

# New Jersey Furbearer Management Newsletter



Spring 2012

New Jersey Division of Fish and Wildlife  
Upland Wildlife and Furbearer Project



## TRAPPER AND HUNTER SURVEY REMINDER

### 2011-12 NJ Trapper Survey

- Mailed to all 2011 New Jersey trapping license purchasers at the end of the 2012 season.

### 2011-12 NJ Firearm Hunter Harvest Survey

- Mailed to a percentage of all NJ hunters who purchased any type of firearms licenses.

*Survey results provide important information used to evaluate, plan and improve recreational trapping and hunting in NJ. They are also used to estimate harvests for most game species, evaluate population trends and calculate the value of the firearm hunting and trapping to the State's economy. If you received a survey and have not returned it please complete it ASAP and return in the stamped, return-addressed envelope included with the survey.*

### The Muskrat - *Ondatra zibethicus*



*The muskrat is the most valuable furbearing animal in New Jersey in terms of numbers of animals harvested and revenue from pelts. The animal is also capable of habitat damage, and management of muskrat populations is essential where they are established.*

The muskrat (*Ondatra zibethicus*) is a semi-aquatic rodent that is widely distributed throughout most of North America ranging from the McKenzie Delta, Alaska, in the North and in all but the northern extremes of Canada, to northern Mexico in the South. It is absent in many areas including most of Texas and California as well as the southeastern Atlantic Coast (Florida, coastal Georgia and South Carolina) although the habitat of these regions appears suitable. The animal's common name arises from the odor associated with the species during breeding season. Both sexes have musk glands located near the anus. A yellowish, musky smelling substance is secreted and deposited at stations along the routes of travel of muskrats, at defecating posts, and at bases of lodges and mud bars. The scent retains its properties long after its exposure to air and serves as an advertisement during the breeding season.

The muskrat is stocky with a broad head, small ears and small eyes. Adults tend to have a total length of 16 to 25.5 inches and weigh an average of 2.2 to 3 pounds. Muskrat weights vary geographically, but males are slightly heavier than females. The tail is long, scaly, flattened and rudder-like. Their short legs are modified for aquatic life with its hind feet partially webbed, while the front feet are unwebbed, smaller and used for skillful manipulation. The fur is soft and

velvety, consisting of a thick waterproof underlayer and a coarser, longer glossy over-layer of guard hairs.

The female muskrat has an estrous cycle of about 30 days. Both sexes are promiscuous or loosely monogamous (some males help construct lodges and care for orphaned young). In New Jersey, two to three litters are common. Young muskrat open their eyes at 14 to 16 days and are weaned at four weeks. At three weeks, young muskrat are able to dive and swim when disturbed at the lodge. Four-week-old muskrats are fairly independent but susceptible to exposure especially in rainy weather. Once weaned, the young may continue to use their natal nest or may move away. Sexual maturity is usually reached by one year.

In New Jersey, the species occupies a number of estuarine habitats, including impounded and natural tidal and inland marshes and freshwater ponds, streams, and lakes. Muskrats are most successful in brackish marsh habitats, however. Although flexible in their habitat requirements, muskrat must have a source of slow-moving water and a protected site to rear young. Other habitat preferences are related to a stable water level, herbaceous cover, substrate type and water velocity.

A 50-50 ratio of brackish water with dense vegetative cover is ideal habitat. Clay soils are particularly desirable and allow them to construct their burrows. The most productive marsh areas in New Jersey appear to be brackish, threesquare bulrush tidal marshes. Tall saltmarsh cordgrass, cattail and tall cordgrass marshes are also considered valuable. Muskrat obtain their highest numbers in the brackish marshes of Salem, Gloucester, Cape May and Cumberland counties.

Habitat tends to be the major factor in determining what kinds of food a muskrat will eat. Muskrats in streams and canals eat a greater variety of foods, including animal matter, than muskrats in marshes. Consumption of animal matter is generally considered less important in the diet of muskrats, although consumption of aquatic invertebrates is highly beneficial during the winter months. The animal's diet can include fish, freshwater mussels, clams, insects, crayfish and snails. Plant material eaten by muskrats consists of the stems, leaves and rootstocks of marsh plants. Cattail and bulrush are always utilized when present and can constitute as much as 80 percent of the muskrat's diet.

Almost all foraging takes place within 15 to 40 feet of the lodge and few movements of muskrats exceed 500 feet from the lodge. Feeding sites of muskrats occur at burrow openings, undercut banks, stumps, logs and snags. Muskrats are primarily herbivorous, although foods and feeding habits vary with habitat, season and availability.

