely as highways and not as abodes, but old-fashioned brick sewers often afford nesting crannies.

Wharves, stables and outbuildings in cities should be so built as to exclude rats. Cement is the chief means to this end. Old tumble-down buildings and wharves should not be tolerated in any city.

In both city and country, wooden floors of sidewalks, areas, and porches are commonly laid upon timbers resting on the ground. Under such floors rats have a safe retreat from nearly all enemies. The conditions can be remedied in towns by municipal action, requiring that such floors should

be replaced by others made of cement. Areas or walks made of brick are often undermined by rats, and may become as objectionable as those of wood. Wooden floors of porches should always be well above the ground.

FARM BUILDINGS.—Granaries, corncribs, and poultry houses may be made rat-proof by a liberal use of concrete in the foundations and floors; or the floors may be of wood resting upon concrete. Objection has been urged against concrete floors for horses, cattle, and poultry, because the material is too good a conductor of heat, and the health of the animal suffers from contact with these floors. In poultry houses, dry soil or sand may be used as a covering for the cement floor; and in stables, a wooden floor resting on the concrete is just as satisfactory as far as the exclusion of rats is concerned.

The common practice of setting corncribs on posts with inverted pans at the top often fails to exclude rats, because the posts are not high enough to place the lower cracks of the structure beyond reach of the animals. The posts should project at least 3 feet above the surface of the ground, for rats are excellent jumpers. But a crib built in this manner, though cheap, is unsightly.

For a rat-proof crib, a well drained site should be chosen. The outer walls, laid in cement, should be sunk about 20 inches into the ground. The space within the walls should be thoroughly grouted with cement and broken stone and finished with rich concrete for a floor. Upon this the structure may be built. Even the walls of the crib may be concrete. Corn will not mold in contact with them, provided there is good ventilation and the roof is water-tight.

However, there are cheaper ways of excluding rats from either new or old corncribs. Rats, mice and sparrows may be effectually kept out by the use of either an inner or an outer covering of galvanized wire netting of half-inch mesh and

heavy enough to resist the teeth of rats. The netting in common use for screening cellar windows is suitable for covering cribs. As rats can climb the netting, the entire structure must be screened.

KEEPING FOOD FROM RATS. — The effect of an abundance of food on the breeding of rodents should be kept in mind. Well-fed rats mature quickly, breed often, and have large litters. Poorly fed rats, on the contrary, reproduce less frequently and have small litters. In addition, scarcity of food make measures for destroying the animals far more effective.

The general rat-proofing of buildings is the most important step in limiting the food supply of rats. But since much of the animal's food consists of garbage and other waste materials, it is not enough to bar rats from markets, granaries, warehouses, and private food stores. Garbage and offal of all kinds must be so disposed of that rats can not obtain them.

It cities and towns an efficient system of garbage collection and disposal should be established by ordinances. Waste from markets, hotels, cafes, and households should be collected in covered metallic receptacles and frequently emptied. Garbage should never be dumped in or near towns, but should be utilized or promptly destroyed by fire.

Rats find abundant food in country slaughterhouses; reform in the management of these is badly needed. Such places are centers of rat propagation. It is a common practice to leave offal of slaughtered animals to be eaten by rats and swine, and this is the chief means of perpetuating trichinæ in pork. The law should require offal to be promptly cremated or otherwise disposed of. Country slaughterhouses should be as cleanly as constantly inspected abattoirs.

Another important source of rat food is the remnants of lunches left by employes in factories, stores and public buildings. This food, which alone is enough to attract and sustain

a small army of rats, is commonly left in waste baskets or other open receptacles. Strictly enforced rules requiring all remnants of food to be deposited in covered metal vessels would make trapping far more effective.

If buildings are infested with rats, wire-screened compartments should be used for storing food. Many merchants now keep flour, seeds, meats, and the like in wire cages, and the practice should be general. Ice boxes and cold-storage rooms may be made proof against rats by an outer covering of heavy wire netting of half-inch mesh. Steamboat companies engaged in carrying high-priced southern produce to northern markets can, at small expense, protect the vegetables or fruits in screened compartments on both docks and vessels.

Rats do not gnaw the plane surfaces of hard materials, such as wood. They attack doors, furniture, and boxes at the angles only. This fact suggests the feasibility of protecting chests containing food by light coverings of metal along the salient angles. This plan has for years been in use to protect naval stores on ships and in warehouses.



SOME GOOD RATTERS.

NATURAL ENEMIES OF RATS.—Among the natural enemies of rats are the larger hawks and owls, skunks, foxes, coyotes, weasels, minks, dogs, cats and ferrets.

Probably the greatest factor in the increase of rats, mice, and other destructive rodents in the United States has been the persistent killing off of the birds and mammals that prey upon them. Animals that on the whole are decidedly beneficial, since they subsist upon harmful insects and rodents,

are habitually destroyed by some farmers and sportsmen because they occasionally kill a chicken or a game bird.

The value of carnivorous mammals and the larger birds of prey in destroying rats should be more fully recognized, especially by the farmer and the game preserver. Rats actually destroy more poultry and game, both eggs and young chicks, than all the birds and wild mammals combined; yet some of our most useful birds of prey and carnivorous mammals are persecuted almost to the point of extinction. An enlightened public sentiment should cause the repeal of all bounties on these animals and afford protection to the majority of them.

TRAPS. — Owing to their cunning it is not easy to clean premises of rats by trapping; if food is abundant, it is impossible. A few adults refuse to enter the most innocent looking trap. And yet trapping, if persistently followed, is one of the most effective ways of destroying the animals.

CAGE TRAP. — When rats are numerous, the large French wire cage traps can be used to advantage. They should be made of stiff, heavy wire, well reinforced. Many of those sold in hardware stores are useless, because a full grown rat can bend the light wires apart and escape. Cage traps should be baited and left open for several nights until the rats are accustomed to enter them to obtain food. They should then be closed and freshly baited, when a large catch may be expected, especially of young rats. As many as 25 and even more partly grown rats have been taken at a time in one of these traps. The writer has had excellent success by concealing a cage trap under a bunch of hay or straw, and has found by experience that a decoy rat in the trap is useful. A commission merchant in Baltimore places the baited cage trap inside of a wooden box having a hole in one end and against which the opening of the trap is fitted. The box is then covered with trash and large catches are made.

FIGURE 4 TRIGGER TRAP. — The old-fashioned box trap set with a figure 4 trigger is sometimes useful to secure a wise old rat that refuses to be enticed into a modern trap. Better still is a simple deadfall—a flat stone or heavy plank—supported by a figure 4 trigger. An old rat will go under such a contrivance to feed without fear.

STEEL TRAP. — The ordinary steel trap (No. 0 or 1) may sometimes be satisfactorily employed to capture a rat. The animal is usually caught by the foot, and its squealing has a tendency to frighten other rats. The trap may be set in a shallow pan or box and covered with bran or oats, care being taken to have the space under the trigger pan free of grain. This may be done by placing a very light bit of cotton under the trigger and setting as lightly as possible. In narrow runs or at the mouth of burrows a steel trap unbaited and covered with very light cloth or tissue paper is often effective.

The best bait is usually food of a kind that the rats do not get in the vicinity. In a meat market, vegetables or grain should be used; in a feed store, meat. As far as possible, food other than the bait should be inaccessible while trapping is in progress. The bait should be kept fresh and attractive, and the kind changed when necessary. Baits and traps should be handled as little as possible. Ordinarily, traps should be frequently cleaned or smoked. The use of artificial scents, as oil of anise or rhodium, on the bait, is advocated by many, but no doubt their importance has been exaggerated. The experience of the writer is not favorable to their use, but they may do some good by concealing the human odor on the trap.

POISONS. — While the use of poison is the best and quickest way to get rid of rats, the odor from the dead animals makes the method impracticable in occupied houses. Poison, however, may be effectively used in barns, stables, sheds, cribs, and other outbuildings.

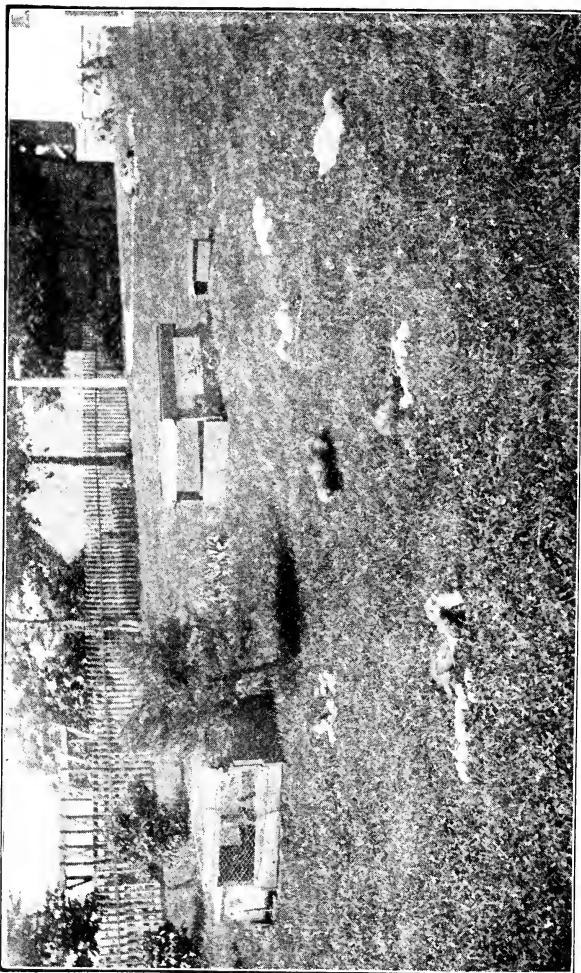
Among the principal poisons that have been recommended for killing rats are barium carbonate, strychnine, arsenic and phosphorus.

DOMESTIC ANIMALS.—Among domestic animals employed to kill rats are the dog, cat and ferret.

DOGS.—The value of dogs as ratters can not be appreciated by persons who have had no experience with a trained animal. The ordinary cur and the larger breeds of dogs seldom develop the necessary qualities for ratters. Small Irish, Scotch and fox terriers, when properly trained, are superior to other breeds, and under favorable circumstances may be relied upon to keep the farm premises reasonably free from rats.

CATS.—However valuable cats may be as mousers, few of them learn to catch rats. The ordinary house cat is too well fed and consequently too lazy to undertake the capture of an animal as formidable as the brown rat. Birds and mice are much more to its liking.

FERRETS.—Tame ferrets, like weasels, are inveterate foes of rats, and can follow the rodents into their retreats. Under favorable circumstances they are useful aids to the rat catcher, but their value is greatly overestimated. For effective work they require experienced handling and the additional services of a dog or two. Dogs and ferrets must be thoroughly accustomed to each other, and the former must be quiet and steady instead of noisy and excitable. The ferret is used only to bolt the rats, which are killed by the dogs. If unmuzzled ferrets are sent into rat retreats, they are apt to make a kill and then lie up after sucking the blood of their victim. Sometimes they remain for hours in the burrows or escape by other exits and are lost. There is danger that these lost ferrets may adapt themselves to wild conditions and become a pest by preying upon poultry and birds.



FEMALES AND THEIR YOUNG. IT IS BEST NOT TO REMOVE THE YOUNG FROM EITHER NEST, HUTCH OR PEN OR HANDLE UNTIL THEIR EYES ARE OPEN. THIS PHOTOGRAPH WAS ESPECIALLY TAKEN FOR FERRET FACTS AND FANCIES.

SUMMARY OF RECOMMENDATIONS.—The following are important aids in limiting the numbers of rats and reducing the losses from their depredations:

1. Protection of our native hawks, owls, and smaller predatory mammals—the natural enemies of rats.

2. Greater cleanliness about stables, markets, grocery stores, warehouses, courts, alleys, and vacant lots in cities and villages, and like care on farms and suburban premises. This includes the storage of waste and garbage in tightly covered vessels and the prompt disposal of it each day.

3. Care in the construction of buildings and drains, so as not to provide entrance and retreats for rats, and the permanent closing of all rat holes in old houses and cellars.

4. The early threshing and marketing of grains on farms, so that stacks and mows shall not furnish harborage and food for rats.

5. Removal of outlying straw stacks and piles of trash or lumber that harbor rats in the fields.

6. Rat-proofing of warehouses, markets, cribs, stables and granaries for storage of provisions, seed grain, and feed-stuffs.

7. Keeping effective rat dogs, especially on farms and in city warehouses.

8. The systematic destruction of rats, whenever and wherever possible, by (a) trapping, (b) poisoning, and (c) organized hunts.

9. The organization of rat clubs and other societies for systematic warfare against rats.

While there is much of value in the foregoing taken from the writing of Mr. David E. Lantz, and printed at Washington, too much dependence should not be put in poisoning. It may be

a quick way to get rid of *live rats* but is apt to prove very disagreeable before all after effects are eradicated. The odor from a dead and decaying rat is hardly bearable to say the least. At best, poisoning is not one of the safest methods to adopt. While a few can usually be caught in traps, they soon learn to "steer clear" of such whether the common steel trap or the wire or the wooden affair. Where rats are numerous or hard to get "shet of," ferrets are to be recommended.

CHAPTER IX.

FERRETS AND RATS.

THE natural disposition of the ferret is to drive, kill and hunt its own living. It is also a very keen scented little animal, and upon smelling the rat or rats in their holes or where they have been running around, will find them. For rat hunting ferrets should be older than for rabbits. While those a year or older are best yet many are successfully used that are five to twelve months of age. Various methods are used in training for rat hunting. Perhaps the following is as good as any: First get a young rat and put it in the box with the ferret. If you can't get a young rat, use an old one, but cripple it by breaking its tushes. After they have killed two or three in this way they can be used in barns or wherever there are rat holes. The ferret or ferrets will enter the holes and chase the rats out.

In hunting rats where there are many dens, holes or hiding places, so that the rats run from one to the other, two or more ferrets will do the work much quicker than one. Put the ferret or ferrets in holes or under the building, or wher-

ever rat signs are most plentiful and you are apt to hear rats squeal. Be on the watch with club or dog and kill as they come out. Rats run for their lives as soon as a ferret approaches but if no other outlet will turn and fight savagely. A single rat is no match for an old or experienced ferret. Rats are very cautious and will not stay about a place where ferrets are kept and worked. Ferrets have a peculiar and strong odor or smell that is very objectionable to rats generally causing them to soon leave.

The small sized ferrets are best for rat hunting, as the large ones can't get into the holes as readily, and in some not at all. Most of the old rats will get out of the way, unless several ferrets are being used, but all young will be killed by the ferrets while "ferreting" out the dens. Rats are usually found where there are more than one entrance, or way to escape from their den, so that one ferret has difficult work in catching many of the old or full grown. Where rats are numerous it is policy to use several ferrets for then the rats not caught will be run from their dens and hiding places. Men and good dogs (not too many) can be of much assistance in killing and catching as the ferrets chase them out. It is said that a ferret put in a cellar where there are rats will rid the place of the

pests within a day. Possibly if rats were very numerous one ferret might be overpowered.

I doubt if any raiser or handler has better explained how to use for rats than Mr. C. Bremen, of Danville, Illinois, who in his catalog gives methods of Working Ferrets on Rats as follows :

“To hunt, drive and kill is a ferret’s natural instinct and disposition. If a ferret has been well handled and cared for and is of the proper age, very little training is necessary to make fine ratters of them. They can be started to chase rats when they are four months old, but there cannot be as much expected from one of this age as from a yearling ferret. For ordinary use on a farm, about the house, barn, granary and other buildings, one pair of yearlings, will usually answer the purpose, and effectually clear out the rats. In grain elevators, warehouses and places where rats are found by the thousands, it is best to have from three to six ferrets. We know of men who make a business of rat catching generally using about six yearling ferrets and successfully clear out place after place of rats.

The question is often asked, Can ferrets be used by people who are not professional rat-catchers? In regard to this, I wish to say the ferrets will do the work if they are given the

chance, so no one need be a professional rat-catcher in order to handle the ferret to advantage. They can be used by anybody. There are boys in every neighborhood who could take a pair of ferrets and enjoy the sport of hunting rats. The best place to work ferrets the first time is under the plank floors of stables or hog pens. In such places there are usually a large number of rats, and the ferrets will get them started in short time. Ferrets can follow rats anywhere, and after they have hunted a few times, they will work harder and hunt in small holes and more difficult places.

To hunt rats it is a good plan to get several men with clubs to kill the rats which escape from the ferrets. Guns are often used, but in the excitement a ferret may be mistaken for a rat and killed. Then liberate the ferret or ferrets where the rats have been working. Ferrets hunt by scent, and upon smelling the rats they will soon enter the holes. Then watch out. The rats will run in all directions and the person quickest with the club will get the most rats. A rat will not show fight unless a ferret gets it cornered. A ferret soon learns to hold on a rat, and will kill them as fast as it can get to them. Ferrets work under and around a building. When they come out hunting for the rats, pick them up and

put them in the holes where the rats were seen making their escape. They will chase the rats from one building to another, and thus the men will be able to kill most of them with their clubs. The ferrets will kill all the young rats they find in the nests. They will not stop to eat a rat, however, as long as there is a rat left in the holes to be killed.

