Kipling says "Chucundra the muskrat is a broken-hearted little beast. He whimpers and cheeps all night." Kipling should know, but Chucundra is other things besides a little animal who "never comes into the middle of the room but always creeps round by the wall." According to a report made by the chief of the Government Biological Survey, "Its fur, while not of the highest quality, is adapted to a great variety of uses and its flesh, unlike that of most fur bearers, has considerable food value."

From a commercial standpoint the muskrat is one of the best fur bearers, ranking ahead of seal, sea otter, and beaver, which, from the insignificance of the animal, one would hardly suspect. Its skin was first used more than a hundred years ago to make "beaver" hats. Now it is manufactured into seal-skin garments for the ladies and also into imitations of all high grade fur, so there is no fur dark of color and short of hair that, when properly dyed and doctored, it is not sold for.

As the sale of all game becomes less through prohibitive laws, the flesh of the "broken-hearted little beast" grows more in demand the country over. It is red in color, fine grained, and tender, as good for table use as rabbit, perhaps better than squirrel because not so tough. Some say it tastes like terrapin, others see a resemblance to duck. Whichever is true, it is very palatable. In many markets it is disguised and sells as swamp or marsh rabbit. In one place as water squirrel, but growing in favor all the time it is offered more and more under its rightful name—dressed muskrat.

Years ago, when to the writer the world was young, he put up over night at the shack of an old trapper and at supper ate with much relish of the pièce de résistance, a dish of strange looking and queerly tasting game. He could not figure it out. Not rabbit, nor duck, although there was rather a ducky flavor to it, nor squirrel—there were no squirrels in the neighborhood. Finally curiosity got the better of good manners and the trapper was asked, "What is it?"

"Them?" he replied. "Putty good, ain't they?"

Receiving an affirmative nod, he continued, "Them's young muskrats."

"No!" the writer answered. "You can't fool me. There's no musky taste to them."

"That's all in knowing how to cook them," the old fellow chuckled. "You see in skinning them you don't want to let the fur touch the meat an' be sure ter pull the musk bags off with the hide, then if you soak the meat in salt water fer an hour or so, they's jest as good as chickens or bull frogs."

They were, not a bit of doubt about it. Afterwards, in telling of this new dish and how good it was, not one of a party of listening sportsmen believed the story.

"Rats!" one said. "Eat rats! Bah! I'm no Chinaman, thank the Lord."

"These were muskrats," he was told. To which he replied, "What's the difference? Rats are rats."

"Yes," another chimed in, "this story of a muskrat supper is fishy like the one you tell about eating fried rattlesnakes
MUSKRATS AND MUSKRAT FARMING

You may have done it, but——" And there was no convincing them. The word rat queer ed the whole affair.

Why should not muskrats be fit for food? They are cleaner in habits than ducks or domestic fowl. They eat lily root, celery bulbs, flag, all the good things aquatic birds feed on and few of the bad. Occasionally they may eat fish. A duck always will. Some authorities claim they are semi-carnivorous. This the writer does not believe. He has found many ducks dead and untouched on rat houses, cripples which crawled out of the water and died. Some had been there for days. Once a friend with whom he often argued on the subject proved it to him. This friend p addled more than a mile to clinch his argument.

"Come," he said. "Come. I'll soon show you if muskrats eat dead ducks or not. There, see!" he said, as we neared a rat heap on which lay the half-eaten remains of a bluebill duck. "Rats won't eat ducks, eh? what do you think now?"

It was an old rat house with an unusual opening in the top. By way of reply, two or three vigorous jabs were made at it with a push paddle, when out jumped a mink closely followed by his mate. They had killed or driven away the builders of the house and were having their own misdeeds charged against the original owners. Which teaches, "Beware of circumstantial evidence," and also shows how sometimes erroneous statements are made concerning game by superficial observers.

As the public learns that muskrats are as good as any of the common ducks, better than many, the demand in most of the Eastern cities and a few of the Western, continually grows. For instance, in Baltimore, a year ago last winter, over ten thousand dozen were sold, frequently bringing more than a dollar a dozen. In Philadelphia the demand was much heavier, the sales of a single dealer as far back as 1907 amounting to two hundred and fifty dozen a week during the entire season.

Over twelve years ago a Sportsman's Club in Michigan asked for a law protecting muskrats. Their request was treated as a joke until in a body they went to the State Capitol, and after some lobbying invited the members of the legislature to a banquet prepared by the club's own chef. No hint was given that the principal dishes were of muskrats, cooked in many ways, until after the dinner was over, then the toastmaster announced the fact and asked for a law protecting "such excellent game." The club got what they wanted and for many years thereafter gave annual "muskrat feeds" invitations to which were at a premium.

