

Muskrat Control in Wastewater and Storm **Ponds**

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Muskrats can be a serious problem in your ponds. Muskrats may burrow into your pond berms breaching the pond liner or the even causing the berm to fail, leak, or blow out.

Muskrats are mostly nocturnal animals but can be active in early morning and late afternoon. A muskrat reproduces rapidly and if you see one, you probably have many more. There are many indicators you can use to assess if you have a muskrat problem besides actually seeing one. You may notice a collapse in the dirt above the rip-rap or just a spot that looks like it may have settled and not completely collapsed. On a calm morning, you can look for muddy water along the berm edge if your pond water is normally clear. There can also be huts or mounds of vegetation out in your ponds. The inside of your structures may also reveal muskrat activity upon close inspection. Look for vegetation piles (beds) built up on the inlet/outlet culverts or on the divider wall. Muskrats will also defecate on top of your culverts or on the divider wall to give away that they are present. Another great indicator happens, when it freezes, called bubble trails. Usually, first ice is the best time to look for this indicator when the ice is thin and the water is clear before any snow inhibits your view. When a muskrat leaves the den, it releases air from its fur as it swims under the ice. The bubbles float up under the ice and leave a defined trail, giving away the muskrats travel path and also where the den is located. Look for these locations when the sun is high and bright.

The city has a National Pollutant Discharge Elimination System (NPDES) permit to operate these ponds and it calls for removal of muskrats when you identify their presence. Your NPDES permit DOES NOT supersede the regulations the Department of Natural Resources (DNR) has set for protected animals, and muskrats ARE protected with a season that they may be harvested. Check your DNR regulations booklet for the date that muskrat trapping opens in your region. It is ILLEGAL to shoot a muskrat all year, even during trapping season, unless it is being dispatched while in the trap. If you have muskrats in your ponds, when muskrat trapping is closed, the first thing you should do is call your local Conservation Officer (CO). The officer will likely ask you some questions and direct you on what methods he/she will allow you to you use in their region. If muskrat trapping season is open, you need to buy a small game license and a trapping license in order to be able to trap muskrats. The city council should also give you written permission to trap within city limits or on their property. One thing to keep in mind is that if you are breaking the rules set by the DNR, you could potentially lose your personal privileges for hunting and trapping for up to five years. Don't risk it! Some CO's may give you permission to trap/shoot them with restriction and record keeping, some may not. Some may want you to contact them each and every time before any methods of removal. The local CO will give you direction on the methods they would like, contact them.

> THERE ARE THREE MAJOR TYPES OF TRAPS FOR MUSKRAT ERADICATION. THEY ARE: FOOTHOLD TRAPS, CONIBEAR TRAPS, AND COLONY TRAPS.

Foothold traps come in many sizes and styles. I would recommend a size one or one and a half, in either long spring or coil spring design. You can use these traps in any location that the muskrat is walking. They should be placed where the muskrats come out of the water. These traps have an advantage in that they can be set in many locations, such as vegetation beds in your structures. There are disadvantages to this trap. You could catch a non-target animal like a turtle, bird or mink. These traps only catch one animal at a time, and the animal will likely be alive.

Conibear type traps also come in many sizes and I recommend using #110 up to #150 in size. These traps are designed for locations where the muskrat is swimming under water in a trail or at the entrance to it's under water den. The advantages to this trap are that it rarely misfires, it usually catches less non-target animals, and it kills the muskrat. The disadvantage is that it only catches one muskrat at a time.

Colony type traps are like cage traps, but the doors are reversed so they face inward. This trap has many advantages to a pond operations specialist. When an underwater den entrance/bubble trail or a muskrat trench is found, this trap is the best choice. The advantages for this trap are that it kills the muskrat and it can catch up to nine muskrats at a time! Place this trap in line with the swim trench or chip through the ice and place several colony traps parallel to each other in line with the bubble trail. Muskrats are used to swimming in muddy water and frequently bump into things while swimming. This is why a colony trap is so effective, they swim into the trap door and push the inverted door open and swim in as it falls behind them, trapping them inside and drowning them.

Take note of the pictures provided to identify trap types and a few trapping location examples to help you clear your ponds of these troublesome little critters. The earlier you catch muskrats, the less pond repairs and disasters you will have. I hope that you don't need this information, but if you do, good luck in your muskrat eradication!











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