

Plover Patrol Program: Western Snowy Plover monitoring on the North Coast
Oregon Conservation and Recreation Fund (OCRF) Grant (Agreement 305-21) support to
Portland Audubon



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We thank the Oregon Department of Fish and Wildlife Oregon Conservation Recreation Fund for supporting the Plover Patrol program led by Portland Audubon in partnership with Oregon Parks and Recreation Department. Below we provide a summary of how the funds provided by OCRF were utilized to advance the Plover Patrol program and helped build further success of the program. We report accomplishments per grantee responsibility as listed in the grant agreement:

- 1) ORBIC, as a Plover Patrol partner, adds a critical component to lead the field training of Portland Audubon's Volunteer Coordinator site visit check-ins. This would also provide a connection to ORBIC's plover work on the central and south coast.**

Multiple trainings were conducted at ORBIC sites on the central and south coast field sites (6 sites in Lane and Coos Counties) as well as on Plover Patrol sites on the North Coast (4 sites in Tillamook and Clatsop Counties). Trainings were conducted by ORBIC biologist Daniel Farrar and attended by Allison Anholt, Portland Audubon Coastal Community Science Biologist. Trainings consisted of:

- Overall nest monitoring protocol training and knowledge exchange to ensure consistency of methods between the ORBIC plover sites with the Snowy Plover Management Areas (SPMAs) of the North Coast sites run by Plover Patrol (Portland Audubon and OPRD).

- Allison Anholt visited ORBIC sites in April 2022 for instruction on using trail cameras to monitor plover nests to identify predators as well as appropriate technique to float plover eggs to estimate incubation age.
- Daniel Farrar visited north coast Plover Patrol sites twice in May 2022. Once to participate in field training and the second trip to help select sites for camera monitoring and to assess habitat restoration projects.
- We also worked with ORBIC on standardizing their banding database so that data across Oregon (as well as Washington) can be utilized by researchers to investigate questions about plover survivorship and dispersal to inform subsequent management decisions. This work is still ongoing and we plan to continue working with ORBIC on this beyond the timeline of this grant.

2) Provide comprehensive monitoring coverage of North Coast Snowy Plover Management Areas (SPMAs) to document plover breeding success (occupied sites) and presence/absence of plovers. Collect information on habitat characteristics, predator assemblage, and human use that will inform timely and effective management of SPMAs by OPRD.

Support from OCRF aided in increased coverage of the Plover Patrol monitoring sites. Overall, 2022 represented the most productive year in Plover Patrol history, with a record 19 chicks fledged across all sites! The hatch rate was also the highest recorded, with 30% of monitored nests hatching. Forty-four nests were found and monitored by volunteers, the highest number of nests so far in the program’s history (Fig. 1). Volunteers recorded 3,160 potential predators across all sites during surveys, including both animals seen and signs of animals (tracks, scat, nest destructions) (Fig. 2). Gulls accounted for 75% of the potential predator observations (2,374 of 3,157). The increased data collection is helping inform management decisions to help in plover recovery efforts.

