## WOLFE LAKE (WESTPORT) ASSOCIATION



## Nature Around Us The American Mink

Article & Photo by Margie Manthey and published in the Westport Review Mirror, 2019



**The American Mink** is a small, slender mammal in the Mustelid family, which includes weasels, otters, martens and fishers, among others. Its range extends from much of Canada through the Eastern United States. It inhabits forests close to water – an "ecological edge," where biodiversity is most abundant in a healthy environment. Slightly webbed feet allow the mink to move easily between its terrestrial and aquatic worlds. Being an excellent swimmer, fish make up nearly half of its diet, but it also eats crayfish, amphibians, rodents, snakes, birds

and eggs. Although diminutive in stature, the mink is innately fierce. It will readily attack and eat larger animals like rabbits and muskrats. The mink was once tamed to hunt rats.

Perhaps you've observed a mink running lakeside with its comical, rolling gait: it pauses briefly to investigate the nooks and crannies between rocks for frogs and other delectables, then noiselessly slips into the water, only to scoot back out, shaking water from its sleek, mahogany fur. Then it's off and running again, always on a mission and ever so curious!

The mink is solitary except during the breeding season and when raising youngsters, which are born in spring or early summer. It doesn't hibernate and must hunt year round for food, occasionally waiting out harsh winter weather in its den for days at a time. Ironically, the same body shape that makes the mink an agile predator also leaves it vulnerable to heat loss due to a high surface-to-area volume ratio. To stay lithesome and nimble, it doesn't store much body fat, so the mink needs to eat a third of its body weight daily to survive. This may explain why it often kills more than it can possibly eat.

In the past, biologists didn't pay much attention to the mink as it was so widespread; but when a decline in its population was observed in places where habitats appeared intact, analyses of tissue samples, stomach content and food sources were performed. Biologists discovered that the mink can act as an indicator of the health of the aquatic ecosystems where it lives. The mink has a low tolerance for toxins and so acts as a "biosentinel," or early predictor, of environmental contamination. Fish in some of our lakes and rivers are now contaminated with mercury and polychlorinated biphenyls (PCBs), and studies have shown that even small amounts of these toxins can significantly impair mink reproduction. Higher doses can cause death. Pollutants, pesticides and heavy metals amplify in potency as they pass from organism to organism, up the food chain. This is known as "biomagnification." Occupying a place at or near the top of the food chain, the mink is especially vulnerable to concentrated toxins, especially mercury. If other natural impacts are also present, such as food shortages, parasitic loads or extreme weather conditions, tolerance for contaminants drops even lower. The mink acts as a "canary in the coal mine." Investigating marked declines in mink populations can provide early warnings of contaminated water systems, prompting us to take action to improve and protect water quality. The mink is fierce, yet fragile. It reminds us how our actions can impact natural resources, wildlife and, ultimately, our own well being.

Margie is a self-proclaimed nature nerd with a passion for all things finned, furred and feathered...even the creepy-crawly-scaly kinds. She's summered on Wolfe Lake since childhood and loves sharing what she learns about our wild things.