“We do not advise the use of a muzzle in working ferrets on rats. When the ferrets have a litter of young they will bring out all the rats they kill for the young ferrets to eat. After they have hunted for an hour or two they should be put back in their pens. Give the ferrets a few such hunts and the rats will leave. Rats are very cautious animals and are afraid of ferrets. They will not stay in the holes where ferrets are worked occasionally. Hunting rats with ferrets is great amusement. The boys especially take an interest in this sport. Buy the boy a pair of ferrets and he will soon have your place cleared of rats. Ferrets can be turned loose in cellars, mills and storerooms and they thoroughly rid the place of rats. The usual way is to have a pen to keep them in when they are not being worked.

Ferrets are particularly valuable to poultry men to protect young chickens from the rats. A rat will often carry off a whole brood of chickens

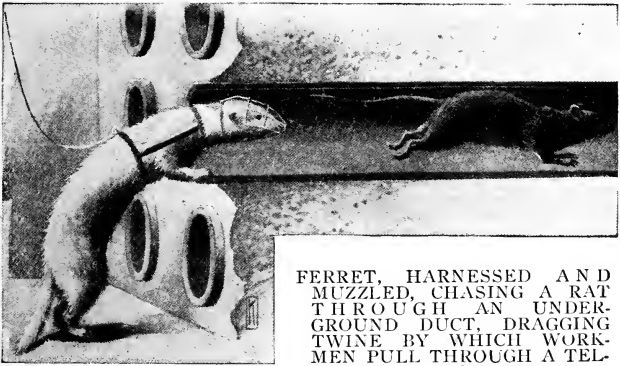
in one night. Ferrets can be worked to great advantage around chicken houses and yards. They cannot catch chickens which are running loose. There is no trouble along this line, yet it is not to be expected that chickens and ferrets could be kept in a box together. A pair of our early spring ferrets will do a great deal of good in keeping the rats away, even while the ferrets are quite young. They will run through the holes and chase the rats away. A good way to start young ferrets is to put mice in their pens for them to kill and eat. As soon as they handle mice, young rats may be put in their pens. If the rats are too large they should be crippled so the young ferrets can easily kill them. They will soon get so they can kill any rat, and then they are ready to take out for a rat hunt. We have had ferrets only five months old handle large rats."

In response to an inquiry from St. Nicholas magazine, Mr. Cline, Superintendent of Construction of the Central Union Telephone Company of Indianapolis, Indiana, some years ago wrote as follows regarding the use of ferrets in laying telephone wires:

"I beg to acknowledge receipt of your inquiry concerning the use of a ferret in connection with rodding our underground ducts, as we call it,

and in reply thereto you may be advised that we have used the little animals very successfully at Indianapolis, Terre Haute, Lafayette and Huntington, Indiana.

“When we first began to use them we baited them or enticed them through the duct by hanging a piece of raw meat at the opposite end, but



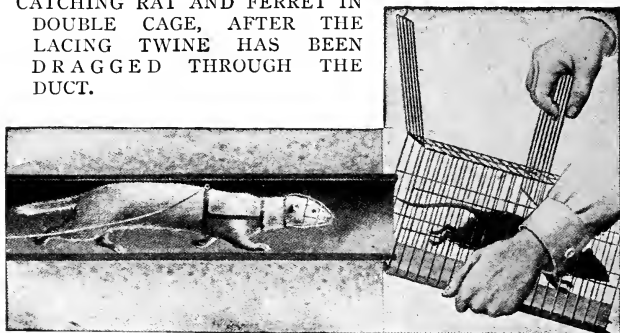
FERRET, HARNESSED AND MUZZLED, CHASING A RAT THROUGH AN UNDERGROUND DUCT, DRAGGING TWINE BY WHICH WORKMEN PULL THROUGH A TELEPHONE WIRE.

our latest experiments have been by the use of a live rat, started through the duct ahead of the ferret, which entices the ferret to follow the rat through the section of duct to the next manhole, where the rat is caged and used for another section.

“Before starting the ferret through the duct, he is harnessed up with a collar and girth, to

which is attached the end of a ball of lacing twine. As the ferret goes through the duct he pulls the lacing twine after him and when he reaches the other end we have a string through the section of duct, by means of which we pull a small wire through and with this wire the pull-

CATCHING RAT AND FERRET IN
DOUBLE CAGE, AFTER THE
LACING TWINE HAS BEEN
DRAGGED THROUGH THE
DUCT.



ing-in rope is drawn through the duct. The pulling-in rope may be either one and one-quarter inch manila or a five-eighths inch flexible wire.

“We also keep the ferrets well fed until within about twenty-four hours before they are used, as the tendency of a ferret is to do better work when he is hungry.”

CHAPTER X.

FERRETS AND RABBITS.

A RABBIT never fights although it can scratch and bite. About all they ever do when caught by man, dog or ferret is to lay back their long ears and squeal. Their means of self-preservation is largely in their legs for they are swift runners, yet they soon hole when chased from their nest. In winter and especially during severe weather the majority hole up, except at night, when they come out for something to eat. Such being the nature of the rabbit it is game on which ferret hunting can begin at an early age—four months or thereabouts.

Right here is a good place to call attention to the fact that the short, open lawful season for rabbit hunting has tended to increase the supply in even many of the thickly settled states. In certain localities farmers, gardeners, horticulturists, etc., are complaining of rabbits gnawing young fruit trees. Here is a splendid opportunity of helping the land owner get rid of the

rabbits as well as affording a few days sport to yourself, ferret and friends. The property owner hopes you will catch every one of the four footed, swift running, gnawing rascals. He don't care either how you get them. So destructive are the rabbits to young orchards, in many states, that unless trees are wrapped, or in some way protected during the winter, entire orchards are ruined. Rabbits are more partial to apple and peach trees than to other fruits it seems. In such localities land owners wish the rabbits killed off as early as possible, before severe weather, for they are not apt to bother fruit trees until the ground is frozen or covered with snow.

That ferrets are used successfully on rabbits is amply proven from the fact that laws in some states prohibit their use only under certain conditions. These "conditions" vary in the states having laws of this kind. The following was in effect in Ohio at date this book was printed: "No ferrets shall be used in catching or hunting rabbits, except by the owner or lessee of lands, or a bona fide employee of such owner or lessee and when they are destroying or injuring trees, shrubbery, grain, berries or fruit."



HUNTING RABBITS WITH
DOG, FERRET AND GUN.

To know how to use ferrets successfully comes from experience, and the inexperienced will have more or less trouble, especially if their ferret has not been handled a good deal prior to being used in actual hunting. Some of the points to be remembered when trying for rabbits are: Silence is of much importance; heavy walking, loud talking, scratching of dog at mouth of den, all

combine to interfere with the ferret's work by making the rabbit remain in the ground. Always put the ferret in at the lowest entrance if there is more than one. Never handle your ferret roughly and keep it warm and dry. Coaxing is much better than trying to drive them. Use one ferret at a time only as you wish to drive out, not kill. If two or more, unless muzzled, were put into a den they would be sure to catch and kill.

Again some of the most successful users of ferrets are the inexperienced. Like the small boy with the willow pole, string and a bent pin for the hook catching more fish than the experienced angler with his costly tackle. In this connection the following simple explanation by a boy using a ferret will not be out of place, especially was the fact known that his explanation was given to several "sports" who had been out after rabbits but had failed. Hailing the boy they bought what he had then asked several questions as he had no dog while they had several. Learning that he used a ferret they wanted to know how they were used, etc. "Well," said the boy, "when you go hunting take your ferret, put it in a rabbit hole and it will go in driving out the rabbit. All you have to do is to shoot the rabbit and wait for the ferret as it will follow the rabbit out, put it in your hunting coat pocket and go to another hole. I forgot to say that you must know how to shoot or the rabbit will keep on running. I let the rabbits get 25 to 35 yards away then aim one yard ahead and by the time the shot get where the rabbit ought to be they are both there.

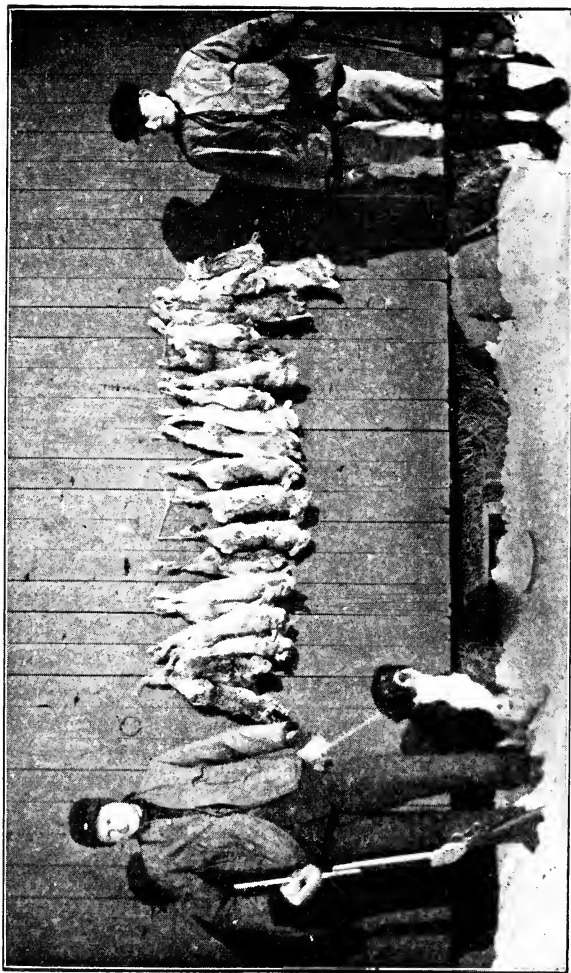
"I never had any experience with mink and skunk, just rabbits and rats. So far this season I have got 109 rabbits with my ferret. One day

last week my female ferret ran 7 rabbits from under one hay stack. They all came out within a minute I think, but I got four of them. I tracked two of the others to a hole and got them, making six out of the seven.

“Yes, I will be out tomorrow over round the briar patch and in the John Collier orchard where there are always rabbits. Same price as today but don’t know how many will have—some though I spec.”

In using a young ferret there is not much danger of the rabbit being caught under ground and even if such should happen the rabbit is almost certain to come out with the ferret clinging to it. An old ferret or one that is extra quick and large, having had much experience, may sometimes kill in the den. When using a ferret of this description it probably is advisable to use muzzle (see explanation in chapter on Ferret Contrivances) as they are apt to remain in den until eating their fill.

When ferrets “lie-up” it is up to the hunter to do one of several things. 1st. Wait awhile for the ferret to eat his fill with the hope it will then come out. 2d. Paunch a warm or recently killed rabbit, if you have one, and if more than one entrance place to windward side. 3d. Pound or stamp on ground immediately over



WHERE RABBITS ARE A NUISANCE—RESULT OF TWO HOURS' HUNT WITH DOG, FERRET AND GUNS.

ferret or as near as it can be located. 4th. If the den is a shallow one dig. 5th. Stop all the exits and fill the mouth of den where the ferret was put in with grass, leaves, or anything that will answer for a nest. Plug or cover entrance securely. Next morning early go back when chances are you will find your ferret asleep in the nest. If not chances are it will come when called.

If ferreting rabbits where there is snow on the ground put the ferret back as far as possible before letting touch the ground. Should there be snow in the entrance better clean out before putting the ferret in. The rabbit can be caught in the hands by inserting as far back as possible and apart. It requires quick work or the rabbit will go through "slick as a whistle" and you won't even "catch a hair." Sometimes when seeing your hands the rabbit will go back and is pretty sure to be caught by the ferret which is following it out. If this should happen ferret will generally remain in den until eating its fill. Another plan is to place a net or sack over the entrance to den so that when it bolts past ferret and for mouth of den it goes direct into this receptacle or trap.

Many ferrets are used by those who enjoy shooting. If hunting with dogs one or more fer-

rets are taken and when a rabbit gets to earth the ferret is put in the hole. One or more shooters stand near and when the rabbit seeks safety in the open again offers a chance to the shooters. On certain days few rabbits "nest" out but seek warm quarters in the ground. Such days may be windy and cold or may be stormy only or again ground covered with snow. The rabbit hunter who enjoys "shooting to ferrets" makes the round of likely dens. The ferret is placed in the hole and developments awaited. Sometimes two, three or even more rabbits have come out, in quick succession, offering a number of shots in a short space of time. Under hay stacks is a good place to find rabbits on a cold or stormy day. As many as a half dozen have been routed from a single stack, especially if built a few inches off the ground, on rails or other material or having dens under. A couple of hunters, one at either side, can enjoy "ending the rabbits" when they get a few rods away.

While there is little or no difference in the hunting qualities of the white or brown, male or female, yet a four months old ferret cannot stand as much work as one somewhat older. Some users of ferrets claim that they have had best results when using a certain kind. This, however, in all probability was not due to the

color of ferret but the day was one that rabbits bolted easily for there are such days. Rabbits bolt best when the weather is settled. They bolt well when there is a set or heavy frost, also after a fall of snow when it has started to freeze again. Warm, muggy or low heavy cloudy days they stick close to the den and it requires much "perseverance" from a ferret to get them to bolt-leave the den.

A good time to hunt rabbits with a ferret is therefore a bright, cold, crisp day or one just after a snow. The latter offers an extra inducement, to the party who does not own a dog, for the tracks will reveal most likely dens.

CHAPTER XI.

FERRETS AND GROUND SQUIRRELS, GOPHERS, PRAIRIE DOGS.

THE English sparrow, which was brought to America from Europe, seems to be a pest with no redeeming qualities whatever. How unlike the sparrow is the ferret, which also came to this country from Europe. East of the Mississippi river they have been used to hunt rabbits ever since reaching this side of the Atlantic. Shortly after 1900 ferrets were used with some success on certain fur animals, more especially skunk and mink. Throughout much of the West, which in a general way will here be defined as that portion of the country west of the Mississippi river as well as parts of Canada, ground squirrels, gophers and prairie dogs are not only a nuisance, but quite a pest to various interests.

In the earlier accounts of the prairie dog most writers had rattlesnakes and owls inhabiting same burrows. While owls and rattlesnakes inhabit same region and sometimes take refuge in the dens of prairie dogs they do not all live harmonious as some writers, who know little or

nothing of natural history, have set forth. Prairie dogs feed upon grass and roots. Their burrows are numerous, long and often deep. The habits and nature of these animals however will not be taken up here.



THE WILD OR BLACK FOOTED FERRET.

Reports from trappers are to the effect that the wild or black footed ferret has exterminated more than one village or prairie dog town. Such being the case why should not trained, tame or domesticated ferrets be of considerable value on these animals? For some years certain raisers of ferrets have stated that farmers and grain

growers where gophers destroyed crops, should keep ferrets, claiming if they knew their worth they would never be without a number. One of the first breeders and raisers of ferrets, as far back as 1904, published some letters from purchasers of his stock. One of these from the state of Kansas, was to the effect that they cleaned out the prairie dog towns. Another from the state of Washington showed how effective they were in hunting ground squirrel. Both letters or testimonials are herewith published. The Kansas letter is as follows:

“Here I am again to see you about the ferrets. We have given the ferrets a thorough test, and you can advertise them for killing prairie dogs with perfect safety for they will do it all right. They are not so very fast, but are a sure shot. Judging from the way they are working two pairs will clean out from 70 to 100 acres in three or four months. We have several dog towns of 100 acres each. The old ferrets do fine, but we do not want any young ones to kill the dogs with. What will be your price on two pairs of fully matured ferrets that are a year old? We want to clean out the dogs and we can if you send us what we want. The way I manage the ferrets is to keep them in a good sized box with a wire front for two or three weeks and then I

take the box out to the dog town, commencing at one end. As they clean up the holes I move the box farther on. The dogs don't get behind them, you bet. No danger of a dog occupying a hole worked by ferrets. I close the box tight except a small hole for the ferrets to go in and out. I also have a small door in it and have a dish to put water and milk in which I take out once a day. I hardly ever see the ferrets but they are in the box a great deal and are not wild; when I see them I can pick them up without any trouble. The box makes it more homelike for them, and they will clean the holes on all sides out from the box so we can tell what they are doing. Write at once so we will know what to do."

A good many years ago the following appeared in the *Spokesman Review*, Spokane, Washington:

"W. A. Davis has discovered a new and efficient method of destroying squirrels. Mr. Davis sent to the state of Iowa for some ferrets, which he used to hunt squirrels, which are one of the greatest pests of this section. The ferrets are trained to go into the holes after the squirrels and either catch and kill them or drive them out of the holes where dogs catch them. Mr. Davis took three ferrets and two dogs and went into the fields. In less than two hours he had killed

sixty-two squirrels. Mr. Davis exhibited the ferrets at Colfax recently and they attracted much attention. He says they are the most successful squirrel exterminators he has ever tried. He believes it will pay farmers of the Palouse country to breed ferrets and train them to hunt squirrels and further thinks that systematic effort along this line will eventually solve the squirrel problem. With half a dozen industrious ferrets a farm could soon be cleared of squirrels, and once they were driven out it would be comparatively easy to keep them exterminated."

