The Plight of Aerial Insectivores

Aerial insectivores – birds that feed on flying insects – have had the steepest population declines of all bird groups in Canada. Their numbers have dropped by an average of 60% since 1970 – a very concerning trend. The causes of population decline are not well understood, but researchers have proposed several drivers. The threats vary for each species, but include:

- Decreased insect abundance
- Environmental contaminants
- Habitat loss (in both breeding and overwintering grounds)
- Mortality during migration

Simple steps to help birds:

- Plant native vegetation
- Protect wetlands and areas of standing water
- Keep pets indoors during breeding season (did you know, domestic cats kill >100 million wild birds in Canada each year?)
- Prevent window collisions by using decals or closing curtains/ blinds
- Buy bird-friendly coffee
- Avoid using pesticides
- Volunteer for a citizen science project!

Aerial Insectivores at risk:

Bank Swallows, Barn Swallows, and Chimney Swifts are all listed as threatened in Ontario, which means the individuals and their habitat are protected under the *Endangered Species Act*. They have all experienced steep population declines over the past few decades. Other aerial insectivores at risk in Ontario include:

- Olive-sided Flycatcher
- Common Nighthawk
- Eastern Whip-poor-will
- Eastern Wood-pewee

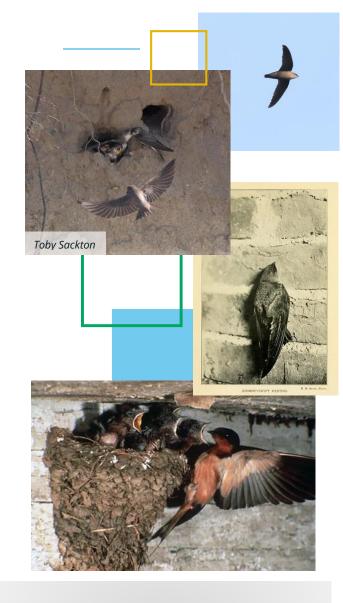
A Plea for the Insects!

Moths, ants, beetles, dragonflies, bees, and other bugs are vulnerable to chemical use and landscape alterations (e.g. draining wetlands).

Stable insect populations provide essential food for the whole suite of aerial insectivores, as well as other critters like frogs, bats, and song birds. Healthy animal populations help our forest, wetland, and aquatic ecosystems thrive!



The Land Between bioregion extends from Georgian Bay to the Ottawa Valley. This is an important ecotone, or transition zone, that contains the physical features and species from the Canadian Shield to the north and the St. Lawrence Lowlands to the south.



AERIAL INSECTIVORES

In The Land Between



Barn Swallows return to their Ontario breeding grounds in mid-May.

Barn Swallows

While historically these birds nested in tree cavities in mature forests, they have adapted well to nesting in human structures like barns, sheds, bridges, or porches. Nesting sites from previous years are often reused.

The best way to help Barn Swallows is to be a good host! Leave doors of barns or old buildings open, or encourage them to nest in a specific location by building a nest platform or shelf. Ensure there is a nearby mud source to help with nest construction.



Chimney Swifts

Before European settlement in North America, Chimney Swifts would nest in rock crevices and holes. They adapted to nesting in stone chimneys. Large flocks of swifts may be seen circling around residential areas.

Recent declines of chimney swifts are attributed to loss or destruction of chimneys, insect declines, and logging practices that remove large trees and dead wood

How you can help:

- Avoid doing work on chimneys during breeding season (May – September)
- Leave large-diameter trees and snags standing
- Report any sightings to Birds Canada's SwiftWatch program



The Canadian population of Chimney Swifts has declined by 95% since 1968. They may be seen flying in large flocks near breeding sites.

Ontario Bank Swallow project

Birds Canada organizes volunteers in a citizen science program to track Bank Swallow sightings and activities across the province. You can help:

- Identify colonies and roost sites
- Re-visit several times a year
- Fill out data forms to submit through Nature Counts

Learn more at:

https://www.birdscanada.org/birdmon/onbans/main .isp

Bank Swallows

These birds build nest tunnels into river banks or other vertical sediment. More recently, Bank Swallows have been tunneling into piles at aggregate pits which is leading to high mortality during breeding season.

To address this: aggregate pit and quarry operators should follow best management practices. You can help this effort by asking businesses questions about their operations.

The population of Bank Swallows in Ontario declined by an estimated 93% from 1970 to 2012.



The Bank Swallow (left) has a dark breast band, while the Northern Rough-winged Swallow (right) does not. Photo: Andy Reago and Chrissy McClarren