High muskrat population density may result in the elimination of preferred food plants in an area, possible disease problems or an eventual decline in the muskrat population. These eat-outs may severely affect the peat layer and retard vegetative regeneration for several years. Once the available vegetation is eaten, muskrats dig into the peaty marsh floor as deep as 2 inches to consume the roots which help bind the marsh soil.

Muskrat populations have been negatively affected in recent years by habitat destruction, drought, and winter storms. Dredging, channelization, stream-bank protection, and oil spills are also detrimental to their populations. Fur biologists throughout the Northeast are investigating the potential causes for recent harvest declines of this valuable furbearer.

## Muskrat Pelt Grading and Pelt Primeness

Muskrat pelts are sized by eye rather than by a board. Properly boarded muskrats from eastern sections will be 6.25" wide at the butt, whereas the smaller pelts will be 5.75" wide at the butt.

<u>Category</u>	<u>Length</u>
XXXL	Over 17 inches
XXL	15.5 to 17 inches
XL	14 to 15.5 inches
Large	12.5 to 14 inches
Medium	11 to 12.5 inches
Small	9.5 to 11 inches
X-Small	Under 9.5 inches

### Pelt Color

Muskrats are not sorted by color, although there is natural variation in fur color from black to pale silver or even white. Bellies vary in color from whitish or silvery to light brown in all back colors. Pelts from western sections tend to have coarser fur. Black Muskrats have black guard hairs with clear, dark blue underfur. Other shades have brownish tips in the underfur.

### Seasons- When is the fur most prime?

Fall - Muskrats trapped in the fall are generally considered early caught skins. The pelt has flat, sparse fur. The pelt leather is of a blue to dark blue color and is dry. In leather of adults is very blue compared to light blue in juveniles.

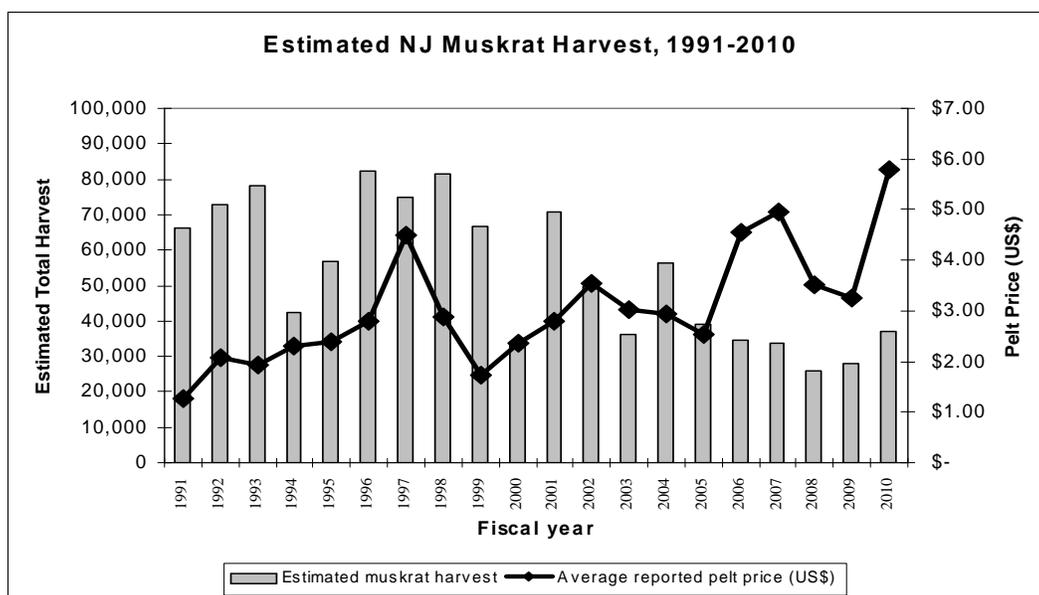
Winter - Winter trapped muskrats exhibit dense fur with slightly blue to clear leather (white or golden colored) that is supple. Juveniles show two thin blue stripes running down back while adults are mottled.

