

# HUDSONIA HARLEM VALLEY BIODIVERSITY MANUAL SUPPLEMENT

## SPECIES PROFILE

**River otter (*Lutra canadensis*) Scarce in region.**

### Habitats in the Study Area

Low-lying areas, in and near lakes, ponds, streams, and wetlands, usually no more than a few hundred meters from water, are the preferred habitat. Otters migrate between rivers or lakes, and may stop to feed in smaller waters such as ponds and slow, relatively small streams. River otters seem to be able to tolerate a wide variety of environments including very cold and hot areas, high elevations, brackish coastal waters and urban areas.

Rarely seen in the tidal Hudson River.

### Study Area Distribution

By the early 20th century, river otter was largely extirpated in central and western New York. Loss of habitat, water pollution, and unregulated hunting and trapping were the main causes. With the post-war decline of locally-based fur sales, otters began to migrate west from population centers in the Adirondacks and Catskills. Probably river otter has been present historically in the northern portion of the study area (e.g. Rensselaer Plateau). NYSDEC records show river otter in the study area north of Westchester County since 1984 (NYSDEC 2008). Otters may enter urban areas but are likely to be killed by motor vehicles.

### Other Relevant Aspects of Ecological Niche and Behavior

Typically observed alone or in pairs, river otters may sometimes be seen in larger groups. Popularly regarded as "playful," this large, semi-aquatic mammal does spend a good deal of time sliding down banks of mud or snow, roughhousing with other otters, and playing with its food, evidently enjoying itself. These activities appear to strengthen social bonds and improve hunting techniques. A high metabolism gives otters boundless energy, but also requires them to eat prodigiously during the day. Otters are active all winter.

River otters have very large home ranges (8-78 km of waterway), the size apparently determined by abundance of food (Goodwin 1935). Males are constantly on the move, patrolling and scent-marking. Despite large ranges and "territorial" behavior, river otters are not particularly aggressive to each other, and generally practice mutual avoidance.

Vocalizations include whistles, growls, chuckles, and screams. Scent glands near the base of the tail produce a strong, musky odor. Aquatic organisms such as amphibians, fish, crayfish and mussels make up most of the river otter's diet. Birds and small mammals may be eaten occasionally. Otters probably have little impact on game fish populations.

Breeding occurs in March and April, but the young are born 10-12 months later, as implantation of the fertilized egg in the uterus is delayed. The female gives birth in an underground burrow, usually along the bank of a stream or lake, though burrows have been found up to half a mile from the nearest water (Doutt et al. 1977). Upon the birth of 1-5 young in a den near the water, the male is driven away, but is later allowed back to help care for them. Helpless

for about 2 months, baby otters are weaned after 10-11 weeks, forage with their mother, and leave the parents after the first year, reaching sexual maturity at two years of age (Whitaker and Hamilton 1998). Otters may den in abandoned beaver lodges.

### **Description and Identification**

With a weight of up to 14 kg, river otters are long, streamlined animals (body length 66-107 cm., tail length 32-46 cm) with a thick tapered tail, short legs and webbed feet. The wide, rounded head has small ears, long, thick whiskers, and nostrils that can be closed underwater. Otter fur is dark brown to nearly black above and a lighter color below, with golden-brown throat and cheeks. Feet have claws and lack fur. The skull is flattened and broad, with 5 cheek teeth in both the upper and lower jaws. The bony palate extends behind the last molars. Often teeth are worn or missing (Burt 1972).

### **Threats and Conservation**

Hunting and trapping are no longer serious threats to otters in most of New York. The New York River Otter Project has, since 1995, released over 250 river otters into areas, mostly in western New York, from which the animals had been extirpated. This program has increased the range and numbers of river otters in New York. Today, development is the main threat, leading to loss or degradation of aquatic habitat and traffic deaths.

### **Survey Technique Constraints**

Otters, fairly large mammals with aquatic habits, are difficult to live-trap in situations that are not threatening to the captured animals, and a permit is required. Traps set in water can lead to otters drowning. Burrows with the opening below water do not easily facilitate live traps. Tranquilizer-aided capture could be hazardous to otters in water, which, immobilized, might drown. The New York River Otter Project has had success in trapping and relocating otters, and may be able to provide advice or tactical support to other researchers. Otter activity on land and the water surface can be observed from a reasonable distance through binoculars. Sign (tracks, scat, slides, scent posts) is a good way to detect otter presence. Because home ranges are very large, otters may not be in a particular waterbody when it is surveyed.

### **References to Identification Literature**

Reid, F. 2006. A field guide to mammals of North America north of Mexico, Fourth edition. Houghton Mifflin. Boston, New York. 579 p.

### **References Cited**

Burt, W. H. 1972. Mammals of the Great Lakes region. University of Michigan Press. Ann Arbor, Michigan 246 p.

Doutt, J. K., C. A. Heppenstall, and J. E. Guilday. 1977. Mammals of Pennsylvania. Pennsylvania Game Commission and Carnegie Museum. Pittsburgh, Pennsylvania. 283 p. + maps.

Goodwin, G. G. 1935. The mammals of Connecticut. State of Connecticut Geological and Natural History Survey. Hartford, Connecticut. 221 p. + plates.

New York State Department of Environmental Conservation: River otter history in New York State. New York State Department of Environmental Conservation. 2008. <http://www.dec.ny.gov/animals/9372.html>

Whitaker, J.O. and W.J. Hamilton. 1998. Mammals of the eastern United States, third edition. Cornell University Press. Ithaca, NY. 583 p.

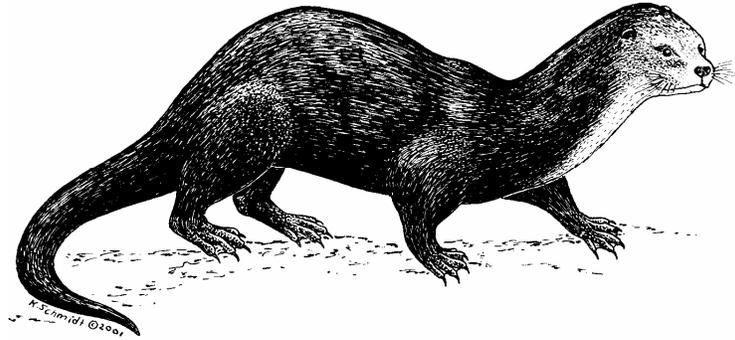


Photo © Erik Kiviat



River Otter tracks.  
Photo © Erik Kiviat