



Barn Swallow banding. Photo by J. Quinn

QUESTION

How do nesting structures help protect Barn Swallows?

ANSWER Nesting structures are built to provide new nesting habitat for barn swallows, a species at risk in Ontario. When barn swallows migrate to Ontario in the spring, they often return to nesting locations used the previous year. However, nesting habitat can become unavailable for various reasons, including demolition or renovation of barns, bridges, and other structures where barn swallows typically nest. Providing new nesting structures near the birds' previous nesting location may contribute to the conservation of this species. Our research focuses on assessing if social cues – barn swallow decoys and vocalizations – can be used to attract barn swallows to new nesting structures.

Although barn swallows are still common in southern Ontario, their population declined by an estimated 66% in Ontario from 1970 to 2012. Because loss of nesting habitat is one of several factors that may be contributing to their decline, many organizations are building nesting structures for barn swallows. However, it seems that few barn swallows nest in these new structures. We hypothesized that barn swallows would be more likely to nest at a structure that already had a nesting colony compared to a structure without nesting birds. To make it appear as though a structure had an active nesting colony, we attached wooden barn swallow decoys to the structure and broadcasted barn swallow songs and calls. Many

bird species select habitat based on social cues from other birds, in addition to what we often consider to be habitat characteristics, such as vegetation.

We are collaborating with Bird Studies Canada on the social cues project at ten properties in southern Ontario, including rare. At each property, two new nesting structures were constructed to replace lost nesting habitat, one with decoys and vocalizations, and one with no social cues. We are monitoring how frequently barn swallows visit the structures, both when the birds arrive in the spring and again before they depart in the fall. We are also monitoring if the birds build nests and tracking the success of each nest. So far, some interesting observations include barn swallows responding to the social cues by interacting with the decoys and counter singing with the broadcasted vocalizations. Also, barn swallows have nested at five of the ten properties, including rare. After the 2015 breeding season, we will analyze the data to help us understand if social cues can be used to attract barn swallows to new nesting structures, potentially improving conservation efforts for this species at risk. ■ ■

By Andrew Campomizzi, Research Scientist, Bird Ecology and Conservation Ontario



Barn Swallow structure. Photo by Z. Lebrun-Southcott

ASK A RESEARCHER

You've asked, and we've answered!

Dr. Andrew Campomizzi has worked as an avian ecologist for more than 15 years. He began working with BECO, Bird Ecology and Conservation Ontario, in 2014 after completing post-doctoral research at the Institute of Renewable Natural Resources at Texas A&M University. There has been much curiosity from *rare* gardeners and trail users regarding the new nesting structures erected on the property this spring. If you ever see something on the property that leaves you wondering, don't hesitate to get in touch with us. We welcome your calls and emails to 519-650-9336 or rare@raresites.org.