A raiser, breeder and seller of ferrets located in Illinois, who has followed the business for many years says that ferrets one year old will drive out ground squirrels (large western kind), gophers and prairie dogs but that younger or inexperienced hunters should not be tried on these animals. Several ferrets should be used, or liberated at the same time, where these pests are numerous. As some of the pests here mentioned are still found near the raiser alluded to he should be familiar with what his animals can and will do.

The ground squirrel in the East is different from the western variety and is not such a pest. The western variety is larger than the little



SQUIRRELS—PESTS OF THE WESTERN FARMERS.

striped fellow called chipmunk in the East which is so small that ferrets could not enter its den.

In some states the use of ferrets on rabbits is unlawful, although an exception is generally made where they are destroying young fruit trees or otherwise doing damage. Ground squirrels, gophers and prairie dogs are considered pests wherever found. So far no law prohibiting the hunting and destroying of these with ferrets has been enacted and probably never will. To hunt these with ferrets is sport as well as ridding the land of pests.

CHAPTER XII.

FERRETS AND MINK, SKUNK, RACCOON, ETC.

ALTHOUGH the ferret has been used principally on rabbits and rats yet now and then a user has been experimenting on furbearing animals. The success has not been so great as with rabbits and rats. It requires an older ferret to hunt rats than rabbits and for fur animals still older and more experienced hunters and fighters should be used.

Prior to 1900 ferrets had not been thought of (or at any rate little used) in connection with hunting fur animals. Not until about 1906, when mink and skunk skins became quite valuable, were they employed by the fur hunter or catcher. A few who were expert handlers of ferrets on rats and rabbits, saw an opportunity, began training or hunting for mink, skunk and other fur animals that might be located or driven from the den, log or other hiding place.

Ferrets that had been handled and hunted a great deal on other animals were used for this kind of hunting which is of the guess work kind. That is dens were ferreted whether known to be occupied or not. Such being the case only a well

trained ferret should be used as numerous dens were tried in which, of course, there was nothing. A well trained ferret will come out, as soon as the den is examined, if containing no game.

One ferret will not, as a rule, drive out a mink. Those who have been most successful

have used two large ones at least a year old. Mink are usually an easy animal to rout. Many instances are known where dogs having located a mink it left the den by stamping or pounding on the ground over where it was supposed to be. This, more especially, is the case where the den is a shallow one.



LARGE OLD FERRET.

While a ferret or even two would probably not be a match for an old male mink yet their nature is such that they dodge from den to den, so that chances are that a mink would seek safety in flight rather than fight. If cornered a mink will put up a desperate fight for an animal its size. If the mink is a female it will be apt to run out, at once,

unless during mating season when such probably will not be the case. While ferrets and mink do not cross, or breed, yet being in the same family (*mustelidac*) may be congenial and not inclined to fight.

A party who has "ferreted" a good deal for mink says: "They are used with fair success to drive or run mink from holes. Use a large male ferret and if there is a mink in the hole you will hear them fighting. Keep back a rod or so and the mink may run out, as they often do. Now shoot or let the dog loose, if you have one. During February and March, which is the mink running season, if a male ferret goes in where there is a female mink they will not fight and the ferret is apt to stay.

Nature of the skunk is much different than that of the mink. So far but few skunk have been driven from their dens by ferrets. Those however who have had considerable den experience in handling ferrets, and are close observers of their habits and peculiarities, can readily tell when they have gone in a den occupied by a skunk or skunks. The ferret will come out usually with fur and tail bristled up very much like a cat when chased and treed by a dog. On the other hand some ferrets will not go into a hole where there is a skunk. If ferret or ferrets are

large, old, savage and persistent fighters they sometimes are able to make a skunk "perfume" which is conclusive evidence that there is fur within, but no skunk will show at the entrance. There may be exceptions where the den is shallow but forty-nine times out of fifty the skunk or skunks will not leave their nest.

In many states the digging out or destroying of dens is prohibited by law. Even if such is not the case digging is not recommended. A trap set in the entrance and hole plugged up outside of trap will be very apt to make a catch the first night. Skunk or skunks generally leave a den the first night after being disturbed.

A ferret user in one of the Central states has the following to say: "In hunting skunk the ferret will not drive them out but will stir them up and the smell will inform you that there is a skunk in the hole. For skunk and mink hunting, they must be bred for that purpose, for if not properly bred, they will not hunt them very well. In order to have them hunt skunk they should be bred the same as a good fox dog or a good coon hound. Two parents that have been good skunk hunters will produce young that take to this kind of hunting readily."

Another party who has used ferrets considerable in the state of Arkansas says: "I find

that the only thing that can whip my ferrets here is the groundhog and opossum, that is, those that live in the ledges."

A party in Minnesota who has raised ferrets for several years says: "While rabbits and brown rats are the most common animals that ferrets are used for however some will drive out mink but never saw one that would tackle a skunk. Generally speaking ferrets are too large to be of much use in hunting the common ground squirrel, yet I have used half-grown ones for squirrels with success."

A ferret user in the state of West Virginia who has a great deal of experience in hunting with these animals says: "Once while out rabbit hunting in the morning, when there was no snow on the ground, my dog trailed around through the forest, and at last went to barking in a cliff of rocks. I went to him, thinking it was only a rabbit. I let my ferret down and in. The ferret was gone about a minute when I heard the supposed rabbit start. The noise grew a little loud for a rabbit and just then I caught sight of a large raccoon coming out. As soon as it was outside of the hole, the dog and I killed it.

"On another occasion my dog kept trailing around an overhanging rock, under which was a lot of leaves. I thought possibly there was a



SOME LARGE, STRONG FERRETS—THE KIND FOR FUR ANIMALS.

burrow or den back in this hollow place. So I put the ferret in the leaves, and stood ready to open fire on what I thought was a rabbit. All at once I heard an awful rumbling noise and a pheasant came flopping out.

“I once put a ferret up in a small hollow in a beech tree, on an old male grey squirrel. The ferret immediately attacked the squirrel and worked some eight or ten minutes but could not start the squirrel. At last the ferret came down unhurt, then I twisted the squirrel out with a grape vine.”

The following is from a party living in Dubuque County, Iowa: “One morning when there was about an inch and a half of snow I took Old Billy, my ferret, gun, and started to go over my trap line. I had taken the ferret along once before to chase a weasel out of a hole, which the ferret did nicely. I saw the weasel go in the hole so thought would try the ferret. I put Billy in the hole and watched ready with my .22 repeater to see or hear the fun. I had to wait only a minute or so when out came the weasel with the ferret on him. Well he sure did finish that toy.

“Now back to where I started. The first hole I came to saw where a skunk had gone in. I hesitated a few minutes then decided to try Old Billy once. It would probably mean either death

to him or the skunk. I knew my ferret was a large and powerful one so decided to put him in the hole. I let him down at the mouth of the den and in he went. I stood anxiously waiting for a few minutes when suddenly I got a whiff of perfume and just then out came the skunk and ferret. I picked up my gun but by this time the ferret had the skunk by the neck and soon choked it to death.

“Well if I ever was proud of Old Billy I sure was after he had killed that skunk. I have sent him in other holes and he has chased them out. I wouldn't sell him for \$25.00—he is better than steel traps.”

The most successful users of ferrets for skunks locate the animals by their patting, which is probably done to scare the intruder. Experienced skunk hunters and trappers, and especially skunk diggers, know that when a skunk in den is closely approached by man or dog they are apt to pat. This is done with their front feet and can be heard for a rod or two. Some ferrets will not fight a skunk but will approach within about two feet and stop, when the skunk is very apt to pat. When the ferret is put in the den place your head as far down the den as possible and listen, keeping quiet.

Chances are good that if there is a skunk or skunks within you will hear them.

A ferret that has tackled a few skunks is apt to become wise and not take hold, as they do not like their perfume. Such a ferret will usually enter a den but is not apt to tackle yet may go near enough to cause the skunk to pat (thinking that it will frighten the intruder). The ferret may stay for a few minutes or come out excited and bristled up. Some ferrets, however, have been known to rout skunk from their nests without causing them to pat or scent and then lie down in the warm nest. Others come out but do not show by their actions that there is game or fur within. The "pat" method, however, is one of the best for locating skunk yet the would-be fur catcher by this method should not lose sight of the fact that only a small per cent of dens contain game of this kind.

CHAPTER XIII.

FERRET CONTRIVANCES.

IF ferrets have been handled considerable and properly there will usually be no necessity for using muzzles, harness or other ferret devices, or contrivances, now upon the market. Some cut off the four long teeth or tusks (two on each jaw) of ferrets a year or older when used for rabbits only. Ferrets so treated cannot kill a rabbit and should they grab and hang chances are that bunny will either get loose or come out of the den dragging the ferret.

In handling sick ferrets it is advisable to muzzle. Some use thick gloves only, yet when a ferret is sick it is usually cross and more apt to bite than at other times. Again a bite at such times is more risky than when the animal is enjoying good health. The bite of a ferret is not considered poisonous, yet better take no chances. Thick leather gloves can be worn in handling and training ferrets until they become accustomed to you, as they are unable to bite through.

CARRYING — The first and most important contrivance to be considered in connection with ferrets and ferreting is a pocket, bag or box to

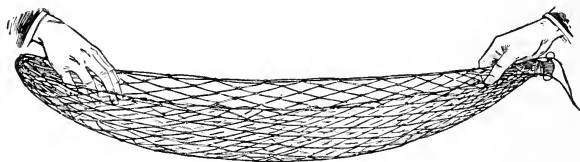
carry the ferret in. These animals should be carried, in such a way that there will be no danger of hurting. A good many ferret users carry in a game-coat pocket, sack or canvas bag; none of which are very satisfactory. In a coat pocket they may be injured when you are climbing a fence or going through brush.

A very good carrying sack can be made of heavy cloth (duck, however, is better) with leather lined bottom and ends. The front had also best be leather and must have small holes sufficient to let air in or ferret will smother. The leather bottom and ends makes the bag stiff so the ferret can lie down and rest if desired. The bag had best be carried under the coat on cold days to keep the ferret warm. In some states where the law is strict, no doubt, they will be carried under coat if weather is warm.

None of the carriers mentioned are really as good as a small box with a handle. The box is not only more sanitary but is really more convenient for the ferret. A box 12 inches long by 4 wide and 4 high will accommodate one while for two same length and height by 6 wide. They can be carried in a smaller box but for all day trips this size is about right for the larger sized fer-

rets. Some are made with a division thus keeping the animals separate.

RABBIT NET—This contrivance can be no better explained than to quote from a descriptive circular sent out by the makers who say: "Seeing the bad results of darkening the exit of a den or burrow by the use of a sack, bag, or trying to catch the rabbit with the hands, often driving it back to be caught by the ferret, causing it to 'lie up.' Again where you cannot shoot on account



A GOOD RABBIT NET.

of horses or other stock being nearby, we realize the great need of a net to be used by the sportsman. Not long since we placed on the market a net that is so simple that a child can operate it perfectly. This net will not darken the exit in the least, and the bolt of the rabbit against it locks the net securely with the rabbit within. This net is made of strong, light, seine twine, hand made, and will last a lifetime. This net can be carried in the pocket."

The illustration shows the net. Immediately after a ferret is put in a den the net is placed over the mouth of den. The two strings going through rings near right hand can either be held or fastened. They have also been used to some extent on mink and other animals that can be routed from the den by a ferret or ferrets.

MUZZLES — A ferret known to be a “killer” and “lays up” should be muzzled. It is usually only the old and experienced or large, strong, savage fighters that develop these bad traits. On such a muzzle can be used, similar to the old-fashioned dog muzzle, consisting of thin, narrow, little strips of leather. One loop goes over



THE OLD-FASHIONED MUZZLE.

the nose or snout of the ferret, another round the neck close up to the head. Two strips connect the two—one on top the other underneath. The smaller band is slipped over nose; the one which goes around neck is usually fastened with a small buckle. See illustration.

There is another model of muzzle, made or manufactured somewhere in Northern Ohio,

called Adjustable Ferret Muzzle, but whether it is an improvement over the one just described we are unable to say. The illustration shows the Adjustable with strings for tying. A pretty good idea of this muzzle can be had from illustration. It should be made of light leather, cut

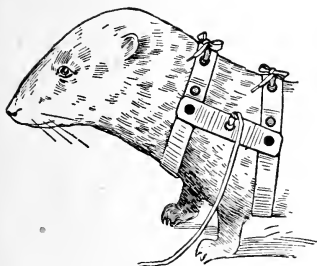


ADJUSTABLE MUZZLE FOR
FERRETS.

and sewed together to fit over nose and jaws. Eye holes should be about $\frac{5}{8}$ -inch in diameter and end or opening for nose $\frac{7}{8}$ -inch. This will allow end of nose to come through less than an inch but so that holes come over the animal's eyes. If rightly adjusted the ferret will not be able to open mouth wide

enough to catch. Holes are cut or punched in the leather through which a string is run and tied around neck just back of head. The longest or top part extends back several inches and is tied back of the forelegs as further precaution to keep on.

FERRET HARNESS — This is a simple arrangement. It consists of two strips of light leather $\frac{1}{2}$ -inch wide and 6 long. These go around the



HARNESS FOR FERRETS.

body—one in front and the other back of the shoulders. The length of each of the two cross strips is $2\frac{5}{8}$ inches. One of the cross pieces has a hole in which a string can be attached.

Some use this or similar harness for training and working ferrets

but if they have been rightly handled there is little or no need of such an arrangement. Harness are used principally on slow ferrets or where time cannot be spared. The illustration will tend to make plainer should you wish to make or use. They are easily put on and taken off and are not so bothersome or disagreeable to ferrets as some other "contrivances." Instead of the harness as shown some have simply tied a string so it will not slip around the ferret's neck or foot.

In this connection the following from a party who has had experience may be of interest and value: "Some ferrets will hunt all right without a harness or string, but it is safest to use a means of inducing them to come out. Always keep the ferret warm, as it may not want

to come out if it is cold. I once had a ferret that would always kill the rabbit in the hole and would not come out. I broke her of this by feeding just before starting out for a hunt. Some claim that their ferrets will drive out mink or skunk but so far I never have been successful in this although I never tried much. If you come to a hole in which there are a great many roots it is safest to let the ferret go in loose rather than harnessed or string attached, for string or harness is apt to get caught."

CHAPTER XIV.

LETTERS FROM RAISERS.

THE following letters are from those who, as a rule, have raised small numbers only. Several points are brought out by these not mentioned elsewhere that are of especial interest. It will also be learned from these writers that ferrets are successfully raised in Canada, Iowa, Nebraska, West Virginia, Pennsylvania, Illinois, and New York. While Ohio is the center of the industry there are in Illinois, Minnesota, Iowa, New York and probably other states those who raise hundreds, possibly thousands, each year.

My father is a great ferret breeder and I will try to tell about some of his ways. I came from England to this country in February, 1910, and always worked on a farm. My father has kept ferrets since he was 18 years old and he is 53 now, and he still keeps them. Perhaps this country will be a little different for ferrets from England.

The ferret will come in heat in March and if they are not mated with a male they will die.

They have from two to nine in a litter and I never knew of one to breed twice in a year.

The best thing to feed them is new milk and dog cakes and flesh of all kinds but they like birds the best. But when they have young ones, never give them any flesh until the young are a month old, as the blood will get on them and that will entice the old one to eat them.

I never knew of anyone using fine gravel. The best thing to be used in their pens is clean sawdust for they must be kept clean. Never give them anything with salt on, as salt will kill them.

G. W. FRADLEY, Canada.

Ferrets usually breed in April but have been known to run until May or June. They have from three to eleven at a litter but I have had them have as high as fifteen. They carry their young 42 days. Always keep the male away from the female as they will kill the young.

I feed my ferrets bread and milk twice a day and a little fresh meat once a week. Do not feed them very much meat as it makes them mean and hard to handle.

Ferrets are born blind and remain so for about five weeks. Fix the nest for the female about a week before she has her young and do not bother her until the young are about two

weeks old. The ferrets hide their young until about that time. If the young get to squealing and crawling about at this time, soak a small piece of bread in warm milk and place it in the nest, as they are hungry. They will soon find it and suck all the milk out.

I have been a breeder of ferrets for twelve years and have had only one ferret that raised more than one litter a year. This one had a litter in June and another in August. The first litter contained nine and the next one eleven, and she raised nineteen out of the twenty.

Always keep ferrets in a dry place with three or four inches of dirt in their pen for them to dig in. If you don't they will get a disease known as the foot-rot and that soon kills them.

C. E. WYNN,
Webster Co., Iowa.

I have had ferrets for five years and they are very useful in catching rats or rabbits, if they are properly handled.

