2024 Citizen Science Report

Overview

- This year, Montana Audubon had 53 volunteers across 3 citizen science projects, resulting in 66 surveys conducted across Montana.
- We hosted trainings for Long-billed Curlew and screech-owl surveys, and we were able to host an inperson Chimney Swift training in Havre in collaboration with Montana Fish, Wildlife, and Parks. We were also able to host an in-person screech-owl training and survey demonstration as a Master Naturalist course at Montana Wild this past spring with the Montana Discovery Foundation.

2024 Citizen Science projects



Vestern and Eastern **Screech-owl Surveys**

These nocturnal cavity-nesting owls depend on old growth trees in riparian areas. This year, we started a pilot project to survey for these birds throughout the state to assess their conservation needs.



Long-billed Curlew Surveys

For 10 years, we've been working with many partners to learn more about Long-billed Curlews to protect the grasslands and agricultural lands they need for breeding.



Chimney Swift Surveys

We partnered with Montana Fish, Wildlife & Parks throughout eastern Montana to discover where Chimney Swifts are active and breeding; often in towns and near buildings with large chimneys.



We would like to extend a sincere

THANK YOU

to all of our to all of our wonderful volunteers, partners, and to the L.E.A.W Family Foundation, who made these surveys possible!

Western and Eastern Screech-owls

Starting in March we hosted our first statewide survey of Eastern and Western Screech-owls, and 19 volunteers were able to locate 8 screech-owls and 4 other owl species, totaling 42 owls observed across 19 survey routes. The 6 total owl species observed include Western Screech-owl, Eastern Screech-owl, Great Horned Owl, Northern Pygmy Owl, Northern Saw-whet Owl, and Boreal Owl.



Figure 1: Locations and species of owl detections by volunteers in 2024.

Western Screech-owl. Photo by Bob Martinka



Eastern Screech-owl. Photo by Peter Dudley

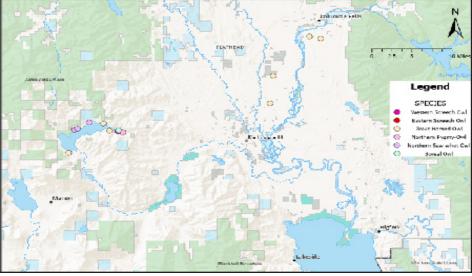
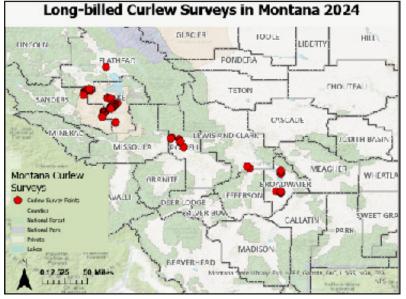


Figure 2: Shows a cluster of detections in Flathead county, indicating an owl hotspot west of Kalispell around Ashley Lake containing 6 species and 9 individual owls around the lake.



Long-billed Curlew

April marked our 10th year of Long-billed Curlew surveys as a part of the Long-billed Curlew Initiative, in collaboration with the Confederated Salish and Kootenai Tribes. 31 volunteers were able to locate 92 Long-billed Curlews and record habitat data across 38 routes, additionally recording 38 different incidental species.





Long-billed Curlew. Photo by Bob Martinka

Figure 3: Locations of Long-billed Curlew survey points completed by volunteers in 2024.

Chimney Swift

Summertime marked another year of Chimney Swift surveys with Montana Fish, Wildlife, and Parks in Eastern Montana, and 4 volunteers were able to collect occupancy and nesting data at 9 different sites, finding a total of 18 Chimney Swifts flying overhead, and 4 Chimney Swifts entering a chimney in Havre, MT.

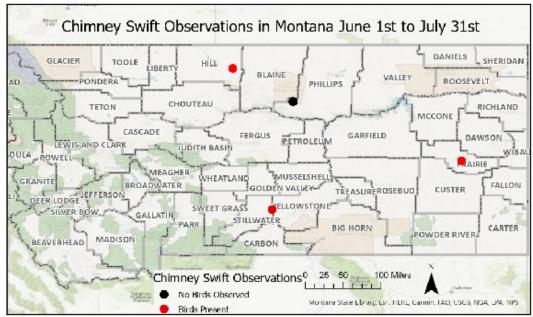


Figure 4: Map of survey locations and observations done by volunteers in 2024.