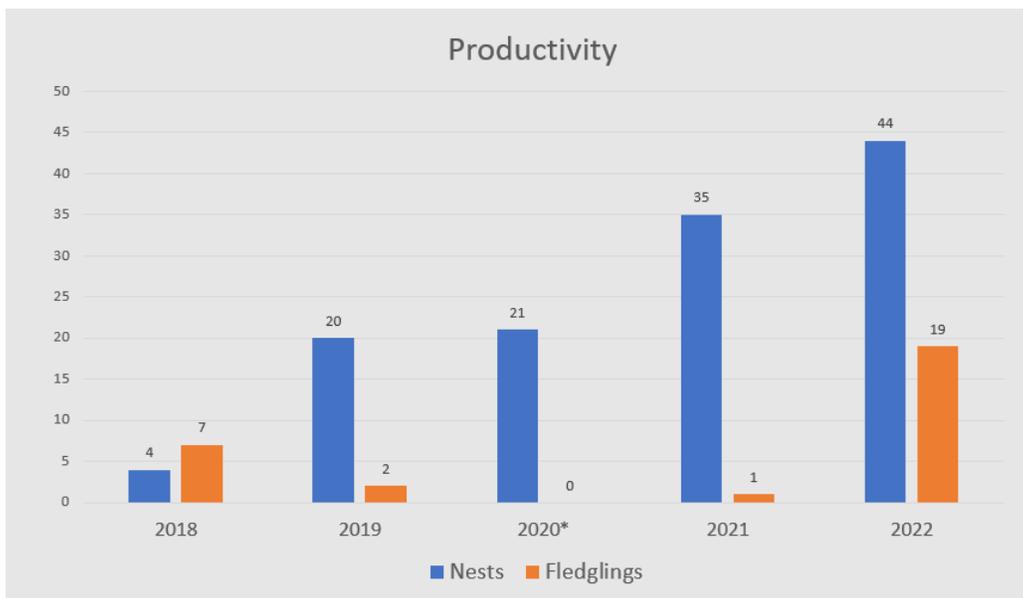


Figure 1. Productivity by nests and fledglings throughout the years of the Plover Patrol program.

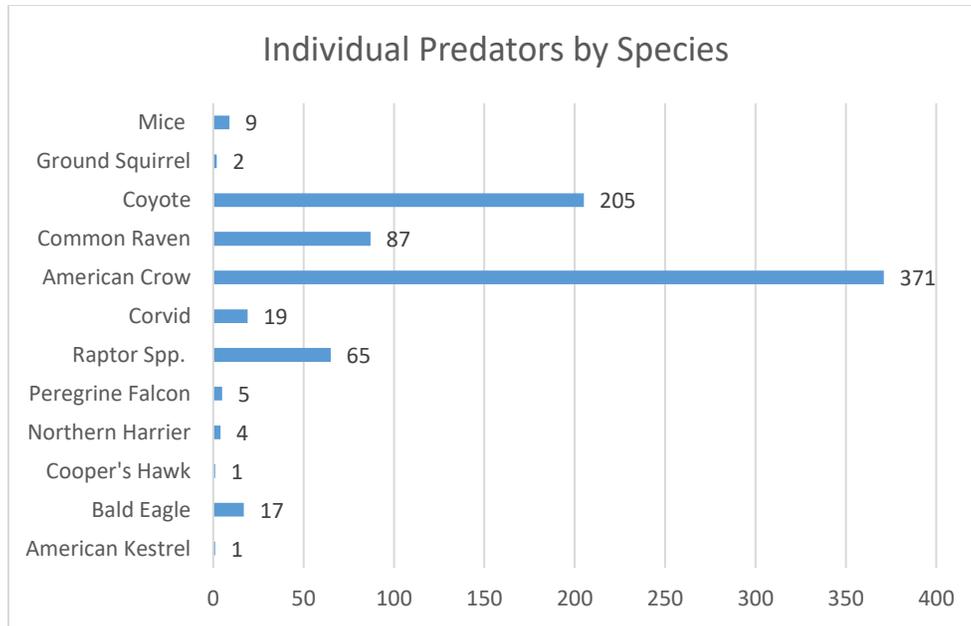


Figure 2. Potential Predators detected by volunteers during surveys conducted in 2022, excluding gull species.

3) Build on the existing volunteer base by recruiting up to 10-20 new volunteers.

In 2022 we ramped up volunteer participation considerably (Fig. 3). In total, volunteers spent almost 400 hours conducting 213 surveys! While nesting surveys were conducted a maximum of 2x/week at each site, we were able to provide volunteers with opportunities to conduct presence/absence “wet sand” surveys, which allowed volunteers to record birds migrating, breeding, or foraging on SPMA without disturbing actively incubating birds. These surveys yield important information about how the sites are utilized by Snowy Plovers, and provide more “eyes on the beach” to record predator interactions and disturbance factors by beachgoers, as well as provide informal outreach opportunities to beachgoers about Snowy Plovers and the importance of conservation measures.