Ferrets should, by all means, have a warm, dry place to sleep and a cool place in summer, for they will get overheated sometimes if kept in a close place. I lost a fine female in this way last summer. Let me speak again about the necessity of cleanness in raising ferrets. If they

are kept in a damp or dirty place, they will get the foot-rot. They are easily cured by applying kerosene and turpentine to the sore parts twice a day, for three or four days.

Ferrets have from five to seven at a litter and they have been known to have fifteen. I had one last summer that had thirteen, but this is too many for a ferret to raise.

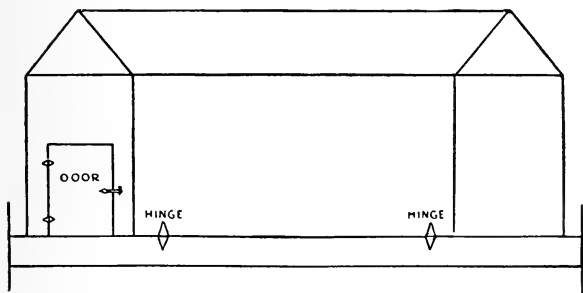
Their breeding season is from the last of March to the first of October. As soon as the period of oestrus comes upon the female, place her in the hutch with the male and leave her there two days; then separate them again and give the female plenty of good, rich food to eat, such as milk and mush oatmeal, cooked potatoes, birds, fowl or raw animal food of any kind. Meat may be given two or three times a week, but always keep your ferrets a little hungry.

When handling ferrets keep them tame. Never make a quick jerk at them or hit them in any way. You should use a string and harness for them when driving out rabbits.

CLIFFORD MARTIN,
Webster Co., Nebr.

I will give my experience with ferrets as I have raised them for fifteen years. The cement floors are all right in the summer season, but do

not keep them on concrete floors in the winter for they are a cold natured animal and should not be on anything that draws frost or dampness. For a house in the winter take four posts, drive them in the ground, letting them be about 18 inches high. Now take sleepers and make them one foot from the ground, put the floor on them and make the house so as to rest on the floor but



WINTER FERRET HOUSE.

make it so as to pass between the post. Now take a pair of hinges and fasten to the floor, then set the house on the floor and nail the hinges to the house so it will set in the proper place. Cut your door in the end.

A house of this kind you can lay over and scrub. It is the best way I have found yet. In the summer time they want a cool, light place with sand on the floor as they will mix the sand

and keep things clean themselves. The summer house should be made of strips about one inch apart. Feed them meat, such as rabbits, birds, sweet milk with bread in it. When they have young ones don't finger them or feed them while they are nursing. If you do the mother will eat the bunch and look for more, and when one of them gets sick, don't doctor it for it is going to leave you sure without cure and to cure it is out of the question. P. H. Doss, West Virginia.

I began raising a good many years ago realizing that many more ferrets could be used to advantage in flour mills, elevators, freight and express offices, as well as by the land owner or farmer. This was evident to me from the grain destroyed by rats gnawing holes in bins and sacks containing grain as well as playing havoc in general in freight, express office or store.

Again the use of ferrets has been most too general in some localities—near towns and cities for instance—where scores of ferrets are used by rabbit hunters, not only in season, but too often at all times. It is pretty hard to catch the ferreter as the animal can be so easily concealed. Ferrets are useful, in their place, but can be made very destructive on protected game which it seems some ferret owners and users stoop to.

Land owners and tenants are generally given permission to use ferrets where rabbits are doing an injury and with this leeway many use ferrets, at times, where they have no lawful right to do so. I have always found ready sale for all raised, selling mostly in this state—Pennsylvania—for rabbit and rat purposes. Some have asked for mink and skunk driving ferrets but having never tried or experimented with ferrets on those animals I do not know whether they would do the work or not.

Some of the diseases of the ferret are: foot rot, which is cured by dipping the feet in kerosene; scurvy is the same as foot rot, only all over the body and can be treated similar to the feet. Young ferrets have what is called sweating, on account of the mother ferret covering the young too deep with straw. Most of the straw should be taken out of the box, leaving only a little. Lump jaw is a disease like a boil and should be lanced. Distemper is a hard matter to cure and all of them should be separated at once and taken out, but better kill all that are sick than to let it run. They can be cured by using skunk oil and sulphur, by pouring it down them and plenty of it. If given good care, they are not hard to raise.

A NORTHERN PENNSYLVANIA RAISER.

In reply to your inquiry about ferrets would say that I have raised them for about twenty years and do not know it all yet. Will try and answer some of the questions asked. Have raised 12 in one litter and have had some with as few as 2. I consider 6 or 7 a good fair average. Ferrets have been known to live ten or twelve years but more of them die before four or five have been reached. I always use young ones for breeders.

A disease commonly known as foot rot is the worst thing I have had to contend with, but have learned how to avoid it, namely, keeping ferrets feet healthy by applying common kerosene occasionally and keeping pens clean.

BERT R. NORTHROP,
Chenango Co., New York.

One must keep the ferret house very sanitary (clean), otherwise it will soon be stricken with some sickness, then it is almost useless to try to save the little animals. Ninety per cent of ferrets die when once sick.

When the female is going to have young, the male should be kept some distance from her. If left together they may devour the young as is sometimes the case.

Old rabbit hunting ferrets should have their teeth clipped off occasionally. This will often save many hours trying to get your ferret out of a hole, where it has caught a rabbit. In hunting skunk and such animals, the longer their teeth, the better.

If a person wants fast hunting ferrets they should not play with them when starting on a hunt. Of course I must say that there are worthless ferrets, just the same as there are good for nothing dogs. Ferrets must have a variety of food, this, too, must be strictly fresh. Rich milk, not pure cream, with bread crumbed in it is good. Meat occasionally, such as the heart, lungs, fresh blood and a piece of the liver that is free from bile, are all good for ferrets.

JOHN C. SIBURT,
Marshall Co., West Virginia.

The first ferret I ever owned was a brown female, medium size, gentle and a fine hunter. When spring came I decided I would try and raise some young ferrets from her. I did not know any more about it than a hog knows about religion, but when I thought the right time had come I got a large brown male ferret from a neighbor and put him in with the female. I took good care of the female, kept her clean, fed her

well and in forty-two days she had eleven fine young ferrets.

The female was tame and I would handle the young all I wanted to, which was every chance I had. When the young were grown I had as nice a bunch as I ever saw, all tame and gentle as kittens. I would play with them, throwing them from hand to hand, put my fingers in their mouth, but I never had one offer to bite me. I never had to put on a heavy mitten or glove, or use a long stick with a hook on one end, to handle my ferrets with, as I have seen some ferret breeders do, who never handle the young until they are large, when it is a very hard matter to tame them.

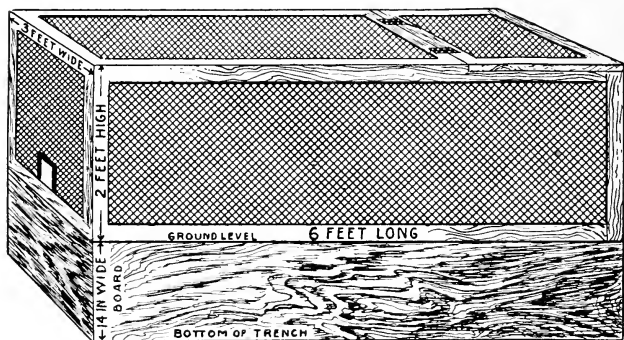
Some people have ferrets die when they are about three or four weeks old. I believe that they die because they do not get enough to eat from the mother. When they are hungry they will crawl around in the nest and cry something like a young mink or rats. When mine began to act hungry I got a shallow dish and filled it with sweet milk and soaked some bread in the milk. I then took all the young ferrets out of the nest and put the little ferrets' mouths right down in the milk for an instant. It won't be long before they will drink alone. A little time and patience will save a good many that otherwise would die.

I feed my ferrets bread and milk twice a day and a sparrow or some other kind of meat once a week when I have it. I also feed them corn, when it is in the milk or good roasting ear time, watermelon rinds and pumpkins, when they are ripe. I feed the pumpkin by making a hole in them near the bottom, large enough for a ferret to go through, and put it in the pen. The ferrets will eat until there is nothing but the shell or outside rind left.

Rats will not stay on a place where ferrets are raised. Before I kept ferrets our farm was overrun with them, but after I had ferrets six months we never had any trouble with them and none could be found. We never used the ferrets to hunt them with but they left, we think, because they disliked ferrets. Ferrets and rats are natural enemies.

The best pen I have ever had for a female and young I will illustrate and describe: The pen is 6 feet long, 3 feet wide, 2 feet high. First dig a trench the size of the pen, one foot deep, and line this with boards on bottom, sides and ends, using boards 14 inches wide for the sides and ends. Be sure and have the boards fit close together so a ferret cannot get through. Now get four scantling 2 x 4 for corner posts, long enough to reach from bottom of the trench to two feet

above the level ground. Nail the four posts (one in each coner) firmly in place. Next join the four posts together by nailing strips 1 x 4 to the posts at the top, all around the pen. You now have the frame. Now shovel the dirt you removed to make the trench, back in the now board-lined trench, until it is level with the side



PEN FOR FEMALE AND YOUNG.

boards. Now get some fine meshed wire, not larger than 1-inch mesh ($\frac{3}{4}$ -inch is good), two feet wide and staple it firmly and tightly all around the frame and over top, leaving a space on top for a door to feed, etc.; also make a hole 4 x 4 inches at the end near the bottom of the pen, through the wire, for the ferrets to go

through, to the hutch, making the hole in the hutch the same size as the hole in the pen. Put the hutch up close to the pen so the holes in the hutch and pen are square together so the ferrets can pass through the holes from the pen to the hutch. Ferrets can dig in the dirt floor to boards but they cannot get through. It will never be wet or damp if the dirt in the pen is kept a little higher than the dirt outside, and the ferrets will also be healthier than those raised on board or cement floors. The pen is stationary and cannot be moved, but if built in the right place, preferably under some shade trees, they will last a long time if built right. I keep my ferrets in them winter and summer, but they should have lots of bedding in the winter.

For hutches I use common dry goods boxes made of 1-inch boards about 2 feet wide, 4 feet long, 1½ feet high. I put on a good cover or roof and a door in the back end about 10 x 10 inches to clean, etc.

Some hunters have trouble with their ferrets not coming out of the hole and use harness or strings on them. I have found a way to get ferrets out: Get some shells for your shotgun, loaded with black powder, remove the shot from the shells and carry a few in your hunting coat pocket. When your ferret decides to stay in the

hole and won't come out, just put one of these shells in your gun, put the barrel in the hole as far as you can and fire. Your ferret will soon be out. (This method is not very safe and unless large den or small load of powder is apt to burst gun barrel. Author.)

ARTHUR N. ANDERSON,
Boone County, Illinois.

CHAPTER XV

THE FERRET IN BELGIUM, EUROPE.

I WILL tell you how the common rabbit is hunted with a ferret in Belgium, Europe. It was in the year of 1911, in the month of January, in the village called Aywaille, close to Liege, a city you will have no trouble in finding on the map. The country around this part is very rough and hilly and pretty well covered with young timber. In this country they cut down the timber every three years and use it in the baking ovens. On this fine morning I loaded myself down with thirty pouches, my ferret, a light colored one, large and gentle as a kitten, which I placed in a box a little larger than a cigar box. I carried it under my arm, under my cape and no one could tell that I had anything. I also placed hay in the box for a nest.

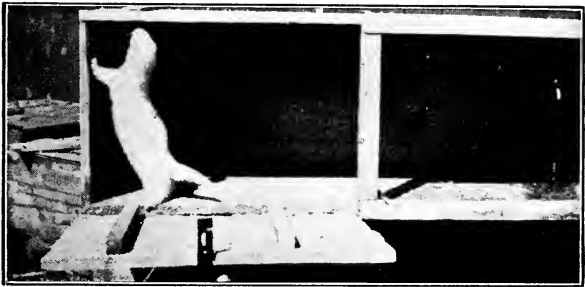
A half mile took me to a friend who was going with me. We got started from his place at 4 a. m. There was about ten inches of snow that had fallen the night before. Two miles took us to the first rabbit den, which consisted of four holes. Here I had better explain about the rabbits' holes in this country. They are not as lazy

as our own rabbits, who rarely ever dig a hole of their own but use other animals holes or hollows in trees. But in Belgium it is different. They dig their own holes which are from three feet to 100 yards long. All of the holes connect together in the ground. Sometimes there are only two holes and again there are as many as a hundred holes, all of which are connected. A den of one hundred holes probably would cover an area of one-half acre and underground it would be pretty well tunneled.

We took our four pouches and spread them over the holes and slipped the ferret in one of the holes, but he was barely in when two rabbits shot out of the same hole. The first one was caught but the second one got away, as we had no chance to reset the pouch after the first one was caught. I set another pouch over the hole again while pard took out the rabbit, which took but a few seconds. Then the ferret came out. I set the box down and he crawled into it, then we gathered up our pouches and set off.

We traveled about forty rods when we came to a hedge where we found a den of six holes, all in the side of the bank among the hedge, a very difficult place to set the pouches. Finally we got them set and placed the ferret in one of the holes. We heard them making an awful fuss, then out

shot a rabbit through a hole we had not found. We quickly set a pouch over the hole and again waited, for we could hear the noise. We did not wait long when a rabbit landed in a pouch, and while pard took him out, out shot another rabbit through a hole that we had not seen. We could not get at the hole to set a pouch so we had to let it go. We waited a little while longer and the



AN EASTERN WHITE FERRET.

ferret came out and crawled into his box and we started off again.

We went a mile this time before we located another of 22 holes. We found blood in several places, human tracks, and decided that there had been hunters there with ferrets before us, so we took the opposite direction so we would not be "stung" again. This time we came to a den of

42 holes, rabbit tracks by the wholesale and no human tracks to be seen. We fairly went wild at the sight and whooped and halloped. After ten minutes' prancing around we began to set pouches. We got the thirty pouches set that we had and then began filling up the other holes with rocks, chunks of wood, in fact anything that would keep the rabbits from coming out of the holes. The den covered an area of 100 yards long by 30 yards wide, among rocks and timber, some of the holes being very difficult to find.

Everything ready, we placed the ferret in one of the holes but in a second he stuck his nose out of another, then back he went at lightning speed. We waited for at least ten minutes, then we heard a slight noise, then we saw the ferret at one of the holes. He nosed around a few minutes then went back in the same hole. He was hardly out of sight when out came a rabbit and landed in a pouch. Then the work began, to take out the rabbits and replace the pouches. In a half hour we had six more, then we waited another half hour and got no more. Then we packed up our pouches, rabbits and ferret. As long as the ferret is willing to stay in a hole you may expect another rabbit, but when the ferret does not go back in the hole of its own accord, you may rest assured that there are no more rabbits in the

holes and you might as well pack your traps, for that will be all that you will get.

We traveled through a timber and found a den of only two holes. No tracks could be seen, but on close examination we found that the snow around one of the holes was melting, so we concluded that they might contain something. We hardly thought that it could be a rabbit and hesitated to put the ferret in. We feared that there was a mink in the hole, but as it was a short one we concluded that we could help the ferret out of the scrap should it happen to be one. I placed the ferret at one of the holes while pard held his hands over the other one. I had barely let loose of the ferret when out shot a rabbit, pard nearly letting it get away. It was so sudden that he was not ready for such a lively performance. By this time we had twelve rabbits, so we loaded up and made a bee line for home. We felt that we could eat a half dozen of them as soon as we got them cooked. We saw a couple of other places where ferrets had been, so paced right on, arriving home at 3 p. m.

JULES BURTON.

CHAPTER XVI.

FERRET RAISING IN A SMALL WAY.

THERE is no better way to explain how to handle a few ferrets than to give the methods as followed by those who keep a few only. While there may be better ways than the following yet it explains briefly much of practical value. This raiser is located in Ocola County, Michigan, which is more than half way up the state being in latitude 44 degrees, showing that they do well even that far to the north:

“In October, some years ago, I bought a pair of ferrets, paid \$3.50 for them. They were brown and the male was larger than the female.

When I first got them they were wild as they never had been handled any and they would bite if you touched them, so the first thing I did was to go to a store and buy a pair of leather gloves to handle them with. The gloves cost 50 cents, making a total of \$4.00 for the ferrets.

I got them home and then I had to make a box to keep them in, as I didn't have one ready. While I was making the box the ferrets slept peacefully in a barrel. For the benefit of those

who have had no experience with ferrets, I will tell you how I made the box and I might say now that it has given good satisfaction.

First I got a box from the grocery store about 32 inches long, 20 inches wide and 14 inches high. I nailed a top on it and made a door for feed and such like in the top about 7 by 10 inches. Then I put a door in one end about 15 by 8 inches. This door I use when cleaning out the box. For light, I tore off a board from the side and then nailed two thicknesses of common screen over it. This left space for light 4 inches wide and extending the whole length of the box, giving plenty of light and ventilation. To take up the moisture I put in about $1\frac{1}{2}$ inches of dry sawdust (I like this better than dirt) and about one inch of wheat straw on top of the sawdust. This brings the floor up to a level with the bottom of the screen.