There was formerly a hotel keeper in Chicago who could make "canvasback duck" out of a fishy old sheldrake and "broiled young prairie chickens on toast" from a plebeian mud-hen. No one but himself and the cook knew how it was done. The writer can bear testimony that the imitations were almost as good as the originals. With muskrats no such jugglery of the kitchen is necessary. They stand on their own merits and this demand for their flesh, coupled with constant discoveries of the new kinds of fur manufacturers can make from their pelts, is what in the long run will make muskrat farming very profitable.

A Long Market History

For a hundred and fifty years muskrat pelts have been sold in ever-increasing quantities on the London fur exchange. Careful records have been kept of all transactions. From 1763, the earliest available date, to 1800 sales averaged 75,000 skins yearly and prices were low. For the next fifty years there were larger offerings and increased demand. The skins began to be freely used for imitations, some of which the London Chamber of Commerce classed as "permissible substitutes." This brought the average for each year up to 411,000.

The following forty years showed much heavier sales. Skins which previously had come largely from Canada through the Hudson’s Bay Company began to arrive in quantities from the United States. The average was a trifle under 2,500,000, "permissible substitu-
tion" evidently being a winning game. The sales for each of the next ten years were over 4,000,000, and since then the sky has been the limit.

The totals for the present season, winter of 1913-14, London sales only, covering shipments from all America, Canada as well as the United States, will exceed 10,000,000 skins. From 1763 until 1900 recorded sales show that 165,000,000 rat skins were sold. Include in this the total business of the next thirteen years up to the present time and the figures reach nearly 240,000,000. To these English sales add pelts used in America and the rest of the world, then consider.

Is it any wonder muskrats are getting scarce? Isn’t the volume of business sufficient to class them as game and to extend Nation-wide protection of the law during the breeding season and early fall when their fur is almost worthless? Either way, protection or extermination, the fur farmer gets the benefit, this term to include every man and boy who has, or can make, a pond, or buy or hire a marsh.

Musk rat farming is in its infancy. Records show that little or no attempts have been made to improve the breed, to raise only black or very dark stock. Nor have many farmers fed their rats, preferring to let each animal hustle for himself.

The writer, talking not long ago with the owner of a rat ranch, was told:

"Sure, we raise them and make money, too. Good money."

"How?"

"Well, you see," he replied, "we just let them grow. We own a lake of about 650 acres. For a year we kept trappers away; then let four men take it on shares. Each staked off his part, same as a mining claim and trapped, giving us half he made. When prices were highest we realized about $4,000 a season for our share."

"Did you feed the rats?"

"Feed them? Why, no! There was plenty of natural food, besides it is not good to have a fur-bearer very fat. Makes too much trouble in cleaning his hide."

"Did you protect the rats from their natural enemies? Coyotes, foxes, mink, hawks, and owls?"

"No. What an idea!"

Really it was no farm. The four men paid half their catch for "trappers' rights," making good money by doing so. Had the farm been "cultivated," that is, efforts made at bettering the stock, feeding and protecting it, beyond question the profits could have been increased more than thirty per cent.

There are many similar farms along the Eastern shore of Maryland, although it seems flattery to call a simple herding of the wild by so pretentious a name. These are all on lands subject to tidal overflow which, before the muskrat industry began to boom, were unsalable at half a dollar an acre and now net the owners more than the cultivated lands adjacent.

Profit With No Care

As an example: A man bought a tract of useless marsh land, paying what was then considered the large price of $2,700. He made no attempt at farming or feeding, but leased it for one-half the fur. In 1909 his share of the profits was $890. Another instance was a young fellow who bought a little overflowed tract for $150 and in a single year cleared $100 for his half of the rats caught. In both instances, care and intelligent treatment would have largely increased the money made.

When, two or three years ago, muskrat skins soared to over eighty cents apiece, some of these trappers made more money than they ever knew there was in the world before, and even now, with prices cut in two, earn tidy sums for their few months' work. Remember what I write. The time is not distant when a dollar will be considered cheap for the skin of one of the "broken-hearted little beasts." How times change! Back in the 60's when the writer sold his spring catch at a shilling (12½c) each he thought he was traveling rapidly along the highway that leads to riches.

