Muskrat Love

Steve Shaluta, Jr.

By Jim Evans

Sitting beside the marsh in the cool of the evening, I suddenly became aware of an animal swimming across the pond. It made a wake like a duck or a beaver, but it was smaller than a beaver. I soon realized that a muskrat was crossing the pond, its head visible above the water with the front feet held tightly beneath the chin and the tail undulating behind in a distinctive swimming motion. As it approached, the muskrat paused and slapped the water with its tail, much like a beaver, dove below the surface of the water and was gone.

The name muskrat refers to the musky smelling fluid emitted from its paired scent glands located underneath the tail. The scent is used by the male to mark its territory during the breeding season and as a warning to other muskrats to stay away. The muskrat, as you would expect, has a variety of colloquial names such as "marsh rabbit," "swamp bunny," and "marsh rats," in addition to more colorful names such as "civet-scented musquatch" or Rudyard Kipling's "chuchundra." Many of the names refer to the culinary market for muskrats. Furbuyers often refer to them as "rats." Muskrat meat is a tender red meat and is consumed under a variety of names. In Belgium and the Netherlands it is sold as "waterkonijan" which means water rabbit. Perhaps you can't see yourself eating muskrat even under a disguised name. The muskrat eats mainly aquatic vegetation and is a clean animal so you would expect the meat to be tasty. It certainly looks edible. But as one pundit said, "To err is human, to eat muskrat is not!"

A member of the West Virginia fauna, the muskrat is a semi-aquatic mammal of the rodent order and the mouse family. The muskrat ranges in size from about 1-½ to 2 feet in length. It doesn't really look like a rat and is actually a rather striking animal with its long, lustrous fur. Being a rodent, the muskrat has chisel-like front teeth with molars which have characteristic angled folds of enamel. The muskrat is stocky, with a broad head, small ears and beady little eyes. The tail, used as a rudder in swimming, is scaly, sparsely haired and laterally flattened (has a ridge on top and bottom). The clawed toes aid the muskrat in digging. The hind feet are webbed for aquatic life. Musk-

rats in West Virginia weigh from two to three pounds, although a few individuals may tip the scales at four pounds.

The muskrat's fur is soft and velvety with a thick, waterproof, soft underfur overlain by long, glossy guard hairs that conceal most of the underfur except on the belly. A look at the belly reveals the dense underfur which is much sought after in the fur industry. The color of the muskrat's back ranges from a rusty red to black, with most individuals being a rich chocolate brown. Furs are often described by the color of the pelt and the region, such as the "Black Muskrats" of Virginia marshes to the grayish pelts with white bellies known as "Maryland Whites." The belly fur of muskrats ranges from white to brown with frequent hues of yellow or cinnamon colors. The throat is white. Male and females have the same color fur.

The muskrat, a native of North America, can be found throughout most of the United States and Canada except for the extreme southern region of the United States, including all of Florida where its relative, the round-tailed muskrat, lives. The muskrat was introduced to Europe in 1905 and now occurs throughout most of Europe and part of Asia. Its habit of burrowing into dikes and dams to make dens has made it, as you would expect, an unwelcome guest in the Netherlands and Belgium. The muskrat is a pest in these countries and is hunted year-round with .22 caliber rifles.

The muskrat's habit of burrowing can also damage or drain lakes, ponds and other waterways. And its love for eating ears of corn rivals that of a hungry teenager. Perhaps you enjoy watching the muskrat in your pond. If so, a non-lethal control method such as rock rip-rap on the dam face may be adequate

Bill Beatty

Muskrats that live in marshes usually build muskrat houses, which are more or less conical structures built of roots and stems of aquatic vegetation.

to stop the little digger. Most landowners, however, will choose a drowning set or a conibear trap to stop the damage. This job may frequently be given to a local trapper. In rural West Virginia, trapping is the accepted way to get a muskrat. One author said, "The three reasons to trap muskrats are you are hungry, you want some fur clothing, or you don't want muskrats."

