

## **Muskrat** (*Ondatra zibethica*)

Although the number of muskrats living in the New York/New Jersey Harbor Estuary has been in overall steady decline for decades, the feeding and building activities of these mammals still play an important part in maintaining the Estuary's wetland ecosystems by influencing plant growth, soil quality, animal habitats and small-scale topography. People



often look upon these animals as pests with their burrowing and building activities that can damage creek banks and other shoreline structures, but muskrat burrows or lodges help make wetland areas attractive nesting, resting, and feeding areas for other animals including turtles, terns and other waterfowl, snakes, fish, amphibians, birds, and other rodents. Muskrats are also predators, keeping the Estuary's local food webs in balance.

Known by some as “poor man’s mink,” Muskrat can be harvested for its pelt. Historically, Muskrats were trapped in the Estuary’s wetland areas including the New Jersey Meadowlands, where their numbers have improved somewhat in recent years, likely due to the abandonment of trapping in this highly-developed area.

The Muskrat is a stout, semi-aquatic rodent. Full grown, they weigh between 2 and 4 pounds with a body length of 18 to 25 inches and a tail length of 8 to 11 inches. The Muskrat’s grayish-brown coat is practically waterproof. Its’ dense undercoat is covered by long, brown guard hairs that protect the soft undercoat from wear. Its strong tail is nearly hairless, somewhat flat along the sides, and covered in scales.

Muskrats are named for their musk gland, located under their tails. Secretions from this gland warn other Muskrats to keep away, signaling a particular territory as “taken.” This cuts down on competition for food and mates, aiding in the muskrat’s overall survival.

With webbed hind feet acting as paddles and a long tail serving as a rudder, muskrats are good swimmers, capable of moving at up to 3 miles per hour and even swimming backwards. Their nostrils, shaped like the number seven, allow the muskrat to inhale remaining oxygen from their previously exhaled breath. This adaptation enables the Muskrat to swim underwater for up to 15 minutes.

Living in or near water for most of their lives, Muskrats excavate their homes or lodges in the banks of the Estuary’s slower moving creeks and streams using their sharp front claws. Most active at dusk, dawn and during the night, muskrats feed on vegetation including cattails and other aquatic plants but will also eat mussels, frogs and small turtles. They are eaten by foxes, coyotes and large owls.

The Muskrat is an adaptable creature that can do well close to people. It can tolerate poor water quality, and, where wetland habitat has been eliminated, can make its home in newly constructed canals or irrigation channels. These abilities have enabled the muskrat to survive and claim a niche for itself in the altered environments of the New York/New Jersey Harbor Estuary.



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