Chimney Swift. Photo by Bob Martinka



Where does this data go?

All of the data collected by volunteers on these projects goes to the <u>Montana Natural Heritage Program</u>'s database, which contributes to population data of these species. The data help scientists and conservationists assess the species conservation status, which helps to focus research and conservation efforts.

Surveyor Database Scientists Conservation Conservation Plan Action

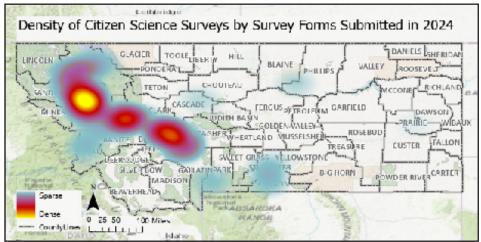
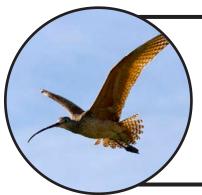


Figure 5: Density of 3 citizen science surveys by location conducted in 2024, with higher survey density pictured in yellow and lower survey density pictured in blue.



What's next?



Want a more in-depth look at the results of any of these projects?

Visit https://mtaudubon.org/birds-science/citizen-science-opportunities/ and click on the project to view the individual project survey report.

Feel free to email Gwynne at **gwynne@mtaudubon.org** with any questions, comments, concerns, or if you'd like to volunteer for any of our projects.

Long-billed Curlew. Photo by Bob Martinka

Keep an eye out for updates on our citizen science projects on Montana Audubon's website, in our email newsletter, and on our social media!



Website & email newsletter:

https://mtaudubon.org/news/



@MontanaAudubon



Bird Species Observed by Project

Screech-owl Surveys

Great Horned Owl Northern Pygmy Owl Northern Saw-whet Owl Boreal Owl Eastern Screech-owl Western Screech-owl

Chimney Swift Surveys

Chimney Swift Violet-green Swallow



Long-billed Curlew Surveys

Long-billed Curlew
Great Blue Heron
Western Meadowlark
Red-winged Blackbird
Savannah Sparrow
Canada Goose
Eurasian Collared-Dove
House Sparrow
American Robin
American Crow
Common Raven

Common Raven
Yellow-headed Blackbird
European Starling
Ring-necked Pheasant
Wilson's Snipe
Killdeer
Tree Swallow



Black-capped Chickadee Vesper Sparrow Lark Sparrow Eastern Kingbird Mallard

Black-billed Magpie Brewer's Blackbird Brown-headed Cowbird Rock Pigeon

Sora Western Tanager Ring-billed Gull

Thank you to our volunteers!

Screech-owl Surveys

Adrianna Carter Aleda Miller Beth Hill Bob Martinka Carrie Jamrogowicz Catherine Frazer Chelsea Klocke Christian Meny Don Skaar Eliza Lindley Erica Sall Jenny Hook **Jess Garby** Karen Nichols Kristen Bontadelli Lauren Smith Lea Frye Malinda Siegel Olivia Schwartz

Long-billed Curlew Surveys

Andrea Stephens Bruce Fields Carla Belski Carol Fox Chelsea Klocke Chris Scranton Cindy Holder Darcy Thomas Elaine Caton Jacob Lilley Jenny Hook Jess Garby John Walden **Judith Strom** Judy Watkins Kristen Bontadelli Libby Langston Liz Hiltunen Lvnda Saul Maci MacPherson Mary Mai

Pam Scranton

Pamela Willison Patsi Pohle Phil and Jill Rod Wallette Veronica Cooley CSKT Biologists

Chimney Swift Surveys

Amber Langley Anne Holub Madison Coyer Nick Janz





Tyler Dean

Quinn Sullivan

Solomon Garza