

SAGEBRUSH SONGBIRD SURVEY ANNUAL REPORT

2018 FIELD SEASON

A community science partnership of Audubon Washington, the National Audubon Society, Audubon chapters, and the Washington Department of Fish and Wildlife



Mountain Bluebird. Photo: Bruce McCammon

MESSAGE FROM THE PROGRAM DIRECTOR

Hats off to our volunteers for another exceptional year of effort, persistence, and determination. These volunteers flew high for the birds and the Columbia Plateau sagebrush steppe habitat, and our accomplishments reflect that! This year we were grateful to have a Puget Sound team join the project, including volunteers from four Audubon chapters, the Washington Ornithological Society and the Puget Sound Bird Observatory. As a result of this extra effort, volunteers donated 37% more hours and surveyed 25% more sites. Chapter

participation was at its highest yet—11 of the 25 Audubon chapters in Washington.

2018 was also a year of wildland fire. Although forest fires and the smoke they generate tend to get a lot of public attention, rangeland fires increasingly impact large areas of sagebrush steppe. In 2018, nearly 163,000 acres of sagebrush habitat burned, putting us in the top three of western states for sagebrush burned.

In addition to habitat loss, fire impacts our project when survey sites burn. Fires in Chelan, Okanogan, Douglas, Benton and Yakima Counties have burned large swaths of public lands, forcing us to establish new survey

sites. Activities at an informal gun range ignited two wildfires adjacent to a Wenas survey site in 2015 and 2017. Fortunately, the wind blew both fires away from our survey site. However, we were not so fortunate this summer when the Grass Valley Fire consumed three sites surveyed in past years, and all seven adjacent potential survey sites.

As we approach the final year of our field survey, we're putting every effort into making sure we finish strong, even as we begin anticipating the new information that will come from this work. Like you, we can't wait to see this data put to work protecting sagebrush birds and habitat.

Christi Norman

BY THE NUMBERS: 2018 FIELD SEASON SCIENCE STATS

SITES SURVEYED

80

SURVEYS COMPLETED

240

VOLUNTEER HOURS

4,340

VOLUNTEERS

118

SITES WITH FOCAL STUDY
SPECIES (2014-2018)

158 OUT OF 283

THE SCIENCE BEHIND THE SURVEY

The Sagebrush Songbird Survey engages local communities in protecting sagebrush songbirds by deploying trained volunteers to survey for sagebrush birds in potential habitat areas across the Columbia Plateau. When first envisioned, the sagebrush songbird project focused on filling an information gap in our understanding of how birds were responding to the relentless loss, fragmentation, and degradation of sagebrush habitat.

From this, the Sagebrush Songbird Survey was born, a landscape-level effort to document the presence of sagebrush obligate and associated birds across a range of habitats. The

data collected in this survey program will improve species distribution models for sagebrush birds.

These models are used in a variety of land use planning tools, like the Western Association of Fish and Wildlife Agencies Crucial Habitat Assessment Tool. Having better models will result in more bird-friendly land management and planning across Washington State. In addition, our data is incorporated into the Washington Department of Fish and Wildlife Priority Habitats and Species database, a legally-recognized source for best available science in our state.

How does it all work?

Using ArcGIS online to identify and assess potential sagebrush steppe habitat areas in the Columbia Plateau, sites are selected and ground-truthed by adventurous volunteers. Once a site is established, it's surveyed by volunteers on a monthly basis during the spring breeding season to document the presence or absence of

sagebrush songbird species. Our data undergo quality control and results are entered into eBird – the world's largest biodiversity database. After that, we summarize the year's results and then it's on to the next field season and the next round of sites!

What makes our survey unique?

