Grant Application

Lindsay McNamara

Email: Imcnamara@abcbirds.org
Application ID: A30ML76

Custom Ref. -

Application Start Date: 2022-04-21 18:49:24
Application Completed Date: 2022-05-09 22:54:22



1	Have you ever applied for an OWF grant before?
	yes
1.1	What was the name of the project?
	Conspecific Attraction to Establish Populations of Oregon Vesper Sparrow on Prairie and Savannah Conservation Lands
2	Have you ever been denied for an OWF grant before?
	no
3	Project Title
	Keeping Wildlife Wild in Oregon
4	Name of my Organization
	American Bird Conservancy
5	If your organization is not a tax-exempt nonprofit, please list the name of your fiscal sponsor
	If this does not apply to you, write N/A
	N/A
6	Project Manager Full Name
	Lindsay Adrean
7	Project Manager Mailing Address
	Please enter full address with city, state & zip
	P.O. Box 920 Veneta, OR 97487

8	Project Manager Phone Number				
	541-286-6871				
9	Project Manager Email Address				
	ladrean@abcbirds.org				
10	Please provide a brief biographical statement about yourself				
	Lindsay Adrean is a conservation biologist whose work focuses on developing methods for people and birds to coexist in harmony.				
	After receiving an M.S. degree in Wildlife Science at Oregon State University, Lindsay worked as a biologist at the Oregon Department of Fish and Wildlife coordinating management strategies to reduce waterbird predation on juvenile salmonids on the				
	Oregon Coast, and implementing the Oregon Conservation Strategy around the state. She subsequently held a research position				
	with Oregon State University studying Marbled Murrelet movements and breeding success in the Coast Range. In her current position as Northwest Program Officer with American Bird Conservancy, Lindsay is utilizing her knowledge of murrelet research to				
	implement on the ground conservation actions. American Bird Conservancy places emphasis on building partnerships to achieve				
	conservation goals, which is what drew Lindsay to the organization. Her goal in this position is to enhance the capacity of				
	landowners, public organizations, and everyday people to incorporate bird conservation into their routine activities.				
11	Provide any social media handles you use -				
	Enter social handles or URLs such as instagram, facebook, twitter, youtube, etc. so that we can use to cross promote on our				
	channels - if you do not have any, please place N/A				
	Twitter: @ABCbirds Facebook: https://www.facebook.com/AmericanBirdConserve/ Instagram:				
	https://instagram.com/americanbirdconservancy?igshid=YmMyMTA2M2Y=				
12	Please indicate if you are currently following Oregon Wildlife Foundation on our social media channels				
	- Facebook				
	- Instagram - Twitter				
	- YouTube				
13	Total estimated project cost				
	14912.31				
14	Funding that you are requesting from OWF - If you're request is for more than \$5,000, please contact Tim Greseth - tim@myowf.org before submitting your application.				
	5000				
	3000				
15	What type of project are your proposing?				
	Wildlife				

Will your project address an Oregon Conservation Strategy habitat or species?

16

16.1	What habitat or species is addressed?		
	The Marbled Murrelet and Western Snowy Plover are strategy species. Late successional mixed conifer forests of the Coast Range is murrelet breeding habitat and a Strategy Habitat. The Coastal Dunes Strategy Habitat is the year-round home of the Western Snowy Plover.		
17	Start date of project- Day/Month/Year		
	27-05-2022		
18	End date of project		
	01-10-2023		
19	Location of project		
	Lincoln and Lane Counties, Oregon		
20	Has a local, state or federal biologist reviewed this project?		
	yes		
20.1	What is their name and contact info?		
	Deanna Williams, U.S. Forest Service, email: deanna.williams@usda.gov		
21	Have you already or will you obtain necessary permits from all requisite agencies as applicable to proposed project?		
	yes		
22	What will the requested funds be used for?		
	These funds will be used for fuel and lodging (camping) during data collection, and to purchase signage and interpretive materials		

These funds will be used for fuel and lodging (camping) during data collection, and to purchase signage and interpretive materials for distribution to project partners.

Our goal is to build on the "Keep Wildlife Wild" program that was developed by the United States Forest Service Siuslaw National Forest (hereafter Siuslaw NF) and incorporate some aspects of the "Crumb Clean" campaign developed by California State Parks to reduce negative human influences on endangered wildlife. This combined campaign uses infrastructure such as dishwashing stations, wildlife-proof trash cans, and food storage lockers to reduce or eliminate the amount of food waste available to wildlife. The infrastructure is paired with an education campaign which includes signs, interpretive presentations, and community engagement to encourage recreation users to properly store and manage their food and food waste. For 2022, we will conduct the preliminary spatial analysis needed to identify and prioritize recreation sites for enrollment in the program (in 2022 and beyond) and provide signs and interpretive materials to partners for immediate use. California State Parks has shared their sign designs for our use or modification. The Oregon Department of Forestry (ODF) has already approved one of the sign designs which will be updated with the logos of participating partners and installed at trailheads and informational kiosks. Siuslaw NF will update and reinstate their interpretive program with the addition of new materials. Interpretive rangers can begin using materials as soon as they are ready. Signs will be used at campgrounds, day use sites, trailheads, and other appropriate locations. For the spatial analysis, a graduate student from the University of Wisconsin will obtain spatial data on murrelet and plover habitat along with recreation site locations on public lands owned by Siuslaw NF, ODF, and Oregon Parks and Recreation Department. The student will also travel along the Oregon Coast and in the Coast Range to gather data on recreation sites (amount of visitation, numbers and types of signs needed, presence and status of dishwashing stations, wildlife proof garbage cans, and food storage lockers). The habitat and recreation site location data will be overlaid to develop a list of recreation sites in or near murrelet and plover habitat. This effort will inform the distribution of educational components of different styles to these landowners to begin project implementation at recreation sites. For interpretive presentations, we will purchase materials developed by or updated from the "Keep Wildlife Wild" and "Crumb Clean" programs, such as fliers, stickers, and custom Marbled Murrelet and Western Snowy Plover hand puppets. The final product of this analysis will be a spatial database that can be queried for the locations and usage of recreation sites in or near murrelet and plover habitat along with the different types and quantities of additional program supplies needed at each site in future years, such as dishwashing stations, food storage lockers, and signs. Sites can be prioritized based on their location, the amount of visitation they receive, or the existing infrastructure. This will allow us to develop an appropriate budget as we seek long-term funding sources for this program, and efficiently implement the program with existing resources in an informed manner. The database will also be continually updated and added to as program capacity increases. At a minimum, we expect the graduate student to gather data on recreation sites in the Coast Range and along the beaches of the central Oregon coast between Newport and Florence and up to approximately 20 miles inland for the first year.