This kind of fur farming appeals to farmers and farmers' sons, in that it is winter work which can be attended to
MUSKRATS AND MUSKRAT FARMING

629

when other business is slack. The one great trouble is suitable location. Not every would-be farmer has marsh or lake handy to his home. Sometimes a creek can be dammed and a pond formed; but the work must be done thoroughly and the dam made of stone or concrete, else the rats will burrow through, let the water escape, and destroy their home. They are great on the dig—these small fur-bearers—and in soft, moist earth have been known to burrow fifty feet straight in from the water.

The farm should be enclosed by a varmint-proof fence of strong wire netting, not only to keep the rats in but to keep their enemies out, one as necessary as the other. The rats like to roam around of a moonlight night, often finding their way a mile or more from water to some garden or fruit farm where they destroy more than they eat, not only vegetables but young trees. This, if permitted, would make a muskrat farm disliked in a well-ordered community.

Rats Need Protection

Their enemies are legion, all the carnivora, birds and beasts. Many of the four-footed ones can be kept out by the fence. Birds of prey must be met with trap or gun. Nothing is easier to trap than a hawk unless it be an owl. Set a steel trap on top of a stout pole or high post placed near the chicken yard or fur farm against which the birds may have designs and it is almost certain, particularly if no dead tree is near, that the first winged raider coming in search of a meal will light on the pole and put his foot in the trap.

Second only in importance to choice of a fit location is selection of the right kind of breeding stock. Black or very dark brown muskrats are in much greater demand than the lighter colored variety and at least twenty per cent higher in price. There is little doubt of their breeding true to color as do other fur bearers, which would make a pond stocked with them as good as a small gold mine; better than some the writer has known of. They increase very rapidly; have three, occasionally four, litters a year with six to fifteen in a litter. Besides this, the young of the early spring themselves breed late in the fall.

Let me see. A family of five females and one male would produce:

<table>
<thead>
<tr>
<th>Litter</th>
<th>Say 200</th>
<th>Mortality</th>
<th>Deduct 20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>October</td>
<td>60</td>
<td>120</td>
</tr>
<tr>
<td>June</td>
<td>August</td>
<td>40</td>
<td>80</td>
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<tr>
<td>August</td>
<td>September</td>
<td>20</td>
<td>40</td>
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</tbody>
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Net increase in a season ............... 200

There might be a fourth litter and the average might be larger, but all in all, give and take, there should be an increase of 200.

Wild, or semi-wild and unprotected, of these various litters, the mink would get a few, as would wild cats, wolves, and other animals, the hawks and owls their share, but in large lakes or rivers the toll taken by pickerel would be largest of all. A ten- or twelve-pound pickerel would snap up a half-grown rat, then, hardly knowing he had eaten it, go looking for more, so it would be safe to say, instead of 200 reaching maturity, it would be barely fifty, with these still fighting for their lives against their many enemies now reinforced by man.

Quoted authorities differ as to the number of young in a litter, some putting it as low as from three to six. Roderick McFarlane, who for many years was a chief factor for the Hudson's Bay Company, says eight to twenty. According to the writer's experience, limited to Illinois and Northern Indiana, McFarlane is right. There may be exceptional instances of only three, but then again as many as twenty would be equally rare.

One thing in favor of the muskrat farmer is that the rats are good doers, not nervous and excitable like the fox; not subject to disease as are some of the small fur bearers. The writer in more than forty years of marsh experience never remembers having seen a dead muskrat unless one that had met a violent end. Professional trappers say the same.

A much disputed question is "How many to an acre?" Maryland authori-
ties put it at fifty. One should remember that there they make no attempt at feeding. The writer has seen ponds of only an acre or two containing twelve or fifteen houses with a probable average of eighteen rats to each house. On this line of figuring, an acre would support a hundred in the wild and fifty more with liberal feeding.

Will it pay to buy food? Why not? It pays with poultry, although the returns are less and higher grade land is required for coops and runways. Wheat, corn, oats, and bran for chickens cost more than twenty dollars a ton. Cabbages, parsnips, onions, potatoes—all second-grade goods—for muskrats not over six dollars, and one day with another chickens will eat more food.

Now for the money part. After the muskrat farm gets going, from each family of six at least two hundred pelts can be sold yearly, bringing in, say, thirty-five cents each; add five cents more for dressed rats and the total receipts are eighty dollars. Six thousand pounds of food in addition to what they pick up should be sufficient. Three tons, eighteen dollars. Call hauling, attendance, and repairs twenty dollars; the total expense would be thirty-eight dollars, leaving forty-two dollars as the net. This a boy's experiment on an acre and a half. The possibilities of a man-size farm of a hundred acres or more can readily be seen. On paper, raising muskrats looks more profitable than growing wheat or corn.