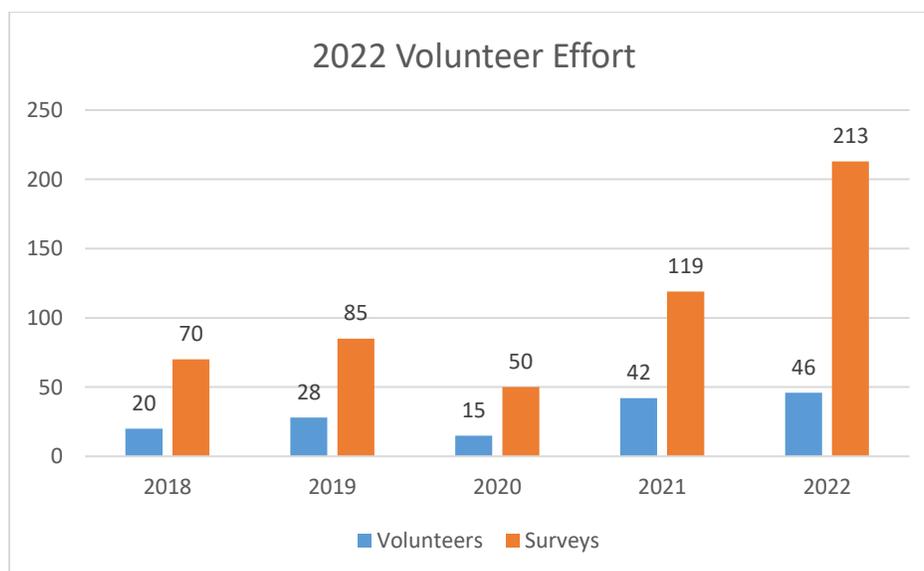


Figure 3. Volunteer effort throughout the years of the Plover Patrol program.

4) High volunteer retention (providing swag, volunteer appreciation event, and project updates during the season).

We have not only increased volunteer participation but also have demonstrated high volunteer retention (40% of previous 2021 volunteers). A major focus of 2022 was to provide volunteers with advanced skill sets accomplishing this important work, as well as a sense of cohesion and community with fellow volunteers. To that end, we provided volunteers with multiple training opportunities both virtually and in the field. In total, we trained over 90 people in those virtual and training opportunities. To provide a sense of community, we hosted two post-season volunteer events: one in person in August, and one season wrap-up event in October that was held virtually. Finally, we provided volunteers with Plover Patrol hats and stickers for their involvement in the program.



Figure 4. In-person volunteer appreciation event (Aug. 2022). A return to normal!

- 5) Engage with over 300 coastal residents on plover conservation efforts via outreach. Engage with thousands of people via Portland Audubon social media posts.**
- 6) Educate, raise awareness and support of plover conservation in focused in coastal communities near North Coast plover SPMA in partnership with Audubon Society of Lincoln City, Friends of Netarts Bay, Friends of Cape Falcon. Together, by providing monitoring data which improves plover habitat management and increasing public awareness and appreciation, this program will directly contribute to the recovery of Western Snowy Plover populations in the North Coast, and indirectly support recovery region wide.**

We were able to expand reach of the Plover Patrol program this year in many ways. In 2022, we conducted 5 plover Interpretive Walks which were open to the public providing them a glimpse into the world of Snowy Plovers and their conservation challenges. In addition, we partnered with local conservation organizations and Oregon State Parks to expand our reach and provide three other

walks, one for touring RV campers at Clatsop Spit, another for the Northwest Aquatic and Marine Educators at Netarts Spit in collaboration with the Friends of Netarts Bay, and a third at Cape Lookout State Parks as a part of their celebration to the ocean, hosted by the Huehca Omeyocan group dedicated to promoting the cultural practices of the pre-Hispanic Mesoamerican peoples. In total, we had 110 participants attend these eight walks.

We also presented about the Plover Patrol program to three different local community groups this year: Oregon Shores Coastal Conservation Coalition and the Vancouver Audubon Society, as well as the Seaside Aquarium coming up in December. We expect our total reach from these talks to be around 100 people.

We also had local newspaper write-ups about our program this year at the Tillamook County Headlight Herald and Oregon Coast Today, and an article in Portland Audubon's *Warbler* magazine. We also periodically highlighted the project on social media as did our partners including OPRD, Oregon Shores, and Friends of Netarts Bay. On Instagram alone, there were 8,525 likes on 7 social media posts from Portland Audubon. Here is one example:

<https://www.instagram.com/p/Cbf8xLvhtal/>

The events, newsprint articles, and social media posts have helped expand our reach to thousands of Oregonians and serve as a way to attract new volunteers or educate local residents.



Figure 5. Snowy Plover interpretive walk at Clatsop Spit (June 2022).



Figure 6. Daniel Farrar of ORBIC floating a Snowy Plover egg to determine age.



Figure 7. One of the many color-banded Snowy Plovers resighted by Plover Patrol volunteers