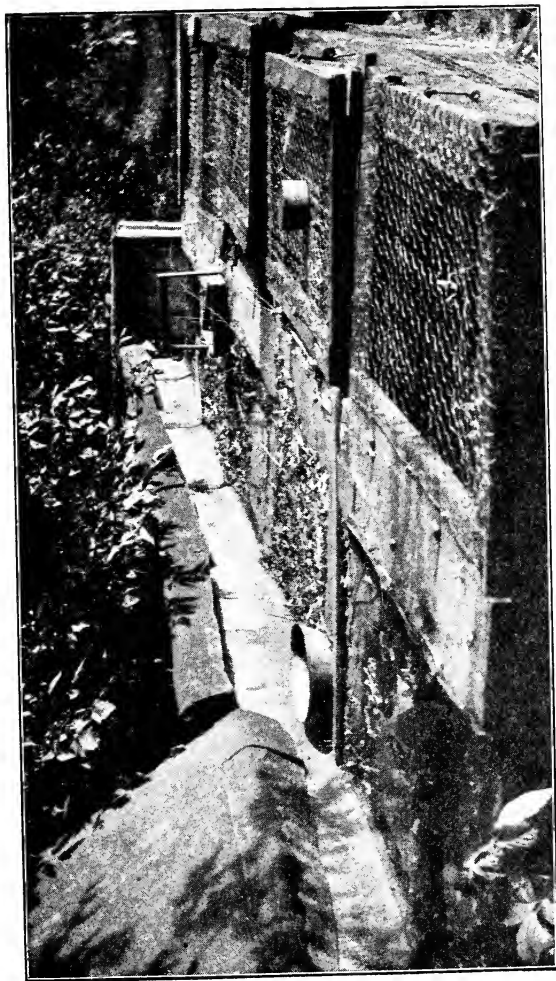
In one end of the box I put a handful of wheat straw for a nest. This makes a nice cool place for them in summer, but in the winter I nail a board across about 10 inches from the end where the nest is, and then I nail another board from the end of the box to the one nailed across and fill it up with wheat straw. This makes a nice warm nest for them. You should leave a

hole at the bottom of the cross board for them to go in.

I clean the box out once a week and put in fresh straw and sawdust. I also take out the droppings about once between the times of cleaning the box, and put fresh straw in the place where I cleaned. I also put in fresh straw for the bedding every two weeks. This keeps the box from getting damp and sour and the ferrets are not bothered with foot rot and weak eyes.

For a dish to feed them out of, I use a tin basin about $1\frac{1}{2}$ inches high. I give them bread and milk morning and night and fresh meat twice a week. Never feed them anything salty, as salt will kill them. I don't think tainted meat is good for them—I always feed mine fresh. I scour out the dish in which I feed them milk every two weeks. It may not seem necessary to some of you to clean the box so often, but I like to keep it clean and as I have the straw and the time, I do it.

I kept my ferrets in this box all winter, and up until about May 10th, when I made another box to put the female in, as I was expecting young ones. I made this box different from the first, it being about $2\frac{1}{2}$ feet high and 3 feet square. I put a screen in front and a lath cover on top. For her nest I got a box about 14 inches



SUMMER OR OUTDOOR PENS. SUCH PENS OR HUTCHES ARE USED WHERE THE CLIMATE IS DRY—BUT LITTLE RAIN. NOTE TOP IS OF WIRE BUT THERE IS A WOODEN COVER HINGED AND TURNED BACK WHICH IS USED IN CASE OF RAIN.

high and packed this full of straw. Then I made a hole near the bottom with my hand.

To tell when to separate the female, she begins to shed about two weeks before she has her young.

One morning about two weeks after I put her in this box, or to be more exact on May 27th, I found four young ones in the nest. They were funny looking things, with their eyes shut and no hair to speak of; I might say they resembled rats, except in size, for they are longer and more slim than rats. These ferrets are sixteen days old now (June 13th) and they are dandies. They haven't got their eyes open yet—they don't open until they are six weeks old. The mother is as gentle as she was before she had her young."

Methods explained in handling the large ranch, colony or ferret establishment at breeding time can be followed by the small raiser to a great extent. (See chapter on Breeding). Some of the things for those who have few as well as those raising many to remember are: After mating the female goes 42 days before young are born; thirty days or thereabout after mating make the female a nest in a box filled with wheat straw; separate the breeding females, providing a box and pen or hutch for each.

The female comes in heat from about the middle of March to the last of April, depending upon the season as well as how she has been kept and handled. Suppose the date of mating is April 25 the young will be born 42 days later, or June 6.

If a second litter is desired the young can be weaned a few days after they open their eyes and have begun eating milk from the pan with the mother. The female is now taken from her young and placed in a pen until she comes into heat again which will be about two weeks. This period can be easily told as the conditions are much the same as the dog family, that is, the part swells, remaining in that condition for a week or longer. The male *should not* be put with the female until the swelling is quite pronounced, which will not be for several days after it begins. Second litters will be smaller than the first, that is, instead of five to ten, the number will more than likely range from three to five. The second litter will be grown in time for last of December and January rabbit hunting.

Prices at which ferrets will sell during the season is usually known by August. Values are governed by the anticipated supply and demand. Unless overstocked it will generally pay to keep until late in August or September before selling

as prices are apt to be higher as the rabbit hunting season draws nearer. On the other hand there is always danger of disease and death, and again the purchaser who buys early has longer to get his ferret or ferrets accustomed to his methods of handling before the hunting season is on. Prices, however, usually show advance in September over August, and October values are higher than September. A party in central New York, who began in a small way, but having since built up quite a business, priced his ferrets as follows:

	July	Aug.	Sept.	Oct.	Nov.	Dec.
Single, female.....	\$3 00	\$3 50	\$4 00
Single, male.....	2 50	3 00	3 50
Pair	5 00	6 00	7 00

From figures given it will be seen that this raiser advanced values 50 cents for September over August with same advance for October sales over September. November and December prices were left blank for various reasons. One being that stock might be all sold; another that supply might be short and prices higher. July sales would generally mean special prices as such would be old stock. Further information as to prices will be found in next chapter.

CHAPTER XVII.

FERRET RAISING AS A BUSINESS.

THE raising of ferrets as a business is one that apparently has not yet been overdone, judging from letters written by ferret raisers who advertise in the hunting and trapping publications. Some of these report their stock gone from one or two insertions of their advertisement. One dealer said that he had hundreds of ferrets in the fall but that he disposed of them all before Christmas. The demand seems always greater than the supply. This is usually more noticeable in the months of January and February.

Among those who use ferrets are farmers, mill men, merchants, etc., on rats, and boys and hunters to chase rabbits from dens. A good many ferrets are lost each season, by rabbit and other hunters, few if any of which live until spring. A demand is also springing up for ferrets to be used in locating mink and other furbearers in their dens. While they don't always drive from den yet if a skunk it generally "raises a stink." They are also sold to ranchers and others, mostly west of the Mississippi river, to be

used on ground squirrels, gophers and prairie dogs as well as for rats and rabbits.

A party who has followed the business for a good many years says: "The demand for ferrets, at the present time (1914) is so great that dealers all over the country turn away orders that they cannot fill. Ferret raising is a good paying business and they can be sold every day in large or small lots. Most of the leading sporting magazines contain advertisements wanting to buy or sell in large or small lots. In the state of Ohio I should estimate that there was more than 100,000 ferrets raised and sold and by December it was a hard matter to buy one dozen from any raiser. They are sold to smaller dealers all over the United States who sell singly or in pairs at good prices. I know of different parties who started with one pair of ferrets and today they raise every year thousands and sell them all."

During my many years experience in the publishing business there has not been a season but that numerous inquiries have been received from those wanting to buy one or more ferrets. At first I referred them to some advertiser but they "came back at me" with the information that they had written all the advertisers in a certain magazine, all replying that they were sold out.

Under these conditions it appears that the ferret raiser or breeder will have but little trouble to dispose of his stock. In this connection I might further mention that during the time I published hunters and trappers periodicals, on more than one occasion, subscribers wrote that they were ordering a ferret or ferrets from such and such a raiser, but could get no reply. In several instances I wrote the raiser asking if he had received an order from so and so. A reply promptly came saying that his stock of ferrets was all gone but that he was trying to buy from another dealer to fill the order. This tends to show, as well as personal visits to several ferret ranches, that up-to-date business methods are not always adhered to by ferret raisers and sellers, yet as more enter the business those who treat customers shabbily will lose out.

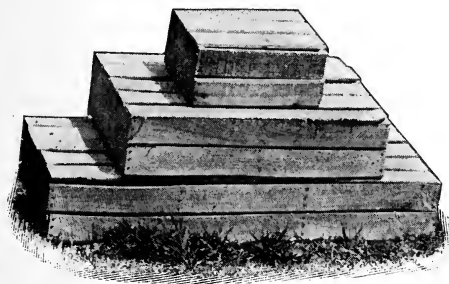
The foregoing is evidence that the ferret raiser who knows the "ins" and "outs" of the business has no difficulty in disposing of whatever stock he cares to sell. A breeder and raiser located near the Twin Cities—Minneapolis and St. Paul—says that he can sell ferrets in the fall as fast as he has them to offer for \$3.00 to \$5.00 each.

Although the heaviest demand and most sales are made during the months of October and November, prices in a general way, at least, are known by August. This is determined by number raised as each ranch or colony "keeps tab" to a certain extent on the other fellow by correspondence and otherwise to learn number raised, and sizing up demand from various parts of the country. The party who raises large numbers generally begins selling in August to smaller dealers, bird stores and other sources at about \$2.00 each or \$24.00 a dozen and advances values about 50 cents a head per month. Thus if the price is \$2.00 a head in August it will be \$2.50 in September, \$3.00 in October, \$3.50 in November, \$4.00 in December. Of course conditions govern the price to some extent and they will vary from figures given, yet they give a fair illustration of values for years immediately prior to 1915.

The advance from August is to pay for the trouble and expense of feeding. Ferrets born last of April and early in May are full grown by August as they attain their growth in about 90 days when properly cared for. It is a good idea for a prospective user to buy early so as to get his ferret or ferrets somewhat familiar with him.

Weight of a large male ferret is seldom as much as two pounds. Females are smaller by

one-fourth to a third than males. The shipping weight of a dozen, generally both males and females, including weight of box is around 25 pounds. A single ferret, including box, 3 to 4 pounds; pair 5 to 6. Shipping weight of ferrets varies, not so much perhaps in actual weight of the animals raised by the different parties, as in the size and thickness of shipping crates. One large breeder and shipper uses the following dimensions for his crates or shipping boxes:



SHIPPING CRATES.

Single ferret, 12 x 6 x 5½ inches, weight 4 pounds.

Pair ferrets, 12x10x 5½ inches, weight 6 pounds.

Dozen ferrets, 32x16x5½ inches, weight 24 pounds.

These crates were made out of ½-inch lumber and weights given are ready for shipment. The crate for dozen lots have a partition through center and six are put in each side. Another dealer gives the following weights: One ferret 3 pounds; two ferrets 5 pounds; six ferrets 15

pounds; 12 ferrets 25 pounds. This party evidently uses lighter material for shipping one or two than he does for one-half or dozen lots.

When shipping it is advisable to keep old ones by themselves. Females will fight young males and the animals may reach their destination considerably chopped or bitten up. It is best to keep young by themselves when shipping.

There is heavy expense in connection with keeping say 500 females and 100 males through the winter, spring and summer. After the young become any size, say by June, it will require the milk from something like 40 cows to supply them. This is assuming that each of the 500 females will have an average of six young. It will also take 300 or 400 bushels of wheat during the year to feed this large number and the young until sold. Some feed little or no meat while others buy all the old horses they can or even those that have died with any disease, other than blood poison or contagious ones.

Northern Ohio is the center of the ferret raising industry. The business was first extensively carried on near New London, Ohio and while the first raiser is no longer engaged in the industry to any great extent others in the same locality are. In several places in Ohio the business is now being pushed as well as having spread not

only to adjoining states but westward beyond the Mississippi river. There is room for more, especially in and near "ratty places".

The ferret industry is one of much more importance than generally supposed from the fact that probably fifty times as many of the animals are in use as those not familiar with their uses realize. In thousands of buildings ferrets are doing much good in destroying and keeping away rats, the great pest not only in dwellings, but mills, elevators, granaries, barns, etc.

In states where rabbit hunting with ferrets is lawful, many are used, as rabbits driven out and caught are not shot up or damaged as is often the case when killed by other methods. The ferret user, who hunts for market, puts his animal in the den and catches the rabbit in his hands, net or a sack, placed over the mouth of the den, as it comes out.

So far ferrets have mostly been used for rats and rabbits. During recent years a few have been used for fur hunting, principally on mink and skunk. There is also more or less call, principally from west of the Mississippi river, for an animal, or other means, of destroying ground squirrels, gophers, prairie dogs and other small animal pests. Where large, old and several ferrets are used they are of considerable value for

such purposes. The ferret is a scrappy fellow and many much larger animals will run from it rather than fight. It may be that the smell or odor of a ferret strikes terror to them — it does to rats.

Some objection is made to those breeding, handling and selling ferrets on the ground that they are often unlawfully used. No doubt such is the case. No one surely is so narrow minded as to say that dogs should not be raised or sold because some use them during closed season. Neither would they say that fishing tackle or gun manufacturers should close their plants because some that bought are using them unlawfully. Ferrets are used unlawfully to some extent, but indications are that the law is generally as well observed by the user of ferret as those who hunt with dog and gun or gun alone.

The native American animal that most resembles a ferret is the weasel which animal is also bold and bloodthirsty. The weasel is different from the ferret in that it can not, or at least is hard to manage and train to hunt game. Ferret raisers say that the weasel and ferret will not cross. Even should later experiments prove successful it is doubtful whether such a "breed" would be an improvement or otherwise.

For hunting purposes probably not. Perhaps a cross of this kind would mean a better fur pelt, but at the same time a somewhat smaller body enabling it to enter smaller dens thus being able more easily to "ferret out" the smaller rat dens.

From the foregoing it will be seen that there are various uses and demands for ferrets. Chapter XIX — Ferrets as Fur Bearers — will also be of interest to raisers and prospective raisers. So far very few ferret skins have been sold in America, but in Europe where the animal is known as fitch a good many thousand skins are sold each year at prices ranging from about 15 to 75 cents. The fur value, as yet, is low but should some fatal disease appear during the winter season it would pay to skin and save the pelts.

The business of raising ferrets is one of more or less risk for the animals are susceptible to disease, can not stand severe cold and are short lived. On the other hand there has always been a cash market for all raised, they produce good sized litters, breed twice a year if rightly handled, and food on which they thrive is not expensive.

CHAPTER XVIII.

HOW TO SELL FERRETS.

NO doubt one of the best, quickest and cheapest methods of selling is by placing advertisements in the classified columns of the hunting and trapping publications. Some of these carry considerable dog, gun, ferret and other allied business and sometimes have a Ferret heading in the classified department. If so there is where your notice of sale should be placed to bring best results.

The cost of advertising, in the classified columns, varies about one-half cent a word each insertion, in your local or county paper; in large dailies about one to two cents a word; in hunting and trapping magazines (which will be your best mediums) from two to five cents a word. Don't let this higher price keep you out for they will undoubtedly sell so many more for you that they will prove the cheapest although first cost was higher. To further illustrate: Suppose you use 20 words three times in a local paper at a cost of one cent a word each insertion, or 60 cents for the three times. A local or county paper circulates mainly in the county where

published and if you sell six ferrets the advertisement has done all you could expect. A 20 word advertisement in say *Hunter-Trader-Trapper*, Columbus, Ohio, would cost \$1.00 a month or \$3.00 for three insertions, or five times as much as the local paper. To equalize cost you must sell thirty from the latter.

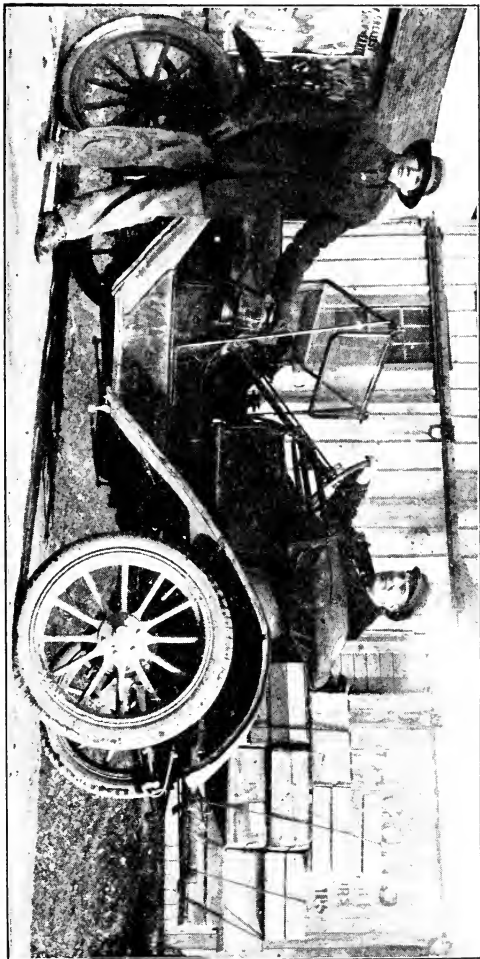
It may come as a surprise to you, but true nevertheless, that more than one hundred have been sold from \$3.00 worth of space in the *Hunter-Trader-Trapper*. Why? Because that monthly magazine reaches and is closely read largely by just the class of people that the ferret seller wants to reach — hunters, trappers, sportsmen, farmers, elevator and mill men, ranchers, etc.

