



Photo by Helga Knotz

Kootenay Bank Swallow Survey

Issue #4: Spring 2020

Research Update on Bank Swallows in Canada

By Dr. Tara Imlay, Landbird Biologist, Canadian Wildlife Service

In March 2020, a group of biologists from academic and non-government institutions, and the federal government, gathered in Saskatoon. The goal of this meeting was to discuss work on aerial insectivore declines from the last eight years and to identify further monitoring and research gaps to address in the future.

Bank Swallows have declined by more than 98% since 1970, making them the most steeply declining species in Canada. While the species is still widespread, the drivers of population declines are poorly understood, and are likely caused by multiple factors on the breeding grounds, migration and during the winter. Past work suggests that despite warmer spring temperatures the species is not breeding earlier, and that a diet rich in aquatic insects is important for successful breeding and migration.

During this meeting, several knowledge gaps were identified

for Bank Swallows. The first is improving survey coverage throughout the range of this species, including river-based surveys on the breeding grounds and expanding eBird coverage in Central and South America during the non-breeding period. Also, on the breeding grounds, collecting data on foraging and roosting habitats used by Bank Swallows is important for identifying critical habitat under the Species at Risk Act. Finally, research to identify migration routes and the wintering areas specific to different breeding populations will inform the threats to these species during

this time, and identify key areas for protecting habitat.

Work begun by the Kootenay Bank Swallow Survey is contributing to addressing these knowledge gaps. The ongoing Bank Swallow surveys in this area will provide crucial information on population trends and changes in distribution in the Kootenays. Also, the strong volunteer base in this region could make it an ideal location for research on local breeding habitat use (e.g., foraging and roosting habitat use), and as a location to track birds during their migration and winter from the breeding grounds.

Assessing and monitoring regional numbers of a nationally threatened species



What we found in 2019

More than 50 Bank Swallow colonies were visited during the 2019 breeding season. Nearly all were active, and several were new to the project. Coverage from the Creston and Radium areas and from Columbia Lake was particularly thorough this past year. Please see page three for a map of all active colonies reported from 2015 through 2019. Additional colonies were discovered late in the summer of 2019, after breeding swallows had left the area, and their status awaits confirmation.

Planning for the 2020 Field Season

Bank Swallows will be returning to southern BC over the next several weeks. We encourage you to report your observations to the project coordinator; contact information is provided on page 4. We are continuing to accept reports of all breeding colonies throughout the region: from Kinbasket in the north, to Rossland and the Flathead in the south.

New for this year is the request to document roosting and foraging sites for the purpose of identifying critical habitat, as outlined in Dr. Imlay's article on page 1.

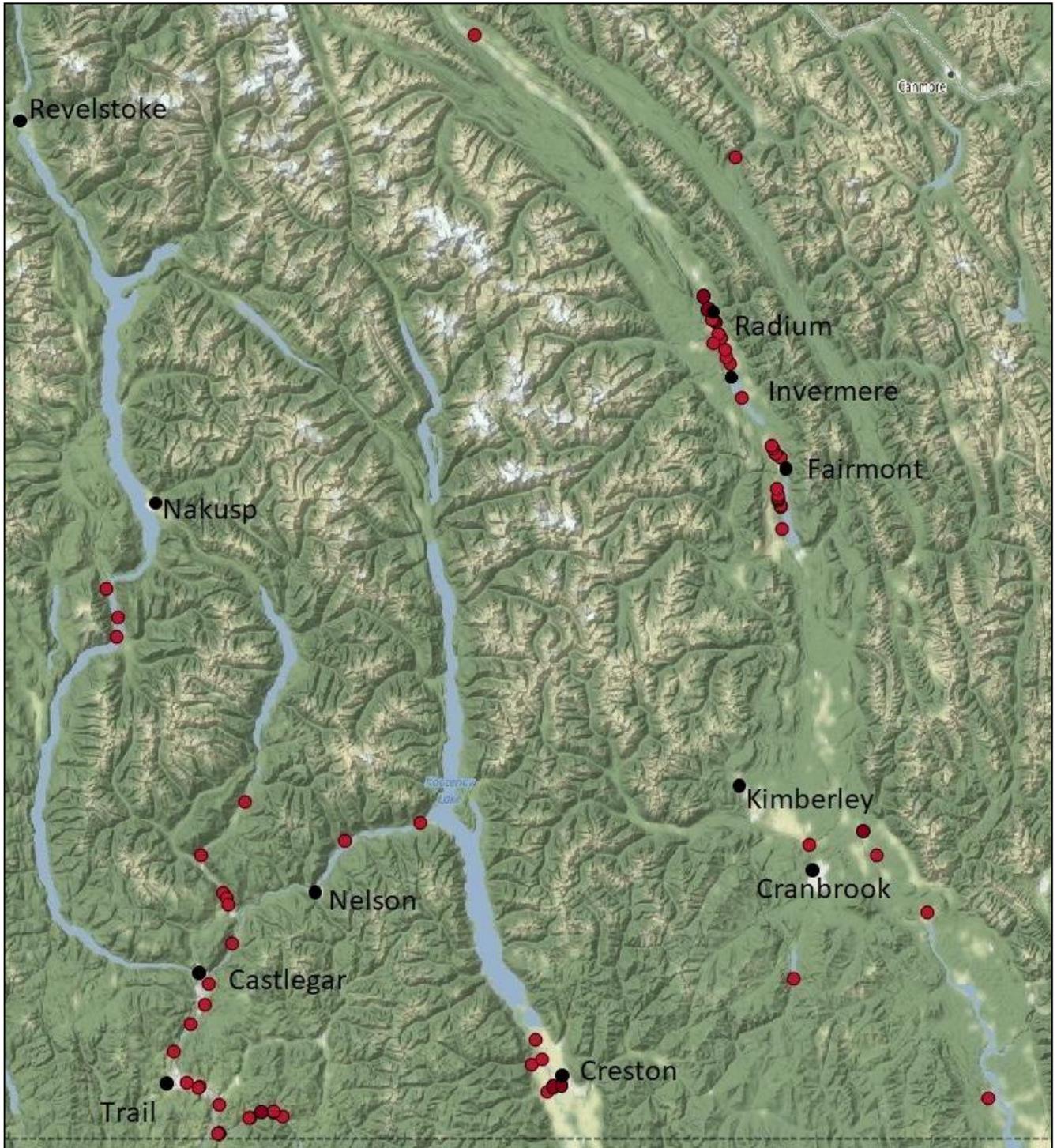
Roosting sites: These are areas where swallows spend the night and therefore are best observed around the time of sunrise and sunset. Studies show that in many areas Bank Swallows roost in cattails and reeds in wetlands, but this hasn't been confirmed here. If you discover a roost, please report the location, habitat type, and number of swallows observed. If multiple swallow species are present, try to estimate the proportion that are Bank Swallows when possible.