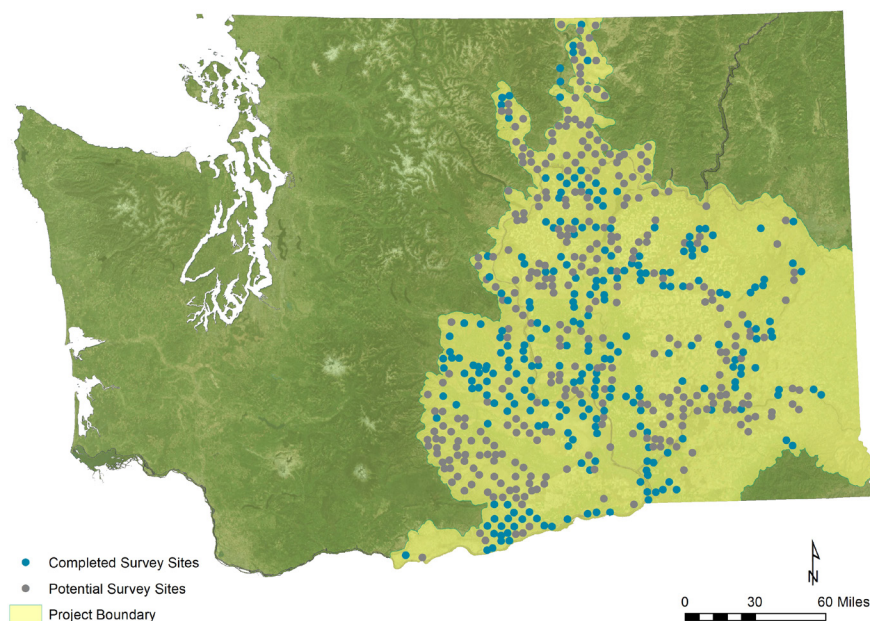
- We work with the entire suite of public landowners in the Columbia Plateau, creating a common body of field data that can be compared across land ownership types and management regimens.
- We collect landscape-scale bird data that will help identify limiting factors in species occurrence across sagebrush habitat conditions, and improve conservation effectiveness by supplying more refined models of species distribution in remaining sagebrush areas.
- We work directly with private landowners and lease holders, engaging them through invitations to participate in the surveys and by survey results.

“VOLUNTEERS FOLLOW 5 FIRE TIPS FOR BIRDING IN SAGE COUNTRY TO STAY SAFE AND PREVENT FIRE ON BIRD SURVEYS.”



Brewer's Sparrow Nest. Photo: Wildreturn

Public Land Survey Site Locations



KEEPING BIRDS ON THE LAND

Rangeland fire poses a risk to people, livelihoods, ecosystems, and wildlife and is the number one threat to sagebrush habitat in our state. Historically, fire frequency in sagebrush systems was low, and the fires that did occur were smaller. These smaller fires promoted a mosaic of sagebrush steppe habitat types in different stages of succession. Today, fragmented and degraded shrub-steppe areas are prone to exotic cheatgrass invasion, which in turn makes those areas more susceptible to fire. This shortens the fire cycle and can prevent sagebrush recovery altogether. From a bird perspective, that's less habitat, fewer places to nest and potentially a missed breeding season as they are forced to disperse to new areas.

Audubon WA is working with a variety of partners to pursue policy solutions to improve rangeland fire response and management. We hope you will join us in advocating for these solutions in 2019.