Other magazines along somewhat similar lines are: *National Sportsman*, Boston, Mass.; *Outdoor Life*, Denver, Colo.; *Sports Afield*, Chicago, Ill.; *Rod and Gun*, Woodstock, Ontario, Canada. These should all prove good mediums to use. Leading national farm papers such as *Farm Journal*, Philadelphia, Pa.; *Successful Farming*, Des Moines, Iowa; *Farm and Home*, Springfield, Mass.; *Farm and Fireside*, Springfield, Ohio can all be used to advantage where the raiser has large numbers to dispose of. These papers and magazines, owing to large circula-

tion, close their forms from three to six weeks in advance of publication and mailing. Those you are anticipating using it is advisable to send for sample copy and advertising rates. These will be mailed you promptly giving all information as to rates, closing dates, etc., that is desired. If you wish to make sales in your own and adjacent states mainly I would advise your using the leading state weekly newspaper or leading weekly farm paper of your state. Their rates will vary from about 25 to 75 cents a line. Usually they do not accept display advertisements of less than three lines. Of course those containing a classified department will usually accept a notice of as few as fifteen words. Poultry papers are also pretty good mediums.

Any publication that you are thinking of using it is advisable to write asking for sample copy and advertising rates. These will be sent you at once. Look them over and if in the Ferret selling season they are apt to be running other ferret advertisements. Don't make the mistake of trying to get into publications having no ferret advertisements thinking that such will be the best ones. As a rule experienced ferret raisers and sellers have tried all of them and are now using the best ones. Remember that some publications do not reach a class of people that are

SHIPPING FERRETS—ON THE WAY TO THE EXPRESS OFFICE.



interested in ferrets and it would be a waste of money to go into such. Again some of the very best mediums for you may contain no ferret advertising during the off ferret selling season.

My years of experience in the publishing business and close observation of the methods of the most successful advertisers, of not only ferrets but other lines of advertising as well, has proven to me that it is best to begin the advertising several weeks in advance of the active or best selling season. Why? Because this gives time for prospective purchasers to write for prices, etc. Be prompt in answering all inquiries for this is one of the great secrets in being successful in any line.

Some ferret sellers wonder why they seldom, if ever, get repeat orders. Nine times out of ten the reason can be traced to their treatment of customers. Orders are not filled promptly sometimes, being held up for days or even a week. I have known certain raisers and dealers, who did not have ferrets on hand when the order was received, holding same for a week or two, buying elsewhere to fill it. Business is business and any ferret raiser, handler, seller and advertiser who offers stock for sale has no right to hold up an order for an unreasonable time. Prompt shipments mean within 24 hours after received.

Some make it a rule to get every order out day received or write customer why shipment was delayed a day. Of course the buyer should take into consideration time in the week that the order is received. It is not advisable to start ferrets hundreds of miles on Friday or to some near points later than Thursday. Many express offices are closed on Sunday and for this reason shipments should be started to reach destination not later than Saturday.

While most raisers fill orders carefully and promptly yet there are others who seem to think customers can wait. The latter seem to think that as they have the money the customer can wait until it suits their convenience to ship. If for any reason an order can not be filled for a couple of days write the party. In fact it is business to acknowledge all orders as soon as received stating that same are being shipped and how (by what express) or will be on a certain date.

As already shown, the business is one that can be enlarged or expanded, as the demand so far has generally been much greater than the supply. When conditions are the reverse, that is, when the supply is larger than the demand, the most successful must not only know how to raise ferrets but must be a fairly good business

man, one who answers correspondence promptly and sees that orders are gotten out quickly. A seller of this kind is always given the preference. In connection with *How to Sell Ferrets* the "how" of the future is going to be much more difficult than the "how" of the past when there was little or no effort required to sell. There is no better place to explain than right here, that of those in the business but few could be classed as good business men, although they may, and most of them do, know ferret raising and handling almost to perfection. Selling, in a few years, when more are engaged in the business and the number of ferrets offered for sale yearly is tens of thousands greater, will be a much harder problem than during the past when they really sold themselves.

If you are in the ferret business or expect to raise and sell, remember that those who buy, receiving prompt and courteous treatment are apt to tell their neighbors and friends. In this way a raiser's reputation becomes known far and wide and his business flourishes. How about a raiser and seller who does not look after his correspondence promptly, misrepresents or delays shipment, days or may be weeks? When a party orders a ferret or ferrets he naturally expects his order to receive prompt attention.

CHAPTER XIX.

FERRETS AS FUR BEARERS.

FEW buyers of American raw furs, so far, have quoted ferret skins on their price lists of furs. Some dealers quote the brown weasel 2 to 5 cents; rabbits, whole skins, 1 cent each. Squirrels, moles and woodchucks (groundhogs) worthless. Squirrels, the American kind, have no fur — only hair — and same applies to the woodchuck. Moles have nice, soft fur but being such a small animal have heretofore had no fur value although thousands have been yearly imported from Europe that apparently are no better than those inhabiting the United States. No doubt the American variety will in time have a fur value.

In the early days beaver was the staple fur although bear, otter, fisher, marten, wolf, lynx, fox, mink, raccoon and muskrat were all exported in quantities as early as 1750 but not until the year 1843 do records show that the common house cat and chinchilla (a South American animal) were exported. American opossum and fur seal were added a few years later, but not

until 1858 was skunk fur used. Such being the facts, in connection with the fur trade, does it appear unreasonable that ferrets will soon be included in the list of fur bearing animals?

In reply to letters of inquiry as to the fur value of ferrets two of the leading dealers in American raw furs located in New York City wrote as follows:

“In reply to yours beg to state that the ferret is the same animal as the European Fitch except that a prime fitch is heavier in fur. I have no doubt that they

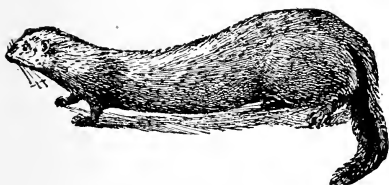


THE EUROPEAN FITCH—BROWN.

have been sold in Europe as Fitch but the best of them known as ‘halbe’ in other words ‘halves’ bringing half price. Their value here has been nominally about 5 to 10 cents for the last ten years.”

The other letter said:

“It is our belief that ferrets, particularly tame or raised, would hardly serve as even an imitation of European Fitch. While both are almost of one species the Stone and Baum Marten are



THE EUROPEAN FITCH—WHITE.

more closely related to Fitch which is well furred, silky and fine in texture, much like a young opossum.

At any rate ferrets would only be salable in lot quantities at probably no more than 10 to 20 cents average at any time."

These letters really show that there is a market for the skins at the present time but at low price. The dealer who said that they would only be salable in lot quantities meant that where they were offered in lots say fifty and up they would sell better than if one or two only were offered at a time.

In the spring of 1909 when my book *Fur Farming* was published it appeared to most people like a book upon a subject of very little importance. They could not realize or believe there was a field for fur farming. Later developments have proven that there was, for during the years from 1909 to 1915 five editions were printed and sold. Maybe those that look upon the business of raising and selling ferrets as being of little importance would change their views if they

knew more concerning it. Tens of thousands of dwellings in both city and country are made rat free because of ferrets to say nothing of their usefulness about barns, mills, elevators, stores and other buildings as well as along wharfs and on vessels. They will clean a city dump of rats in short order.

As already stated ferret pelts so far have not been quoted by many American fur dealers yet they generally allow a few cents for such pelts when they come in with other furs. In Europe the ferret, or a very similar animal known as fitch, has been used for many years by furriers. In America, no doubt, dealers and manufacturers in general will begin handling and listing the article when sufficient quantities are offered to justify.



THE COMMON BROWN WEASEL.

Ferret fur is somewhat like marten or mink, that is, as to length. The fur is longer than on the brown and white weasel (ermine) an animal which they somewhat resemble in both shape and size. The white weasel became quite an item in the fur trade a few years ago. Brown weasel

have been worth only a few cents each from the fur standpoint but are coming into more general use. The probable value of white weasel fur is from \$100,000 to \$250,000 to the trappers of America yearly. The catch varies a good deal but is well up around 500,000 when price of this fur is high. Ferrets are larger, longer furred than weasel with a pelt apparently as well adapted to tanning and manufacturing, with



SOME NICE FURRY AMERICAN FERRETS.

wearing qualities better than some skins now used. As the fur bearing animals become scarcer and their pelts command higher prices the general use of ferret skins will, no doubt, soon be a reality.

Some years white furs are most in demand; others black is wanted; again brown may be the color in general demand. When ferret fur becomes valuable the raiser can, if his supply is too large, kill off the color that commands best price.

Who knows how soon fashion's fancy flurry flames for ferret furs may turn? When it does and prices are as much or more than can be had for the animals for hunting purposes skins can be sold. The prime fur season extends from about the middle of November to February so that those not sold during summer, fall or early winter can be killed thus saving the expense of wintering and keeping until another season.

Perhaps the principal reason that ferret fur has not been more generally used is that manufacturers have not been able to secure the skins in large enough quantities to justify handling them. When dealers are assured that there are thousands of the skins awaiting a market it is reasonable to suppose that the pelts will be of value and quoted by all collectors, dealers and exporters same as mink, marten, ermine, muskrat and skins of other animals having fur value.

Not long since a certain manufacturer, in a large eastern city, began using common brown weasel for certain articles. He reported no trouble in selling the furs made from or trimmed with such. These furs looked nice and were sold at a moderate price. Ferret pelts are sure to come into general use and that soon. Why? Skunk fur was not of commercial value or used until 1858. The white weasel (ermine) prior to

1900 was worth only about 10 cents but during the years of 1904-5 was worth \$1.00 and later sold as high as \$1.50 for the choicest skins.

Ferret is undoubtedly the best furred pelt not now in general use. Brown weasel and the common rabbit, both used to some extent, do not compare at all with ferret skins. While this article after it does come into use is not apt to command a fancy price or even a moderately high one, yet at 50 cents to \$1.00 would offer an outlet should the market for live ones become overstocked, a condition which so far has never occurred. In fact the demand is usually greater than the supply. Again the fur market would be a means of getting rid of any too old for hunters, etc.

There is no denying that certain of the fur bearing animals are gradually being reduced in numbers. In fact such applies to nearly all species. On the other hand the use of furs has wonderfully increased of recent years. The hundreds of thousands of automobiles now in use mean more furs sold such as fur coats, muffs, gauntlets, robes, etc. Remember that no small per cent of the autos are in use winter as well as summer. Again America's population is increasing fast but the wild fur bearers are becoming less. Many different kinds of fur skins now have a market value that did not a few years

ago. No doubt were a bunch of several hundred prime ferret skins offered to some manufacturing furrier even now he would see their worth and buy.

The ferret is in reality a fur-bearing animal, being known to the fur trade in Europe by the name of fitch. Remember that ferrets were brought to America from Europe where they were known as fitch or fitch-ferret. In other words the animal is called fitch in Europe and ferret in America. The fur is called fitch in Europe where upwards of 100,000 skins are used annually, although the price has been low. It may not be generally known, nevertheless it is a fact, that thousands of these skins are sent each year to this country.

The fact that fitch or ferret (whichever name is used) are white and brown and that by crossing various colors or rather shades can be raised, should not be overlooked. This enables the breeder to raise the colors selling best. When the fur value reaches something like \$1.00, even for best, they will offer money making possibilities, for the fur only, as two litters can be raised in a year. The raiser for fur will have a cash market for all produced and need not advertise to sell as is now necessary in most instances. Again the raiser for fur will find that the second

litters can be had much later than when breeding for hunting purposes. Ferrets attain full size, if well cared for, in three months. Allow four, and second litters born any time in September, will be grown by January. Most of the second litters will be born by August so that by December they will be ready to kill for pelts.

One difficulty with second litters when raised for rats or rabbits is, that should the market be supplied, the expense of keeping another season will be considerable. With a market for fur any and all not sold for hunting can be killed, skinned and pelts sold.

As various fur animals are becoming more scarce, ferret fur will gradually rise in price. The day perhaps is not far distant when hundreds of thousands of skins will be sold to the fur trade and at prices probably equal to what the live animals sell for now. Ferret pelts to the value of \$1,000,000 yearly may be a reality soon.

CHAPTER XX.

FERRETS — A TO Z.

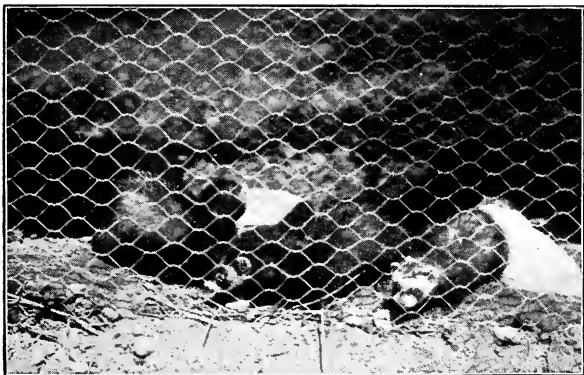
AS I have been in the ferret business for over ten years I will give a description of the use and care of this little animal.

The ferret is a native of Africa. They have been domesticated and raised in confinement a great many years. It is a slim, wiry, muscular animal and can kill animals much larger than itself. They resemble the mink and weasel in shape and size, having long slim bodies, small heads and pointed noses. Having very flexible bodies, they can enter very small holes and follow rats in the most difficult places.

Their natural disposition is to hunt, drive and kill their own living. They are keen scented and upon smelling rats or other game will enter the hole at once to kill them. Rats will run for their lives as soon as a ferret approaches, and being very cautious, will not stay about a place where ferrets are kept and worked. They are very valuable for field hunting as well as killing rats.

Ferrets are very tame and can be carried in the pocket and handled with the bare hands to

chase out rabbits from all manner of burrows and hiding places. When they are let loose they are very active and always want to be on the move. They are of two colors, white and brown. The white ones have pink eyes and are called the English ferret and the brown ones have dark eyes and are called the Fitch ferret.



A BUNCH OF CONTENTED FERRETS.

There is no difference in the two varieties as to their breeding and working qualities—only a matter of fancy as to color. They are hardy, strong animals and breed well in any climate. The average life of the ferret is from five to eight years.

In breeding, always use strong, active, healthy and hardy animals. Never breed from weak and sickly parents or from bad workers. Always try to have breeders that are good workers and are the true ferret type. Avoid inbreeding as much as possible. They must be wintered well if you expect to get a good, strong litter of young.

The average litter is from six to ten, but they have been known to have fifteen or eighteen, but such a large litter is only heard of once in a great while. As a rule, they will breed and raise two litters of young in a season. I had one female that I bred the third time. In the breeding season each male should be kept in a pen by himself, as they will fight if they get together.

Watch each female for developments. When you find her ready to mate, place her with the male and leave for a day. You will have no trouble in telling when she is ready to mate, as she will remain in that condition for from one to two weeks. Each female should have a pen to herself for two weeks before she has her young. Use wheat straw or fine grass for the nest boxes. The female carries her young for forty-two days.

The young are born with their eyes shut and will remain that way for about four or five weeks. When you look at the young, do it when the old one is feeding. When the young are large

enough to come out and eat, they can be weaned and in about ten days the old ferret will be ready to breed again for the second litter.

Feeding is one of the most important branches of breeding, rearing and working of ferrets. The greater part of the success depends on the proper feeding. The staple food is cooked graham mush, fresh meat and sweet milk. Bread and milk and meat is all right if you only have a few. A matured ferret can be kept in good, thrifty condition on mush or bread and milk, as meat is not an absolute necessity. When feeding meat in warm weather, feed only a little at a time. Do not feed salty or diseased, rotten meat, as salt and refuse will kill them. Feed the old ones twice a day, about what they will eat each time, with meat two or three times a week.

When feeding young ones it is best to feed three times a day the amount they will eat up clean and no more. Bread and milk is the best food for the young. A little meat two or three times a week will do no harm. Use good judgment in feeding and you will lose very few.

Ferrets are naturally tame and with just a little handling will become as tame as kittens. Never grab a ferret as he is coming out of a hole, for if you don't get him the first time, he will become shy; let him come clear out of the hole

and then when you do reach him, be sure that you get him the first time. Better wait a few minutes for it than to have a shy ferret.

They are old enough to work on rabbits when three months old and for rats when about six months old. Any ferret will hunt and drive rabbits from their burrows and come out after they have driven the game out, so you can pick them up. That is all one could desire. Any ferret will do this without training.