Foraging sites: Bank Swallows don't always search for food in the immediate vicinity of their breeding colonies. If you find foraging concentrations of swallows, please record and submit the date and time of the observation, location, habitat type, and number of swallows present.

The Columbia Valley Swallow Project

By Rachel Darvill, Biologist, Goldeneye Ecological Services

The Columbia Valley Swallow Project (CVSP) was initiated this year and it intends to be a two-year project. The main purpose of 2020 will be to determine the location of Bank and Barn swallow nest sites, with an opportunity for volunteers to assist with monitoring. Nest locations and nest success will be used to inform the management of nest sites in the Columbia Valley (Canal Flats to Donald) in 2021. Data will also contribute to provincial and federal recovery planning and implementation processes. In year two, the emphasis of the CVSP will be on-the-ground stewardship and conservation activities such as erecting artificial nesting structures. The CVSP is a project of Wildsight Golden, developed by contractor Goldeneye Ecological Services with financial support from RDEK's Columbia Valley Local Conservation Program, Columbia Basin Trust, Columbia Wetlands Stewardship Partners, Wildsight Invermere and Wildsight Regional. If you'd like to participate or know of any Bank or Barn swallow nest sites in the Columbia Valley please contact CVSP biologist Rachel Darvill at racheldarvill@gmail.com.



The above map shows the locations of all active breeding colonies that have been reported in the past five years. Do you know of a site that's not on the map? Please contact us!



Contribute your observations in 2020!

Please report breeding colonies, roosting sites, and foraging locations in the Kootenay region in 2020.

For breeding colonies that were reported previously, indicate whether they are still active and if there have been any significant changes. Check the map for coverage and report all new colonies encountered. A visit in June or July is ideal. Where possible, please include the following with your report:

- colony location
- date
- photographs
- number of adults
- OR, request a data form from the Project Coordinator.

For roosting and foraging sites please include:

- location
- habitat type
- date and time
- number of swallows

Contact Janice Arndt, Project Coordinator, for more information, and to submit reports and photos:

kootenaybankswallows@gmail.com, or 901 Highway 3A, Nelson BC V1L 6J5.

Please always remember to stay safe when you're in the field, and respect all closures and restrictions.

Past newsletters are available at <https://kootenayconservation.ca/KCPStewardship/swallows-breeding/>

The following individuals reported information on swallow locations in 2019: Justin Arndt, Steve Arndt, Ed Beynon, Hazel Beynon, Fred Bushell, Gary Davidson, Helga Knote, Marlene Machmer, Marcy Mahr, Ulrike Sliworsky, Columbia Lake Stewardship Society members: Tracy Flynn, Mary McGovern and Ellen Storey; and Fish and Wildlife Compensation Program staff: Rob Fox and Thomas Hill. **Thank you!** Also, thanks to Creston Valley Bird Fest, Kootenay Conservation Program, and West Kootenay Naturalists' Association for continuing to promote the Kootenay Bank Swallow Survey through their websites.