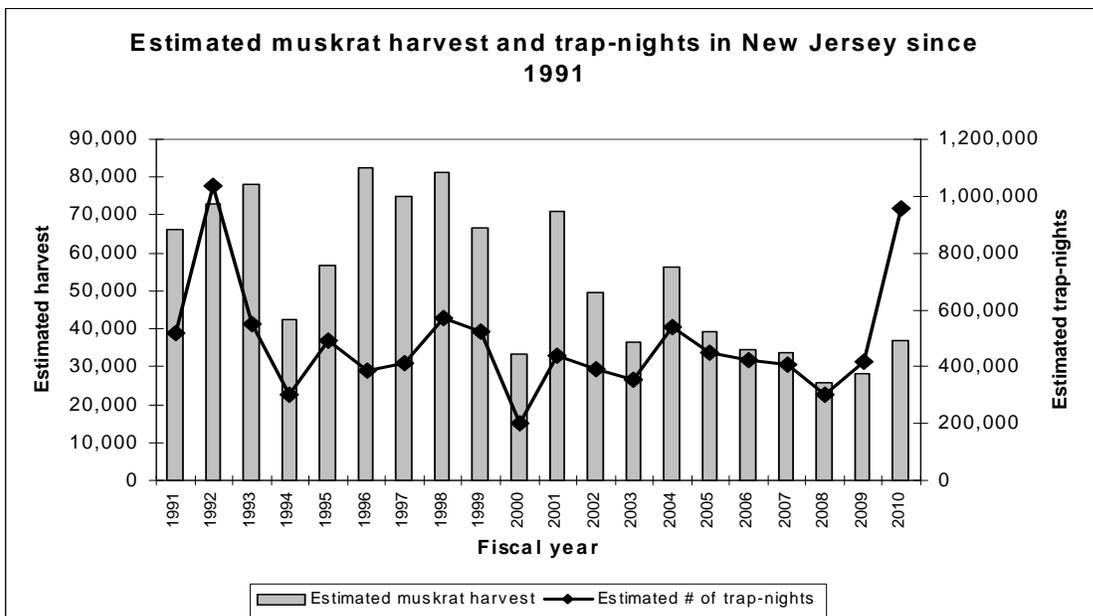
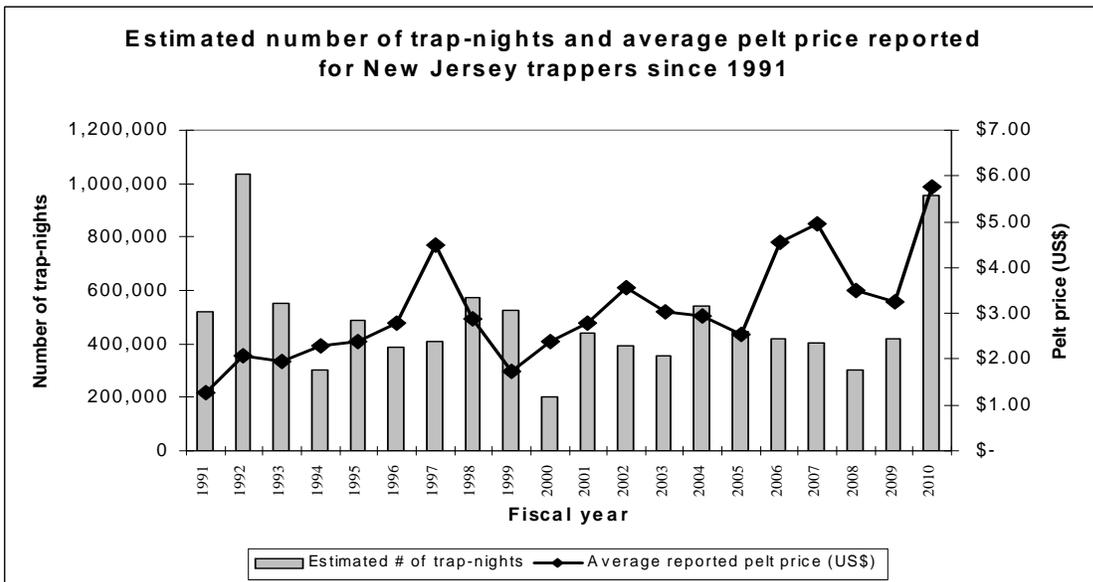
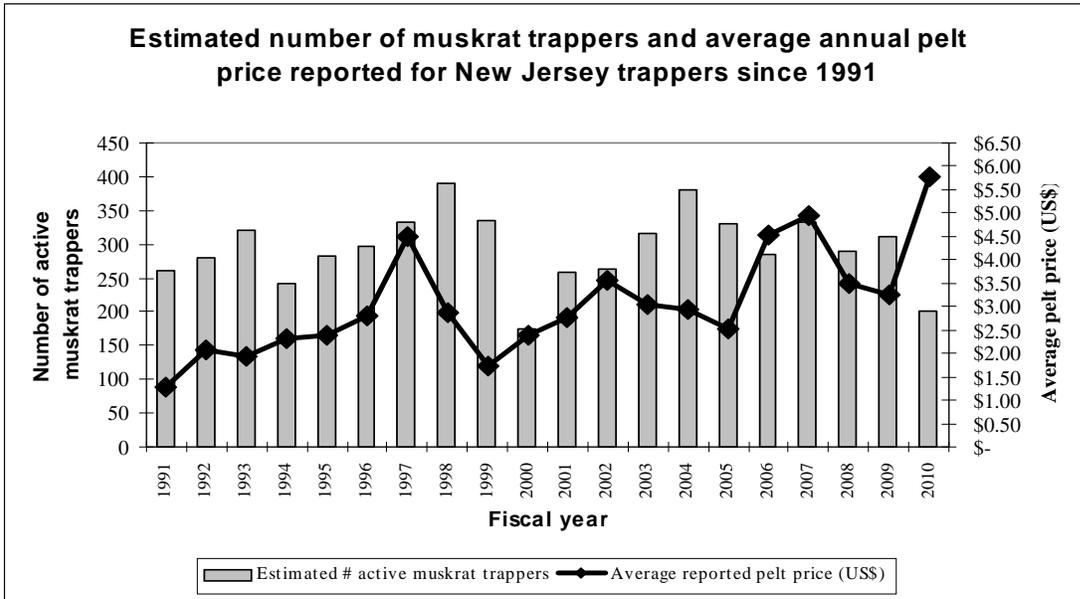
Spring - Fully prime. These pelts have dense fur and clear leather with almost no blue.

