The River Otter

(Lontra canadensis)

ADAPTATIONS OF ONE OF LONG ISLAND'S SEMI-AQUATIC MAMMALS

The river otter was extirpated from Long Island by the early 1800s due to unregulated trapping, habitat loss and water pollution. In the 1900s, conservation measures enabled otter populations to rebound and by the 1990s they began to recolonize Long Island.

It spends most of its time on land but its main sources of food are aquatic prey *(fish, crayfish and crab)* **requiring some interesting adaptations and tradeoffs between life on land and in the water.**

On land, it can reach speeds up to 18 mph. In the water, it can swim 7 mph, dive to 60 feet, swim ¼ mile underwater and remain underwater for 4 minutes!

WEIGHT

10 - 30 pounds –
Males are larger than females.

EARS-EYES-NOSE

All are positioned in a line on the head so that otters can hear, see and smell as they swim while exposing a minimal area of their body. Note the small ear flaps to minimize drag while swimming underwater, and the large nose pad. Otters can smell underwater and may use that sense to locate hibernating prey.

VIBRISSAE

These long, stiff whiskers are extremely sensitive and aid in detecting movement of aquatic prey underwater while fishing in murky water and at night.

FEET

All four feet are webbed for swimming. The hind feet are largest.
(right hind shown here)

LENGTH

Adult river otter body length ranges from 36" to 54" including the muscular tail that comprises about 1/3 of total body length.

FUR

Short *(to reduce drag in the water)* but extremely dense *(for insulation in cold water)*, averaging 375,000 hairs per square inch (compared to 60,000 per square inch in most dogs).

TAIL

Long, muscular, flattened tail used to propel the otter with vertical, dolphin-like undulations, and steer like a rudder with sideways motions.

BODY SHAPE

Long, cylindrical, streamlined shape with short legs to reduce drag in the water.

Otter or Muskrat?

Both otters and muskrats reside in the fresh and brackish waters of Long Island.

When viewed on land it is hard to confuse the two. The muskrat is up to 2 feet long including its laterally flattened, scaly tail. Otters are 3-4 feet in length, including its tapered, furred tail.

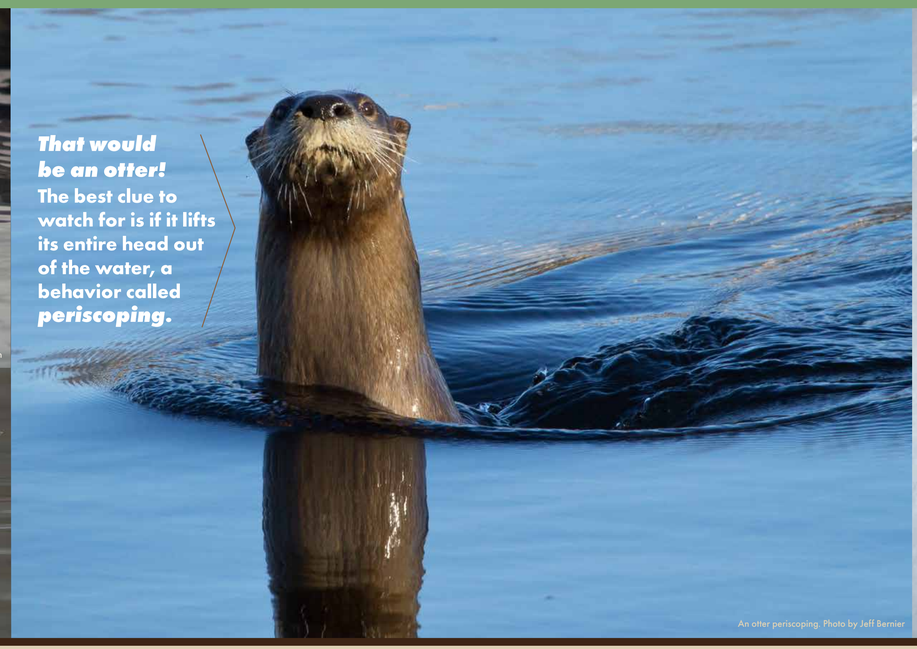
But in the water it is difficult to distinguish between the two. Note the prominent bulbous nose of the otter in contrast to the muskrat's pointed face, longer fur and relatively larger ears; all features that are not easy to discern from a distance.

Watch their swimming styles: otters continually dive and surface while muskrats stay at the surface and may be swimming with vegetation or with their tail out of the water

Use this QR code to learn more about muskrats and otters, including videos of each.

Otter Photo by Greg Jackson

That would be an otter!
The best clue to watch for is if it lifts its entire head out of the water, a behavior called *periscoping*.



An otter periscoping. Photo by Jeff Bernier

Otter slides photographed on a frozen pond in Southold

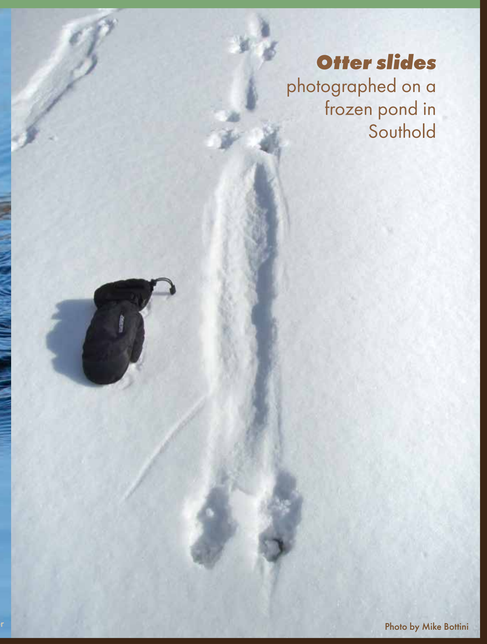


Photo by Mike Bottini

SEATUCK

The Long Island River Project was initiated in 2008.

Seatuck Environmental Association is dedicated to conserving Long Island wildlife and the environment. The organization pursues its mission by advocating for wildlife and advancing conservation projects, engaging community scientists in wildlife research, and offering high-quality environmental education opportunities for Long Islanders of all ages.
For more information about Seatuck's Long Island River Otter Project, visit **Seatuck.org/river-otters**

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