



Faces of Wetlands: Silver-haired Bat

One in a series of articles about the plants and animals of Minnesota wetlands



Image: iNaturalist

Did you know that Minnesota is home to seven bat species? One of the lesser known species is the silver-haired bat. Unlike the more common big and little brown bats that roost in colonies along cave walls, silver-haired bats are solitary, tree-roosting bats. What makes this one special for the watershed is its habitat preference. The Vadnais Lake Area watershed provides the right recipe of forest and water, making it a bat of our own backyard. *Note: These bats very rarely roost in houses.*

Silver-haired bats (*Lasiorycteris noctivigans*) weigh between 8 and 11 grams, with an average wingspan of 29.5 cm. The Latin name translates to “night wandering shaggy bat”. The silver hair from their name comes from the silver or white tips of otherwise black fur. A solitary animal in the summer months, silver-haired bats form swarms and mate in October during fall migration. Females don’t actually become pregnant until March, after hibernation.

Moths and soft-bodied insects are a favorite food for silver-haired bats, but they’re also opportunistic depending on what’s available. Mosquitoes, flies, beetles, termites, and spiders have been found in their feces (or guano). As the slowest flying bat in North America, they tend to stick close to water where insects are plentiful. Silver-haired bats prefer slow moving and quiet water that doesn’t interfere with echolocation. They hunt in these open areas, but commute home to roost in mixed deciduous/coniferous forests.



Historically, the Vadnais Lake Area watershed was a network of wetlands, shallow lakes, oak savannah, and mixed coniferous/deciduous forest. This mixture provided open hunting grounds near shallow water, and minimal travel time back to the safe cover of trees.

Our landscape has changed from pre-settlement, to agriculture, to a suburban neighborhood of houses and highways. While reversing these changes is unrealistic, we can focus on our present assets and how we adapt. Bats in particular have shown an ability to adapt to roads, storm ponds, and drainage ditches. While they're not a pristine network of wetlands, these features still create space for hunting, dense pockets of food, and corridors of slow-moving water. In our watershed, Lambert Creek is a prime example of a network of wetlands and shallow lakes modified by a drainage ditch originally built for agriculture. Much of this land use is for housing, but pockets of forest are speckled across the creek from White Bear Township to Vadnais Lake. Similarly, the old-growth forest of North Oaks and Vadnais/Sucker Park accompanies the lakes and wetlands along the chain of lakes from Charley to Vadnais Lake. Trees that border these channels, wetlands, and floodplains are the buffer that allow the silver-haired bat to adapt and thrive.

From a water resource perspective, what is good for silver-haired bats is also good for the watershed. After decades of "get water away" thinking, we're now realizing that a balanced water cycle includes water on the landscape. By respecting floodplains, wetland, and shoreline buffers, we're investing in water storage, water clarity, and replenished groundwater. The other half of the equation is how we resemble our bat friends, adapting with green infrastructure. Retention basins, raingardens, bio-swales, fescue/"low-mow" lawns, and deep-rooted native plantings help to reduce runoff volume from pavement and rooftops, and support our downstream neighbors.

Silver-haired bats are relevant because like us, they're adapting to a changing world. Together we hang in a balance between development and conservation, control and flexibility, convenience and reciprocity. By being aware of our fellow commuters such as the silver-haired bat, we are better guided in these changing times.

VLAWMO has landscape grants available to help fund native plants, shoreline restorations, raingardens, and other water-friendly landscaping techniques. Visit our website at VLWMO.org/grants or contact us at (651-204-6070) for a free on-site consultation. Join us June 5th at 4:30-5:30 pm at Vadnais Heights City Hall for a free presentation from the U of M on alternative turf (low-mow lawns), soggy yards, and irrigation.

-Nick Voss

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Sources:

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<https://www.desertmuseum.org/kids/bats/Silver-haired.php>

<http://www.batcon.org/resources/media-education/species-profiles/detail/2160>

https://animaldiversity.org/accounts/Lasionycteris_noctivagans/

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