Slightly over-prime: Slightly weaker fur. Leather is reddish, veiny, and less supple.

Over-prime: Loose, weak fur. Leather reddish, veiny, dry, thin, and papery; may have well-defined kidney marks on the back.

## New Jersey Muskrat Harvest: A Twenty-Year Comparison





## **Trail Camera Tips** by Joe Garris

*Division biologists receive numerous photographs of dubious quality that make it challenging to properly identify the animal in question. Here's some good information on how to improve the quality of your trail camera photographs.*

### **Types of Trail Cameras**

There are two basic types of trail cameras, Flash and IR. Information on camera manufacturers and quality can be easily accessed via internet. The flash camera has the same conventional strobe type flash as normal hand-held 35mm or digital camera. An IR camera has infrared emitters. These emitters are the illumination for the photo.

### **Location, Location, Location**

This IS trapping. The idea is to get a photo of the critter in question. You should set up a trail camera using the same basic rules you would use when you make a set with a snare, conibear or box trap. There are three simple, key parts, or steps to a good setup. You can have one step without the other but its best that they all work together. Each of the three steps is important, but this isn't rocket science.

First, you need to put the target location (exactly where you want the camera to take the photo) where the target animal feels comfortable. This site is to be where the animal is going to be, and is also the actual location at which you're going to put your bait if any. I'm sure we've all been told that you can't catch a critter where the critter isn't. This step is just as important here as it is in hanging a snare.

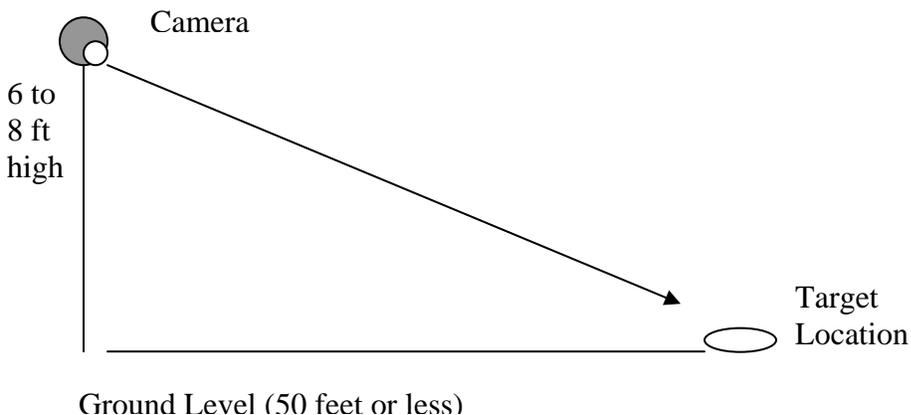
Second is the location of the trail camera. This is a really important part of the setup. Many trail camera users just simply hang their camera from a fencepost or a tree. They may get pretty good photos, too. But at 2 or 3 feet from the ground there's no perception of size of the subject or depth of field in the photo. In order to get a photo in which you can see the whole critter and have some concept of size it's better to hang the trail camera about 6 to 8 feet (or higher) from the ground, angling downward toward your target location.