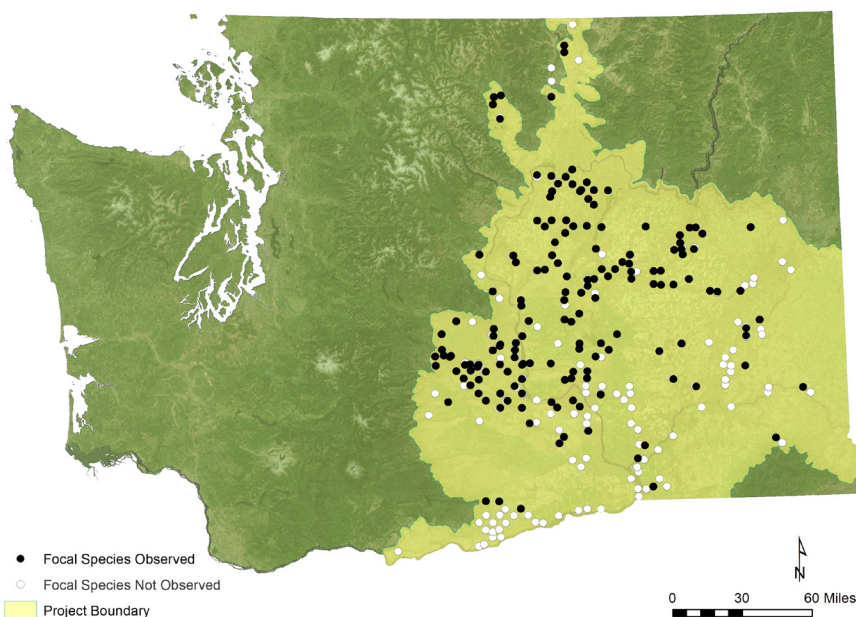
Brewer's Sparrow. Photo: Alice Taylor

TOP 10 SPECIES OBSERVED IN 2018 SURVEYS

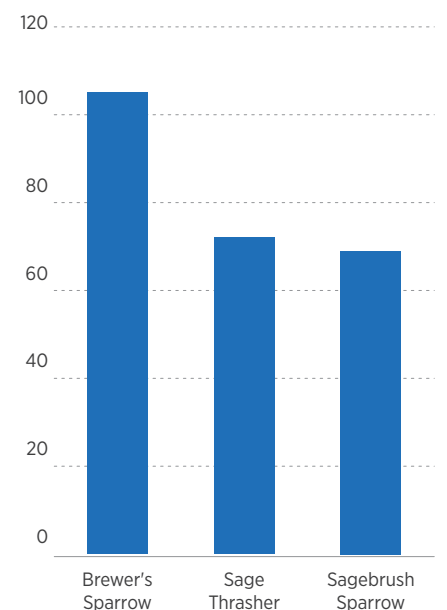
- Western Meadowlark
- Cliff Swallow
- Canada Goose
- Horned Lark
- Vesper Sparrow
- Brewer's Sparrow*
- Red-winged Blackbird
- Common Raven
- House Sparrow
- White-crowned Sparrow

** focal study species*

Location of 2014–2018 Survey Sites with Focal Study Species Observed



Number of Survey Sites where Focal Species Have Been Observed (2014-2018)





Lindell Haggin

THANK YOU TO CHAPTER LEADERS AND VOLUNTEERS

There is no rest for chapter leaders and field volunteers when it comes to the technology used in this project. Each of our 5 years has been a new learning experience for community scientists who continually absorb and embrace changes in ArcGIS online, GPS, and eBird. Leaders train their volunteer teams, resulting in improved survey protocol adherence and quality data.

VOLUNTEER SPOTLIGHT

Lindell Haggin is one of our favorite people to survey with, guiding our ears to the flutter of Sharp-tailed Grouse dancing feet beneath the tinkle of Sage Thrasher and Brewer's Sparrow melodies. Her gift for organization means she's the first to have the sites ready to survey, to train her chapter team, and to submit field data. She has deep roots in Spokane

Audubon territory, is conversant with local farmers and ranchers, and is even recruiting a new generation of volunteers.

WHAT TO EXPECT IN 2019

We will complete field surveys in 2019 – a full year earlier than planned! This year we will focus on surveying private lands to fill the geographic holes in our coverage of the Columbia Plateau, especially the Columbia Gorge, the Methow and the Okanogan.

We are embarking on an effort to **MAKE IT MATTER** – identifying how we'll use this data to protect sagebrush birds and habitat and the strategies to get us there.

To tell our story and the story of this awesome landscape and its inhabitants, get your camera ready to record your sagebrush steppe inspiration for our Sagebrush Sea Photo Contest.



Birding-by-Ear Training. Photo: Bruce McCammon