

Community Science for Conservation: Engaging Oregonians in the Pacific Northwest Bumble Bee Atlas

A Final Report from the Xerces Society

December 2021

Overview

With support from the Oregon Conservation and Recreation Fund (OCRF), the Xerces Society engaged volunteers across Oregon in a community science project to complete a statewide bumble bee survey. Over the last year, within Oregon, 162 individuals submitted photographs of 3,261 bumble bees from eight of the nine Strategy Ecoregions in the state (all but the nearshore ecoregion). The bumble bee records submitted include observations of one Strategic Species and three Data Gap Species listed in the Oregon Conservation Strategy. These observations will help to fill identified data gaps for all of these species. This project also provided wildlife watching and outdoor recreational opportunities for Oregonians of all ages throughout the state as volunteers learned to identify native bumble bees and conduct surveys in different habitats. Below is an overview of the project and the specific objectives achieved.

Objectives

1. We will provide two training workshops to 30 people each (60 people total) in southern and eastern Oregon, where participation in the Pacific Northwest Bumble Bee Atlas has been lower in the past, in order to recruit participants from that region. At least one of the workshops will be recorded and made available online to other volunteers.

With the ongoing global pandemic, Xerces Society staff, with permission from OCRF, slightly changed our approach to this objective by doing three smaller in-person events targeted toward eastern Oregon and one larger webinar targeted toward southern Oregon.

Toward this objective, Xerces Society staff led the following three small workshops in eastern Oregon in June:

1. A small workshop near Joseph, OR with individuals from the Nez Perce Tribe on June 16. Total non-Xerces staff attendance was 11 individuals.
2. A small workshop near Pendleton, OR with the Confederated Tribes of the Umatilla Reservation (CTUIR) on June 23. Total non-Xerces staff attendance was six individuals.
3. A small workshop near Ritter, OR with the Greater Hells Canyon Council (GHCC) on June 24-25. Total non-Xerces staff attendance was seven.

Xerces Society staff also led one large webinar on July 8, 2021 with a focus on southern Oregon by directing volunteers toward surveys for the now Federally Endangered, and Oregon state Strategy Species, Franklin's bumble bee (*Bombus franklini*) – which is endemic to southern Oregon and northern California. This webinar was attended by at least 121 individuals (or unique views, it is possible that more than one person watched at a single computer).

Total direct reach under this objective: 145 individuals.

2. We will engage at least 150 volunteers throughout the state to contribute to this community science project, provide support to these volunteers, coordinate surveys and data submission, and manage the data they collect.

Toward this objective, Xerces Society staff conducted weekly outreach via e-newsletters, Social Media (Instagram and Twitter), and direct outreach via phone and email. Throughout 2021, **162 individuals contributed** data to the Pacific Northwest Bumble Bee Atlas in the state of Oregon. These 162 individuals conducted a total of 279 surveys for bumble bees throughout Oregon and submitted 3,261 bumble bee observations, including 282 observations of species listed in the Oregon Conservation Strategy (See Table 1 below).

Table 1: Observations of Oregon Conservation Strategy species by the Pacific Northwest Bumble Bee Atlas in Oregon.

<i>Bombus</i> sp.	Common Name	Oregon Conservation Strategy Status	Observations
<i>caliginosus</i>	Obscure bumble bee	Data Gap Species	58
<i>fervidus</i>	Yellow bumble bee	Data Gap Species	180
<i>morrisoni</i>	Morrison's bumble bee	Data Gap Species	1
<i>occidentalis</i>	Western bumble bee	Strategic Species	43
Total			282

3. Through the workshops, additional online content, and social media, we will provide a basic introduction to bumble bees, their identification, and conservation, which will make a novel type of wildlife-watching more accessible to Oregonians statewide.

Toward this objective, Xerces Society Staff developed interactive and educational social media content posted to our [Instagram](#) and [Twitter](#) pages using the @oregonisalive and #OregonIsAlive handles/hashtags, respectively, to promote participation in Oregon and our support from OCRF. We also posted informational and [training](#) videos to our website, and developed a [unique portal](#) (including a recording of the workshop we delivered) to direct volunteers toward surveys for Franklin’s bumble bee in southern Oregon.

Example Tweets:

- <https://twitter.com/pnwbumblebees/status/1388502237597552641>
- <https://twitter.com/pnwbumblebees/status/1406482735221280770>
- <https://twitter.com/pnwbumblebees/status/1405153672716120068>
- <https://twitter.com/pnwbumblebees/status/1404634478178308103>

Example Instagram Posts:

- https://www.instagram.com/p/CRAxdxPLxpu/?utm_source=ig_web_copy_link
- https://www.instagram.com/p/CQJZ7n0ny8e/?utm_source=ig_web_copy_link
- https://www.instagram.com/p/CQH_Hbln4wo/?utm_source=ig_web_copy_link