Third is the distance of the camera in reference to the target location. The camera is the highest point - but just as important is the distance from the camera to the target location.

Trail camera specifications list a maximum effective distance for the flash or IR emitters. This can be anywhere from 30 to 50 feet or more (or less). However, remember these distances are maximum possible distance and are really not realistic if you want to be able to tell what you're looking at in the photo other than a pair of eyes.

A simple method to determine the most effective distance from camera to target location is to use that maximum distance for a conventional flash camera and divide that number by two. If it's an IR camera you'll need to determine the total number of emitters your camera includes. Simply count them. They're the little light-bulb like things on the front of the flash panel of the camera. Divide the total number of emitters by two and that's the maximum distance your camera should be from your target location. In other words if the maximum flash distance is 40 feet the target

location should be less than 20 feet from the camera. If your camera has 32 IR emitters the target location should be less than 16 feet from the camera.



### Bait

To take a good photo the animal needs to stop if only for a moment. The simplest way to do this is to use bait that the target animal would find attractive. For deer try apples, corn or a salt block for instance. Another way to get just about any animal to stop and sniff your target location is with scent bait. You can place the bait in a small hole in the ground or you can place some of the scent/bait on a rock. Beaver castor works great for this application. Any animal that walks within smelling distance of the castor scent will stop and check out the site.

You CAN set the camera to take photos as the animal passes by on a trail but it's harder to get clear, stationary images. It's better to get them to stop.

### Other tips

- Set your camera for the so that you have no longer than about 1 minute between pictures. Thirty seconds is better. The more images you can take of a subject the better is your chance of getting a good photo.
- Hang your trail camera from a tree so that the camera faces north or south to avoid direct sunlight.
- Have at least two memory cards for each of your trail cameras. It's easier to just take the used one out and pop in a new one and view the photos at home. Make sure you have a memory card that's big enough to hold as many photos as you'd expect to take between the times you check your camera.
- Always keep track of your camera's battery life. Most cameras' today have a battery life of at least 3 months. Many can last up to a year. If your batteries look low it's best to change them if you leave your camera unchecked to several weeks at a time.
- Place an object of known length (such as an old soda can) near the bait pile to provide a measure of scale. This will simplify identification of unknown animals.

- Bears. They can be a really big problem for trail cameras. They like to rip them off trees and sometimes they like to trash the entire camera. Buy a bear box. A bear box is a metal box that protects the camera from bears. It also protects your camera from people, at least semi-honest people. Bolt or screw your bear box fast to the tree facing in the appropriate direction and place your camera inside. Then lock it. At least in north Jersey where there are bears I don't trust my trail camera with the strap that the manufacturer supplies. The nylon strapping WILL hold your camera to the tree but it doesn't in any way protect the camera from bears or theft.

Try these tips. I've spent lots of time with lots of trail cameras trying to get all of this right. I've taken lots of lousy pictures, too. But now I use the above outlined tips and my luck is lots better.



***Please Remember to Report Your Coyotes!***

*Coyotes harvested by any method must be reported to a New Jersey Division of Fish and Wildlife Regional Law Enforcement office within 24 hours.*

**Regional NJ Fish and Wildlife Law Enforcement Office phone numbers:**

Northern (908) 735-8240 --- Central (609) 259-2120 --- Southern (856) 629-0555



**New Jersey Fishers**

***Please report any fisher captures***

***Call: 877-WARNDEP (877-927-6337)***

Photos of fishers have been taken over the last few years; several by trail cameras in northern Sussex County and one photographed in a tree in northern Warren County. There haven't been any fishers caught in snares or conibears by New Jersey trappers- at least not yet. Reports of road-killed and of box-trapped "fishers" have been received however and the box-trapped "fishers" were examined in the trap. Thus far the reported box-trapped "fishers" have turned out to be either mink or weasel. The road-kills turned out to be mink, usually big males.



***Please report the capture of any bobcat.***

***Call: 877-WARNDEP (877-927-6337)***

**The New Jersey Division of Fish and Wildlife is a professional, environmental agency dedicated to the protection, management and wise use of the state's fish and wildlife resources.**