Much of North America was explored and settled by fur traders, and expansion of the U.S. boundaries was motivated by the lucrative trade in beaver pelts. You would expect that the most sought-after furbearer species today would still be the beaver or maybe the mink. The muskrat, however, is the leading producer of fur. During the peak of the wild fur trade in North America in the 1970s, eight million muskrat furs were sold annually for a value of $29 million.

Growing up on farms, my friends and I got a few dollars of spending money trapping muskrats. The muskrat is the "poor man's beaver." They occur on every stream, are easy to catch and easy to skin. In those days a country fur dealer would travel from farm to farm buying up muskrat pelts. He would then turn them into a few dollars of spending money which were spent for school necessities or maybe for items in the Sears and Roebuck

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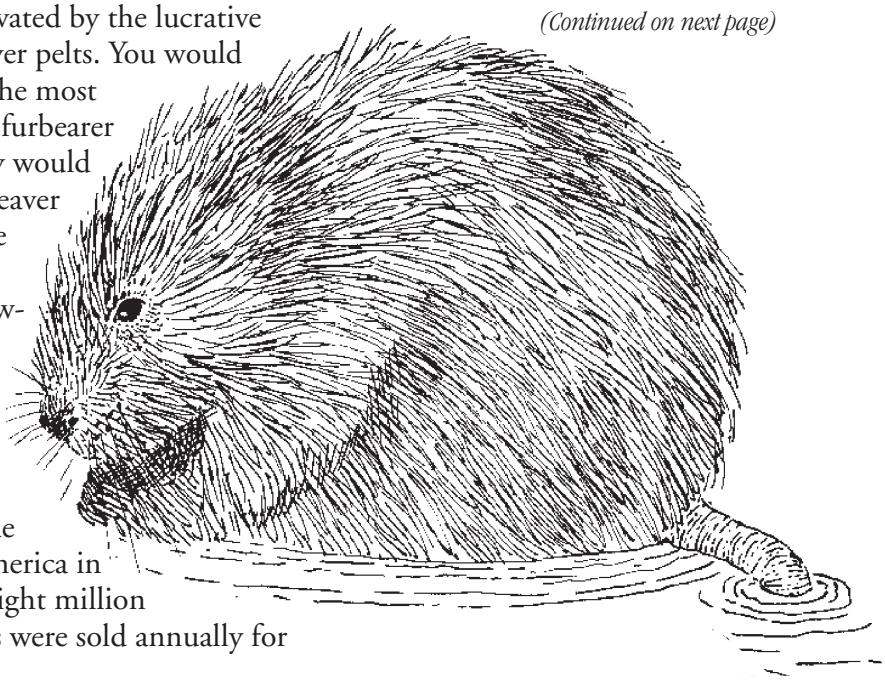

Jacob Dingel/ Pennsylvania Game Commission

A muskrat's thick, lustrous fur is desired by trappers.

catalog. This served as a substitute for the "Trappers' Rendezvous" for many a young trapper. However, the trapper today is not apt to get rich from his muskrat pelts with prices averaging $1 to $5 per pelt.

The preparation of muskrat pelts for sale is an art passed on from trapper to trapper. Muskrats are cased skinned, meaning that the pelt comes off the animal in one piece. Starting from the hind legs and tail region, the fur is turned inside out like a glove. The pelt must then be scraped to remove excess fat and dried on a "muskrat board." Primeness and size are measures of pelt value. A large, fully furred pelt is worth more than a pelt from a young muskrat. A muskrat pelt is considered prime when it is fully furred. This occurs from December to March when the muskrat's fur has reached its maximum length and density. An unprime pelt is characterized by blue-black streaks or spotting on the hide where new hair has not yet fully grown. Although a muskrat coat is a beautiful fur, most of the muskrat fur market goes to Europe and is used for the lining and trimming fur garments.

Muskrats are fond of marshes, swamps and meandering streams. Since they are adapted to aquatic environments, the disruption of aquatic ecosystems through draining and filling of wetlands, the channelization of streams, and the disturbance of riparian habitats has caused muskrat populations to decline. In fact, muskrat populations have been declining throughout the eastern United States for a number of years. The muskrat certainly serves as an indicator species to the decline of wetlands and wetland wildlife species. In recent years, wetlands have received more protection. It is hoped this will help the cause of the muskrat and other wetland wildlife species.

