

Controlling Nuisance: Muskrats

University of Missouri Extension Missouri

Department of Conservation

U.S. Fish and Wildlife Service

The muskrat is a stout, chunky animal with short legs. An adult ranges from 22 to 25 inches long. The 11-inch black tail is scaly, practically hairless and laterally flattened. It is used as a prop when the animal is on its hind feet and is also an aid to swimming. The average weight of a mature muskrat is about 2.5 pounds. The large, broad hind feet are partially webbed and well-adapted for swimming.

They have dense, silky, grayish underfur heavily overlaid on the back and sides with glossy, dark-brown guard hairs. In Missouri, muskrats are classified as furbearers, and their harvest is governed by regulation. Muskrat is an important item in the fur market.

Muskrats are seldom found far from water. They prefer the still or slow-moving water of marshes, ponds and streams. Muskrats are active year-round and, while usually nocturnal, may move during daylight hours.

The muskrat is primarily a vegetarian, feeding mostly on the roots and stems of aquatic plants and, if they occur near water, such items as legumes, grasses, grains, garden crops and apples. Animal food, particularly crayfish and fresh-water mussels, occasionally is eaten.

Muskrats live in houses constructed of vegetation or in burrows dug into banks. Both houses and burrows have underwater entrances and above-water living chambers.

Muskrats breed from early spring until fall, giving birth to several litters of from four to seven young. The young are born naked and helpless in protected nest chambers in houses or bank burrows. Young muskrats grow rapidly and are independent at an early age.

Although the feeding habits of muskrats may result in some damage to agricultural or ornamental crops growing near water, the principal cause for concern is the potential damage to earthen water-retaining structures, resulting from muskrat burrowing activities. Extensive tunneling into earthen dams may result in water leaks or even in the loss of stored water.

Since it is easier to deal with a population of muskrats before they have become established in an area, it pays to watch for signs of these animals and to adopt remedial measures as soon as their presence is noted.

Control

Trapping. Muskrats may be trapped or shot when responsible for property damage. Muskrats are easily trapped. They may be captured by using a No. 1 or 1-1/2 steel trap or a body-gripping trap. Selection of trap sites is important and should be made with care.

Muskrat trails are particularly productive, and the trap may be sunk in the mud or sand and chained to a stake. Traps set on floats, either natural objects or artificial rafts, can be successful. Trap sets in runways, den openings, slides or near natural resting places are also productive.

Where possible, the stake to which the trap chain is attached should be placed in water at least a foot deep so that the captured animal will drown. This is not necessary when using the Conibear because it humanely kills the animal outright.

If there are muskrats in your pond and they are not causing serious trouble, consider them a cash crop. They are easy to trap and skin. Trap them heavily each open season; they produce a lot of young and come back rapidly. A local trapper may be interested in taking the fur for profit if you do not wish to trap. Watch the dam closely for burrows, and repair any weak spots at once. It is relatively easy to fix a weak spot, but a big job to repair the dam after a break has occurred.

Mechanical methods. Rip-rapping with coarse stone or gravel may prevent muskrats from digging into the banks or dam slopes of ponds. The material should be applied in a layer about six inches thick and should extend from one foot above to three feet below water level. This method of damage prevention also protects the pond banks and earthen fill from wave action.

The area of pond most sensitive to muskrat damage is the dam structure itself. A trench may be cut with a narrow trenching machine in the centerline of the earth fill. The trench should extend lengthwise of the fill, be cut about three feet below water level, and be filled to one foot above water level with concrete. The resulting concrete core will effectively prevent muskrats from digging through the dam.

One- or two-inch mesh poultry wire, galvanized after weaving, may be pegged to the inside surfaces of the pond. Lay the wire flat against the banks, and fasten it down every few feet to keep it in place. Wire should extend from a foot above to at least three feet below water level. Since the wire will eventually corrode, this method is not recommended for ponds where swimming is planned.

Pesticides. Pesticides are not recommended for use in controlling muskrats in Missouri.

Missouri Wildlife Code Rule — 3CSR10-4.130

Owner May Protect Property. Subject to federal regulations governing the protection of property from migratory birds, any wildlife except deer which beyond reasonable doubt is damaging property may be captured or killed by the owner of the property being damaged, or by his agent, at any time and without permit, but only by shooting or trapping except by written authorization of the director. Wildlife may be so controlled only on the owner's property to prevent further damage. Wildlife so captured or killed may not be used, transported, sold or given away but must be reported to an agent of the commission within twenty-four (24) hours and disposed of in accordance with his instructions. Deer that are causing damage may be killed only with the permission of an agent of the commission and by methods authorized by him.

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