It is natural for them to hunt, drive and kill and it is just as natural for the rabbit to be afraid of them and so it takes a hike at once. Ferrets will drive out rats, rabbits, mink, gophers and weasels, and some claim to have ferrets that will drive out skunks.

When you train a young ferret with a harness on, the first burrow you put him in, if there is a rabbit in it, have your partner catch the rabbit at the other end of the burrow and hold the rabbit in the hole until the ferret gets hold of it. In a lesson or two the ferret will be a No. 1 and work good ever after. If a ferret works good on rabbits he will soon learn to kill and hunt rats, etc.

The breeding season of ferrets is from March to September and I have heard that they sometimes breed as early as February. Those who

breed ferrets are many and differently situated and no general rule will apply to all.

The main thing in hutch or pen building is to make a comfortable home for them and to be so constructed that cleanliness of all the apart-



TWO OLD FERRETS AT BREAKFAST.

ments can easily be attended to at any time. The next thing to look after is to have a dry place to build and have them so arranged that they can be properly ventilated in the summer and closed in the winter. You cannot succeed in raising ferrets if you have a damp place for their

hutches—dryness and warmth are the principal points to be observed.

A good size for a hutch is four feet long, three feet wide and thirty inches high. Take a box about twelve or fourteen inches square and make a hole in one end about four inches square and then place this box in the large pen, which is used as a nest box; this size pen will be about right for three or four ferrets but if you are going to raise ferrets by the 100 or 1,000, larger hutches will be in demand for an old ferret and her young.

I make a pen five feet long, three feet wide and thirty inches high and then get some one-fourth, one-half or one-inch mesh woven wire and put on the bottom of the pen and all the droppings, etc., goes through the wire so that the pen is always dry. I would advise putting some good wheat straw on the wire and have a good nest box twelve or fourteen inches square in one corner of the pen. I also have wire in one end of the pen and have a flap of a piece of oilcloth in front to drop down should it rain or storm. This is a good pen for all-round use for those who only raise a few ferrets. I would advise you to have the pen raised about three inches off the ground and keep in a good, dry place.

If the pens or boxes in which ferrets are confined are not kept free from dampness and filth, the ferrets will become infected with a sort of scurvy, called foot rot. A thick scab forms on the feet and tail. If the case is not attended to, the toe nails grow long and become dry and dead. The cure is very simple. Dip the affected parts in coal oil every few days until the disease is checked and killed; the scab comes off. If the toe nails are grown out, all the dead nail should be trimmed off; the nails will then grow out again and the feet will be as sound as ever. Three or four applications of coal oil usually effects a cure.

Sometimes it will be noticed among ferrets that their fur does not look clean and bright and on closer examination it will be seen that the hair is matted together and the skin looks red and is throwing off a sort of red dandruff. If it is not attended to, you will notice in a short time that the hair will come off and reveal a dark colored scab or sort of a spongy growth. This disease is caused by filthy pens, etc. A simple remedy that will cure this disease is coal oil. Usually three or four applications will effect a cure. When using the remedy on young ferrets, it should be put on with a brush; this can be

dipped in the coal oil and applied to all the affected parts.

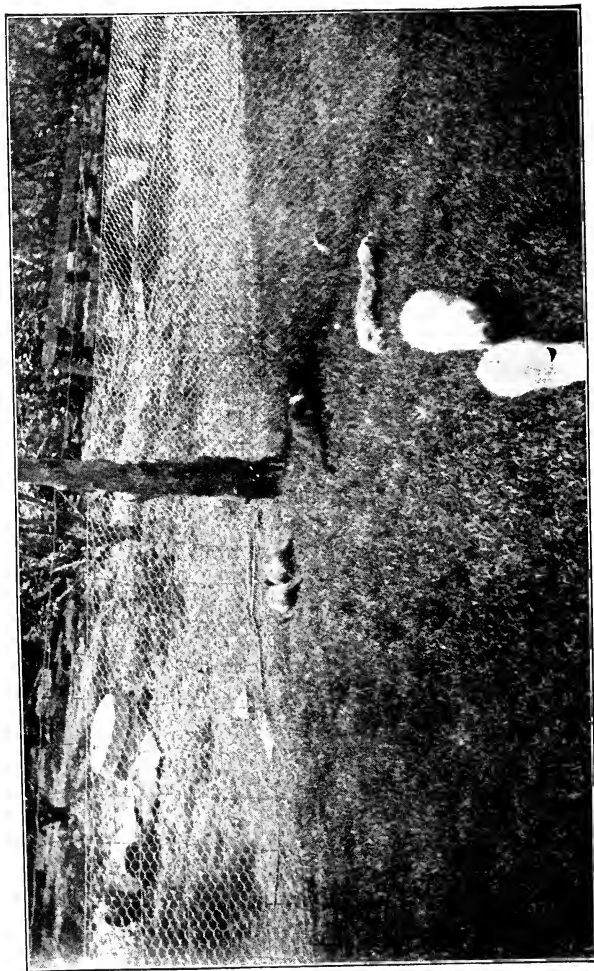
Swelled throat or lump jaw can hardly be called a disease, as it sometimes makes its appearance among the best kept ferrets. The cause appears to be unknown. Some breeders call it a boil caused from ferrets that are thin and in poor condition and have impure blood. The first you will notice, perhaps, will be that the ferret will not come out to eat at feeding time; upon examination you will find that the throat has a hard swelling or boil which will become soft or ripe. Now provide yourself with a sharp knife or other instrument and lance this swelling or boil, squeeze and press all the matter and blood out that you can. Then it would be well to inject with a small syringe, or dropper, some alcohol. If the cut closes up and matter forms again, open it as before. Generally the swelling subsides and the cut heals up with only one treatment. I would advise you not to keep this ferret's young for breeders; neither would I keep him or her for that purpose, as we can't be too careful in selecting our stock for breeding purposes.

Distemper cannot strictly be called a ferret disease. It occurs among dogs and once in a while the ferret contracts it from the dogs in-

fectured with it, running around the pens. When it is known that the dogs in the neighborhood are infected with distemper, it is best not to let strange dogs run about the ferret pens. I know of one breeder who lost all but one of his ferrets with distemper this season and the one that had it and lived was in the pen with the others that died, but pulled through all right and raised a litter of young in the same pen.

The symptoms of the disease are as follows: The ferret refuses to eat and the eyes become swollen, the lids being stuck together with a peculiar sort of matter; the nose becomes swollen and inflamed, and the eyes will discharge a watery fluid; sometimes the nostrils will become closed and the animal dies—apparently from suffocation. Some authorities say that with healthy, well kept ferrets, this disease seldom makes its appearance.

As soon as this disease is noticed among the ferrets, the infected ones should be placed quite a distance apart from the others. A quantity of good disinfectant should be procured and sprayed generously about the pens. A few drops of sulphuric acid which can be obtained at any drug store, placed in the milk, has been thought to be of avail in checking the disease.



LARGE OUTSIDE PEN OR RUN FOR FERRETS.

Fleas never trouble ferrets if the pens or boxes are cleaned out often. Fleas breed in old chaff and straw which has been left unchanged too long in the pens. If fleas appear in the pen or box, it should be thoroughly cleaned at once. If ground floors are used, it is best to remove a quantity of dirt. The pens should be sprayed with a good disinfectant which can be secured at any drug store. The ferrets should be dusted with some good insect powder. When the pens are supplied with fresh clay and dry bedding, they will be in condition again for the ferrets and if the bedding is changed often and no chaff or litter is allowed to remain in the pens, the fleas will disappear.

Young ferrets, while they are yet in the nest, sometimes become afflicted with a form of sweating; this occurs when the mother ferret covers the young too deep in the nest in the straw. It affects the young while they are in the nest and nursing. They are subject to this from the time they are a month old until cold weather in the fall or until they are about four or five months old; and in fact, at any age of their life, if the conditions are favorable to produce sweating.

First, you will notice that the little fellows will be wet or damp about the head and neck and if you allow them to keep on sweating they

will soon die. To remedy this, take a part of the nest or bedding away from the ferrets and they will soon be all right again; also be sure and give them a good circulation of fresh air.

Ferrets, like nearly all other animals, are sometimes affected with sore eyes. We have concluded that it is nothing more than a cold. This may be caused by changing them from a tight to an airy pen in the cool weather, etc. You will notice that their eyes are running and sometimes it is so bad that they are stuck together so the ferret cannot get them open. Give them a good washing with soap and water and apply vaseline or some other mild ointment; coal oil is a good remedy for sore eyes. Apply with a brush or cloth; put it on freely until the eyes are so the ferret can get them open naturally. If they become sticky and close up again, keep on with the coal oil as it is sure to cure them.

H. M. STAVER,
Stephenson Co., Illinois.

CHAPTER XXI.

DISEASES OF FERRETS.



FERRETS like other animals, including dogs and pet stock, as well as horses, cattle, sheep and hogs, are subject to disease. These are few—no more than most animals are liable to, but being virulent (virus) are mostly contagious. Distemper, foot rot and mange are the worst. Swelled neck or jaw, and insects, while they are to be contended with, are not so serious. Some claim that “sweating” is distemper in a different form but whether a

different disease or only a different form, it will receive mention a little further on.

Although ferret diseases generally make their appearance in mild form, remember that if not attended to promptly, will not only result in death to the one first afflicted but will spread to others. Any and all sick should be removed several hundred feet from the others if possible.

The sick had best be kept separate—no two together. True, disease is sometimes fatal, but what animal or fowl is exempt from disease and death? The average age must be considered, which is only about three years.

Breeders and raisers of ferrets who have had years of experience say that nearly all diseases are caused by over or improper feeding and allowing hutches or boxes where kept to become filthy. The sleeping quarters and nest must be dry or attacks of distemper or other disease is apt to occur. A draft or current of air, from a window or other opening, has often caused death, as ferrets are very susceptible to cold.

Carelessness in allowing the living quarters to remain uncleaned of droppings, sour dishes, with possibly foul nests, either or all may lead to an outbreak or epidemic of disease. Yes, there are remedies (more or less effectual) which are explained under the various diseases, yet sick animals are hard to doctor and the best way to cure disease is to prevent it.

DISTEMPER.—Although not strictly a ferret disease, yet it is one of the most fatal to ferrets. Distemper is a very common disease among dogs, from which animal ferrets will contract it, as well as from other sources already mentioned. The symptoms of the disease are: The ferret will

refuse its food; dullness comes over it and the eyes may become swollen, lids stuck together with a peculiar sort of matter; nose swollen and inflamed; it may sweat and shiver at the same time. If removed from the nest it will probably bow its back and stagger when it tries to walk, often falling over in the attempt. You will also notice a heavy dullness of eyes, which become swollen. As the disease advances, the head is apt to swell and an offensive running discharge issues from eyes and nostrils. This discharge is sticky, closing the eyes. They must receive attention or death is sure to follow and that soon.

In the earlier stages the treatment is first to wash the animal in lukewarm water and soap. Rub until thoroughly dry with a flannel cloth, then place in a warm, dry nest with plenty of bedding. Look at it occasionally or if it is cold or chilling, cover or wrap in warm flannels. After being washed give 10 or 12 drops of whiskey in warm, sweet milk. Ferrets not severely attacked will show improvement within twenty-four hours. If no better at the end of that time, repeat both the washing and dose of whiskey. The eyes and nostrils should receive attention first, by bathing in water slightly warm, until cleaned of the sticky matter. After the animal is thoroughly dry, apply vaseline to the nostrils

and eyes, then replace in the hutch. In an hour or two give 10 to 15 drops of castor oil (depending upon size of ferret) followed by a feed of warm milk to which wheat bread, crackers or still better graham mash (see chapter on Feeding and Management) may be added, letting the ferret eat all it will. If it will not eat of its own accord, it is advisable to feed a small quantity with a spoon a few times each day.

One breeder says that he has found a few drops of sulphuric acid, which can be bought at any drug store, placed in the milk beneficial in checking the disease. Another recommends chlorate of potash in milk, the usual dose being 2 grains twice a day.

Food should be given four or more times daily to ferrets afflicted with distemper. Warm milk is about as good as anything. Each day as long as there is any discharge from eyes or nose, they must be washed and vaseline applied as already explained.

Distemper, when diarrhoea sets in, is very apt to prove fatal. In early fall, about first frost, is the time that many die, especially if not in good health. If ferrets are in poor condition, that is, thin in flesh, feed more meat and a little sulphur in their milk. Meat will stop the

flux or diarrhoea, providing no other ailment accompanies.

SWEATING.—European raisers are of the belief that sweat or sweating is a certain stage of the disease known as distemper, while most American raisers think it an entirely different disease. In Europe where they are all classed as one and the same, they are described as follows: Distemper, sweat or the sweating sickness, is a malady identical with distemper in dogs, usually attacking young ferrets near the time they first open their eyes or gain their sight. As a rule, with healthy ferrets, it takes a mild form; but with poor ones, improperly fed, or otherwise not in good condition it is apt to be serious and very contagious. With healthy stock a change of food and a cleaning of their nests with fresh and clean bedding supplied, will generally be all that is required. If the sweating keeps up it leads to heaviness and dullness, food untouched. The condition and treatment in Europe are much the same as explained for the disease known as distemper in America.

A breeder and successful ferret raiser, located in Central Illinois, gives the following description of sweating and the method of treating: "Young ferrets while they are yet in the nest sometimes become affected with a form of

sweating. This occurs when the mother ferret covers the young too deep in the nest with straw. The whole litter becomes wet and sort of gummed up, so to speak, and is affected with a touch of white scours. This trouble never arises until the ferrets are a few weeks old. The loss from this is small, as only an occasional litter becomes affected in this way. When a litter becomes sweated it is best to remove the nest box from the pen. If the mother ferret is still inclined to pile straw over the nest to hide the ferrets, all the coarse straw should be taken out of the pen. That gives the young ferrets a chance to spread out and dry off. If an affected litter is treated in this way, as a rule they will be saved. I have tried washing the young ferrets and then rubbing them dry. This does not do any good. The conditions must be made right, as has just been described, and the little ferrets will dry off and clean up in a few days' time. If there is a litter which numbers too many in a nest, it is best to give a part of the litter to other mother ferrets which have litters of the same size and age, but fewer in number."

FOOT ROT.—This disease is one easily prevented, seldom occurring where the ferrets are well kept and cared for. The disease affects ferrets much the same as similar disease in sheep or

other stock. The disease is really one of the worst ferret maladies, for even when cured, after effects or marks are left. The most prolific cause is putting ferrets away with dirty feet after being worked on rabbits, rats, other pests or game. Wet weather or working where ground is wet or damp are especially hard on ferrets. Just as soon as through using they should receive attention. Pens, boxes, hutches, or whatever ferrets are in, must be kept dry and clean, as dampness and filth will bring on this disease. Some claim that putting wire netting or perforated zinc in bottom of hutches is another cause.

Toes and claws of ferrets may become clogged with fine grass and dirt, which if not removed, will cause the feet to become sore, scabs form, the claws, or toe nails become dry and long, feet may swell to more than double the natural size. In time the tails become afflicted in much the same manner as the feet.

Symptoms of foot rot are easily discovered. The toes around the claws are sore and soon become feverish. The divisions, or joints, above the toes also become afflicted and proud flesh forms, feet swelling. The tail also becomes affected showing much the same symptoms as the feet.

Treatment varies owing to how far the disease has advanced. The most successful and prosperous horse, cattle, sheep or swine raiser watches his stock closely. The same applies to the ferret raiser. If discovered and taken in hand early, washing in soft soap and water will probably remove the scabby formation, which is all that is necessary. Now wash the feet with water only and then apply a mixture of equal parts of turpentine and powdered sulphur. If this does no good, in a few days, or the disease is getting worse, then the following treatment should be used: Apply turpentine twice daily for three, four or five days; then petroleum (lamp oil) once a day for two or three days; then wash their feet with soap and water as the object is to get the scabs off. If the scabs do not come off after a week from first application of turpentine, it is best that they be removed. Some still apply turpentine and lamp oil after scabs come off. Others wash daily in a strong solution of sulphur and copper, followed by an application of vaseline until completely cured.

A Western breeder and raiser who has been quite successful, comments upon this disease as follows: "If the pens or boxes in which ferrets are confined are not kept free from dampness and filth, the ferrets will become affected with a

sort of scurvy called foot rot. A thick, spongy scab forms on the feet and the end of the tail. If the case is not attended to, the toe nails grow long and become dry and dead. The cure is very simple. Dip the affected parts in coal oil every few days until the disease is checked and killed. The scab then comes off. If the toe nails are grown out all the dead nails should be trimmed off. The nails will then grow out again and the feet will be as sound as ever. A mixture of sulphur and lard, to which a little turpentine has been added, makes a good dope for this disease and will cure it more quickly than the coal oil. Three or four applications, however, of either of the above remedies will effect a cure."

The worse disease contracted by the old ferrets, according to a New York state raiser, is foot rot, which can be cured with turpentine, coal oil or peroxide of hydrogen applied twice a day. I also find that out of the first litter, several generally die, as the old one is not experienced in taking care of them.