In some marshes muskrats may get so abundant that they "eat out" the marsh, removing the emergent aquatic vegetation and reducing the quality of the marsh for other wildlife species. Biologists strive to manage muskrat numbers in a marsh by allowing a mixture of aquatic vegetation and open water. Stream habitat for muskrats is in a constant state of change, with dens and vegetation adjacent to the stream affecting the quality of the habitat. The muskrat needs stable water conditions to survive. Frequent high water events such as those found on human disturbed wetlands reduce muskrat numbers.

National Park Service Archives

Muskrat trappers with pelts, early 1900s.

Like other members of the mouse family, muskrats are prolific breeders. Female muskrats are good mothers, while the male is not family oriented. They are promiscuous or loosely monogamous. Breeding usually begins in January. After a gestation period of 28 to 30 days, 3 to 4 young are born blind, naked and helpless. Two weeks after birth they are fully haired, their eyes are open, and the young muskrats soon become active. Within a month the young kits are weaned and on their own. The muskrat may have three or more litters per year. Northern muskrats have fewer litters and more kits per litter, while in the South they have more litters and fewer kits in each litter. In Louisiana, they commonly breed all year long. When the female is ready to give birth again, the young may disperse or the female may build another chamber in the muskrat house for the new litter. As with most prolific breeders, the muskrat is short-lived, with a maximum life span of about four years.

Along streams and sloughs, muskrats live in bank dens. They usually use stream bank burrows throughout the year. The active entrance to the den is usually underwater while the entrance at the water's surface may be plugged by vegetation. An air shaft to the surface in the den provides oxygen. A complex of dens may be connected by a system of tunnels which leads to a nest of grass. Older muskrats have more complex dens and associated tunnels.

Muskrats living in marshes usually build muskrat houses, which are more or less conical structures built of roots and stems of aquatic vegetation. The house is built above the water level and may be up to eight feet in diameter and commonly contains one to two internal nest structures. Individual members may build on their own little alcoves, however, resulting in multi-dimensional houses. The house may even have a porch for loafing and lying in the sun. Each house will have one or more "plunge holes" with an underwater entrance.

R. Town/ USFWS Photo

Looking like the overgrown member of the mouse family that it is, a muskrat prepares to leave its den in search of food.

During periods of low water, canals may be constructed to deeper water. The muskrat accomplishes this by excavating debris with the clawed front feet and throwing it up on the side of the canal with the back feet. Muskrats apparently would rather swim than walk. They may also build feeding platforms which are temporary in nature and usually abandoned after a few days. The peak of house building occurs in the fall to early winter period. During the winter, push-ups of vegetation above the ice are used for resting and feeding platforms.

Although muskrats primarily dine on aquatic vegetation, they are also opportunists. Their favorite foods are bulrush and cattails, however, they readily eat most available food including mussels, clams and crustaceans, and are not above raiding your garden plot. Piles of mussel shells, known as a middens, may be encountered along steams and indicate muskrats feeding in the area. They are local feeders, seldom venturing more than 100 yards from their houses or 200 yards from bank dens. Other signs of activity can be identified by defecation posts, usually an old log or an elevated rock, used by one or more muskrats.

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Muskrats are territorial and readily fight when food is scarce or when territories become crowded. They can be aggressive fighters when cornered and fight desperately with their long, sharp incisors slashing at their opponents.

Muskrat predators, other than man, include mink, raccoon, barred owls, marsh hawks and alligators. Drought and the lowering of water levels make muskrats vulnerable to attack by predators. Mink are especially adept at killing muskrats. They may claim the muskrat house as temporary quarters and while there, snack on the delicious occupants inside.

The muskrat is valued both as a furbearer and as a watchable wildlife species. Yet few people would herald the muskrat as their favorite wildlife species. Perhaps we should remember an old Native American legend about how the "little muskrat" created the earth. Or, if you prefer, the muskrat song which goes, "Muskrat Susie, Muskrat Sam, Do the jitterbug down in Muskrat land…"

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