I have had ferrets with what is called foot rot, writes an Iowa party. This is caused by not keeping their pens clean and letting filth and dampness accumulate. It is a very hard disease to cure and is contagious. It is much easier to prevent the disease than to cure it. When one is

detected with it, they should be immediately put to themselves and their feet washed with good soap and warm water each day and thoroughly dried. Now grease them with a good ointment until they become healed and the scabs come off. Their pens should be thoroughly cleaned.

MANGE.—This disease is generally alluded to as mange, although sometimes called scurvy or scab. The disease is practically the same as in dogs and either dog or ferret may contract it from the other. The symptoms are: A slight reddish eruption, of irritating effect, located usually upon the back and sides. The ferret scratches or bites these and sores and scabs form. One remedy is Spratt's Mange Lotion, 2 ounces mixed with 2 ounces of glycerine. Another remedy thought to be much better is: Resin ointment 3 ounces; sublimate sulphur 1 ounce; oil of juniper 1 ounce; sweet oil 2 ounces. This when mixed makes a creamy ointment. All ferrets afflicted with mange must be washed, dried and then this ointment applied for three or four days.

One man who has handled thousands of ferrets describes mange as being similar to foot rot but making its appearance on the head and ears, which becomes red and irritated. In a short time the hair becomes matted, loose and falls out.

Unless receiving treatment a scab forms which will extend over the entire head and body. A simple remedy is to wash with fine (good) soap and warm water, then apply turpentine. This treatment daily, a few times, is usually sufficient. Sleeping or lying in wet or filthy nests is largely the cause.

A raiser, who at times has thousands of young ferrets, in alluding to this malady, which others call mange or scurvy, says that in plain words it is foot rot and the disease is usually caused by filth or damp pens. The first you will notice will be scabs on the tail, extending in some cases over the entire body. Cases of this character, if not taken care of, extend to the feet, then take longer to cure. A good cure is made by taking fresh lard, mix with sulphur, thin with turpentine, then add a few drops of carbolic acid. Rub this mixture on the affected parts once a day until they are cleaned off. Now clean the pens and give fresh bedding, take a little better care of your ferrets and you will have no further trouble.

Another party who has been in the business for a good many years says: "Sometimes it will be noticed among ferrets that their fur does not look clean and bright. On close examination it will be seen that the skin is red and is throwing

off a sort of red dandruff. This is a light form of scurvy and seldom effects any but young and growing ferrets. The treatment is the same as in foot rot, only it would injure the young ferrets to dip them in coal oil or turpentine. It is a good plan to use a stiff brush. This can be dipped in the coal oil and applied to all the affected parts. This works a little oil into the skin and when it is done carefully it does not injure the ferret. One application usually cleans off all the scurvy and leaves the ferret in good condition."

LUMP JAW.—This disease is just a common boil which comes on the head, jaw or neck of the ferret. If ferrets are kept in a thrifty condition, they are seldom affected in this way. If they become thin and in a poor condition, the blood becomes impure and the boils appear. When the boil comes on the head or jaw, it usually lasts only a short time; but when it is deep-seated on the neck and is of the order of a tumorous growth there is but little that can be done for it. When it is discovered that a ferret is affected in this way, it should be watched closely and as soon as the lump comes to a head and gets soft, it should be cut open and the pus squeezed out. Some cases may need this treatment repeated several times. The ferret should be placed in a pen by

itself and it is a good plan to add a little sulphur to its food. If it is fed nourishing food and gets fat and in strong condition, the lump will usually disappear, leaving the ferret all right again.

Lump jaw, according to another breeder, is a small swelling noticed on the side of the neck just under the jaw. Sometimes this will be gradually growing for weeks or months before coming to a head. When it is ripe the hair will all come off from the center and it will be soft to the touch; then take a small penknife and stick the point in the center of the abscess until the pus starts, then press with thumb and finger until you get all the pus out that you can; then syringe out with a solution of carbolic acid, then wash wound with good soap and water. Keep scab greased with ointment. This will usually effect a cure. I have had cases where the abscess would form the second time, and when it does it usually proves fatal.

SORE EYES.—The breeder, raiser, or keeper of many or few ferrets only must keep in mind that these animals are much more susceptible to cold than most of the furred animals. Ferrets take cold easily and the eyes are sometimes affected, often being entirely closed with sticky matter. Wash with warm water until they can be opened and then apply vaseline.

TICKS.—In the Southern and Central States ticks will be much worse than farther to the north, where they are not so numerous or none at all. Much of the ferret's actual work is apt to be in tick infested places. While one, two or even more will only sap a little of the ferret's blood, yet they should not be allowed to remain on the ferret. It is not best to pull them off but to apply a mixture of 1 part paraffine to 8 of sweet oil, which will either kill or cause the tick to back out.

LICE AND FLEAS.—Unless nests and nesting are changed frequently and ferret hutches and sheds cleaned and disinfectants used occasionally, owners are apt to find their stock bothered with these insects. While they will not kill animals, yet they should be gotten rid of. By spraying a ferret with spirits of camphor you will kill many of the insects. Those not killed will mostly be in such a condition that they can be readily combed out. The combing should be done over a kettle of boiling or very hot water. Ferrets having lice will require more than one spraying. The second should be about a week later to get rid of nits which have hatched in the meantime. A third spraying a week or ten days after the second may be necessary. Sleeping quarters will also need attention: The mixture of paraffine

and sweet oil as recommended for ticks can be used for these insects with good results.

A man who has been connected with the ferret industry for many years thinks fleas are one of the worst things that the ferret breeder has to contend with. He says: "These vermin will sap the life out of ferrets and bother the man who takes care of them. If ferrets are kept on ground floors, it will be hard to get rid of them after they once get a start. What to do: Take Minor's Fluid (sold by druggists), 1 part of fluid to 50 parts of water; wet pens and nest boxes, dip ferrets into the same mixture; this will kill all the fleas it touches."

WORMS.—If not properly fed, that is, right kind of food given, ferrets will suffer to a considerable extent from worms. A good remedy is 3 grains of finely-powdered areca nut given in their milk three hours apart. A half hour after each dose of areca give 5 to 6 drops of castor oil.

The ferret raiser who is careful and watchful, keeping nests changed and otherwise seeking to prevent disease, may go along for years without a single one of the ailments to which ferrets are heir to, attacking his stock.

A party who never succeeds at anything thinks that ferrets are a very uncertain animal to keep, being liable to die with no apparent cause, as

they are to live. He further says: "One may leave them brisk and seemingly all right at night and the next morning they may be dead. About two or three years is the average age, although I have kept them for eight or nine years, but that is rare."

Remember that wild animals in captivity must be watched and cared for. Those who know the nature and habits of the ferret and are quick to understand their wants will be successful raisers. On the other hand some will fail, the same as in all branches of business. Such failures are due largely, however, to the individual and not to the business. The same applies to the ferret industry.



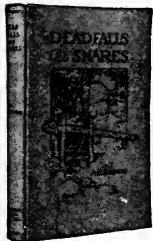
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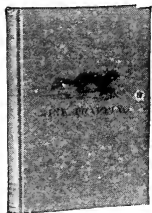
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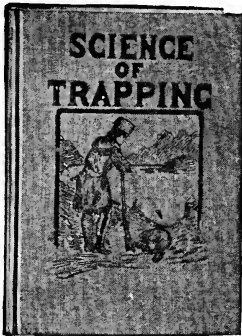
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The author, Mr. E. Kreps, in his introduction says: "In order to be successful, one must know the wild animals as a mother knows her child. He must also know and use the most practical methods of trapping, and it is my object to give in this work, the most successful trapping methods known. These modes of trapping the fur bearing animals have for the most part been learned from actual experience in various parts of the country, but I also give the methods of other successful trappers, knowing them to be as good as my own. I am personally acquainted with some of the most expert trappers in North America, and have also followed

the Indians over their trap lines, and in this way have learned many things which to the white man are not generally known."

This book contains twenty-four chapters, as follows:

- | | |
|-----------------------|-------------------------------|
| 1. The Trapper's Art. | 13. The Raccoon. |
| 2. The Skunk. | 14. The Badger. |
| 3. The Mink. | 15. The Opossum. |
| 4. The Weasel. | 16. The Lynx. |
| 5. The Marten. | 17. The Bay Lynx or Wild Cat. |
| 6. The Fisher. | 18. The Cougar. |
| 7. The Otter. | 19. The Wolverine. |
| 8. The Beaver. | 20. The Pocket Gopher. |
| 9. The Muskrat. | 21. The Rabbit. |
| 10. The Fox. | 22. Tracks and Signs. |
| 11. The Wolf. | 23. Handling Furs. |
| 12. The Bear. | 24. Steel Traps. |

The chapter on TRACKS AND SIGNS contains sixteen pages—eleven of description and five of illustrations.

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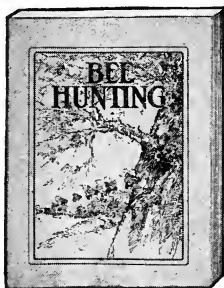
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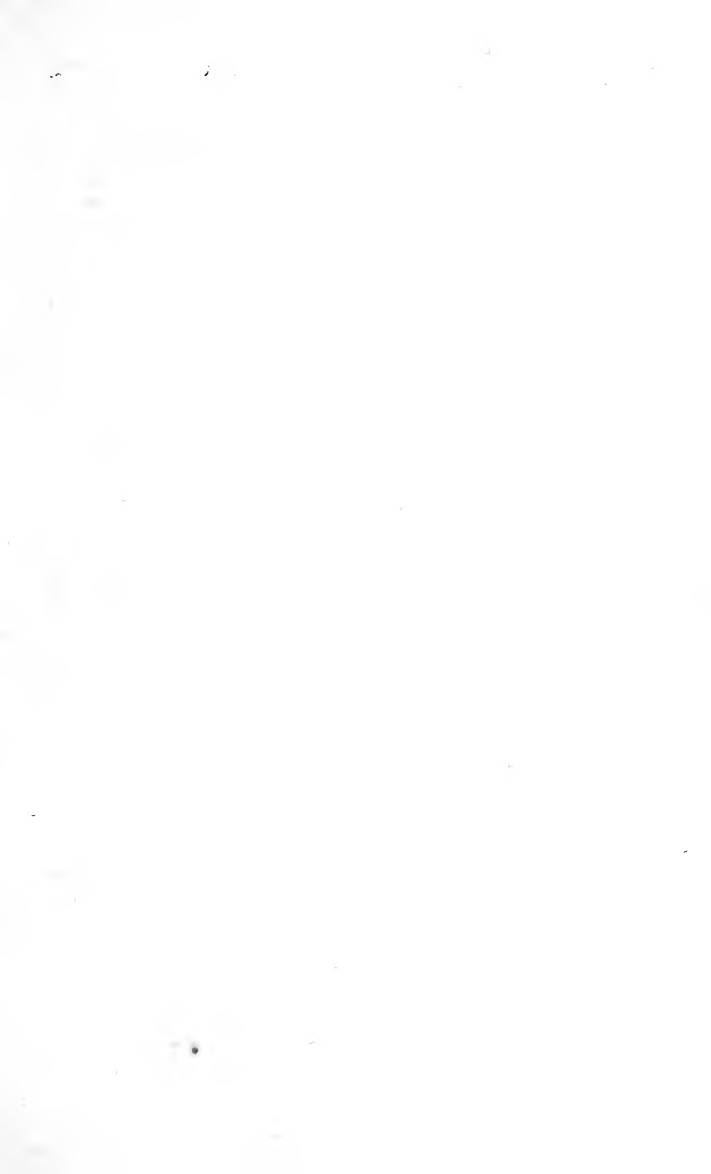
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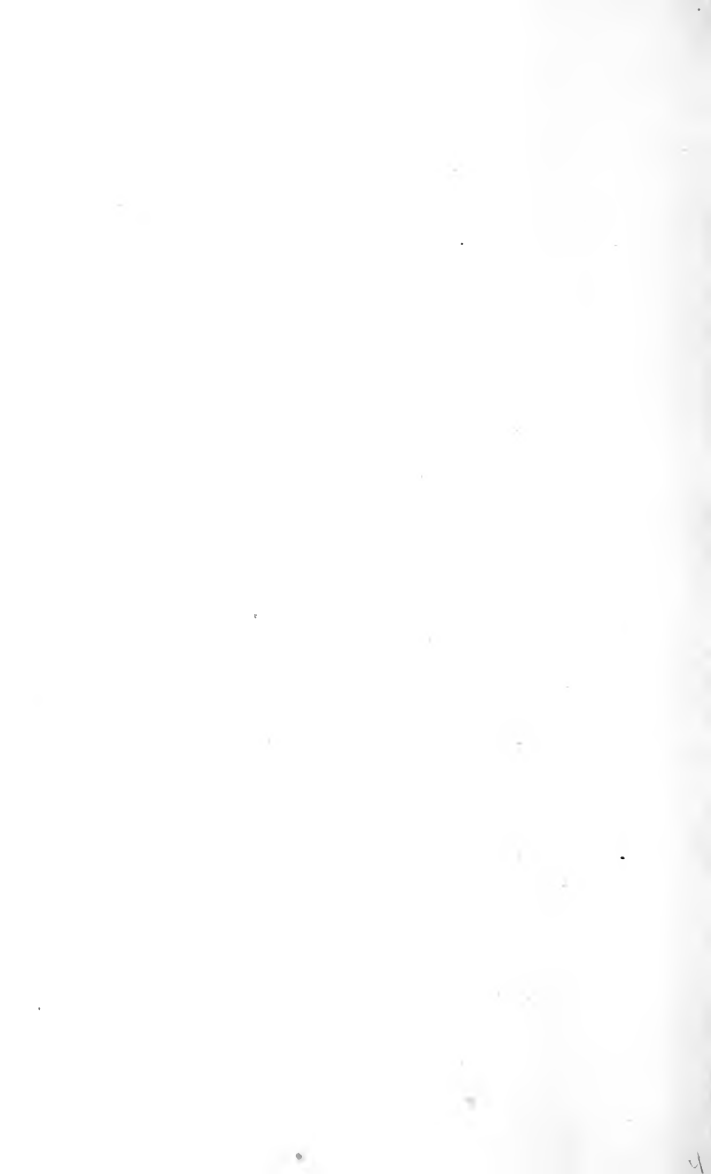
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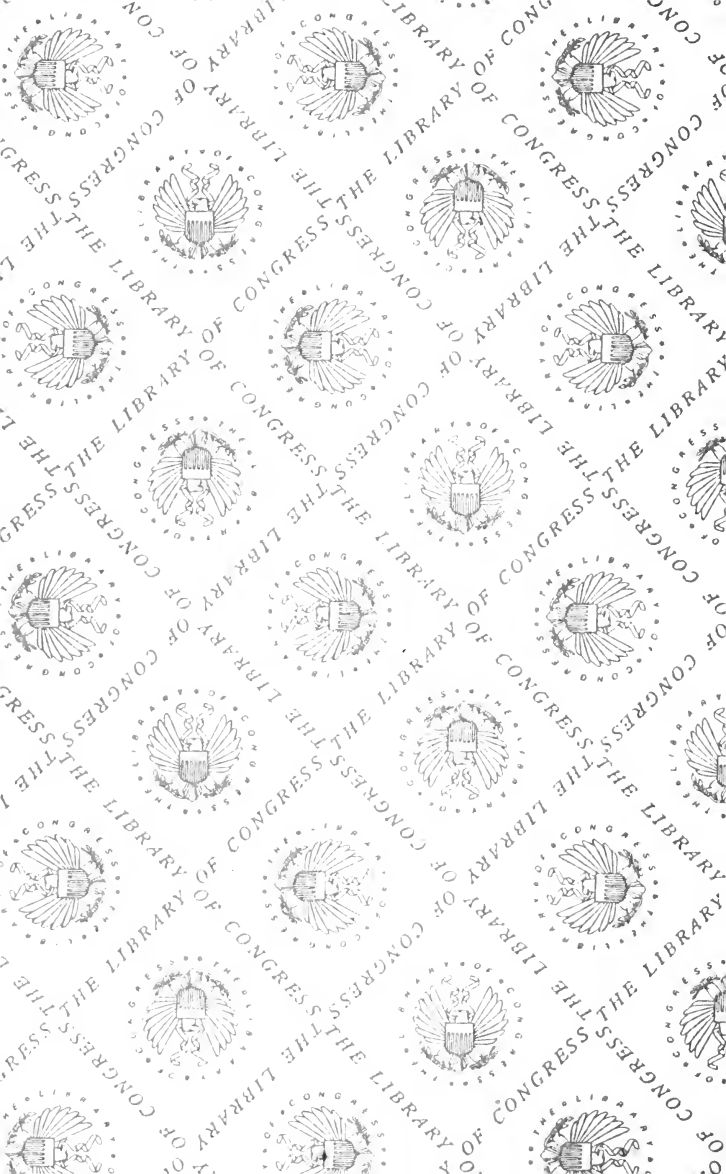
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