24 Upload pre-project pictures or a video -

By submitting these photos or video I warrant that I am the legal owner of this media and grant the Foundation permission to reproduce, exhibit, or publish them for all general purposes in relation to Oregon Wildlife Foundation's work. If you have questions about photo or video submissions please refer to myowf.org/grants for guidance.





1 Document Uploaded





Project Revenue	Cash	In-Kind	Committed / Pending
Oregon Wildlife Foundation Request	5000	0	Pending
American Bird Conservancy	1000	4260.66	Committed
California State Parks (Sign Design)	0		Committed
US Forest Service, Interpretive Coordinator \$310.11 x 15 hrs	0	4651.65	Committed
	0	0	
	0	0	
	0	0	
	0	0	
	0	0	
	0	0	
	0	0	
REVENUE	6000.00	8912.31	
		TOTAL PROJECT SUPPORT	0.00
Project Expenses	Cash	In-Kind	Total
Aluminum Signs	3000	0	3000.00
Stickers	350	0	350.00
Hand Puppets	500	0	500.00
Educational Flier	200	0	200.00
Camping Fee	1450	0	1450.00
Fuel	500	0	500.00
American Bird Conservancy Indirect	0	312.48	312.48
American Bird Conservancy Salary	0	3124.80	3124.80
American Bird Conservancy Fringe Benefits	0	823.38	823.38
US Forest Service Interpretive Coordinator	0	4651.65	4651.65
	0	0	0.00
	0	0	0.00
	0	0	0.00
	0	0	0.00
		TOTAL PROJECT EXPENSES	0.00
Balanced budget? This cell should read "0">		NET	0.00

- Upload your Project Narrative Please make sure your narrative is no more than 7 pages long, single spaced, 12 pt. font (Calibri preferred).
 - 1 Document Uploaded
- 27 Upload letters of support
 - 1 Document Uploaded
- I understand that I am required to submit a Project Completion Report, copies of any publications or social media posts crediting the Foundation's support, and post-project pictures at the completion of my project

yes

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— Grant Application

Lindsay McNamara

Application ID: A30ML76



Keeping Wildlife Wild in Oregon

The Marbled Murrelet is a seabird that is distinct in its dependency on coastal late successional and old growth forests for nesting. Although this small black and white seabird spends most of its life at sea foraging for small fish and invertebrates, it will fly up to 50 miles inland to lay and incubate a single egg in a nest hundreds of feet off the ground in the forest canopy. This occurs after its plumage morphs to a mottled cinnamon brown for the spring and summer breeding season, which provides camouflage in coastal forests. Since the 19th century, there has been a reduction in the amount of mature forest habitat along the Pacific Northwest coast due to timber harvest and wildfires. During this same timeframe, the population of the Marbled Murrelet declined substantially. This species was listed under the federal U.S. Endangered Species act as "Threatened" in Washington, Oregon, and California in 1992. All three states subsequently listed the species as endangered under their state Endangered Species Acts, with Oregon being the most recent to make this decision (July 2021).

The Western Snowy Plover is a beach nesting shorebird that prefers open, sparsely vegetated coastal beaches, salt flats, and the shore of inland alkaline lakes. The overall light color of the plumage provides camouflage in these habitats. Along the Pacific Coast, the Snowy Plover breeds from Washington to the Baja Peninsula. This bird forages by sight while running back and forth over the open sandy habitats where it is found and pecking at invertebrate prey. Nests are laid in the open on small hollows in the sand, with only nearby bits of driftwood, vegetation, or other shoreline debris as cover. Habitat loss, predation, and human disturbance are some of the factors contributing to this species' decline. The Western Snowy Plover was federally listed as "Threatened" in 1993, and is state listed in Oregon as well.

For Marbled Murrelets, recent research has shown that the loss of old forest and warming ocean conditions experienced in this region together reduce the rates of murrelets detected in nesting areas (Betts et al., 2020). With these forces at work, it has become imperative that the factors affecting nest success itself be addressed in order to maximize the number of fledglings produced in any one year. Nest success has been low in studies conducted across Washington, Oregon, and California, with a reported estimate of 20% for Washington (Lorenz et al. 2019). Nest predation by avian predators of the corvid family, such as the Steller's Jay and Common Raven, is the leading documented cause of nest failure (Singer et al. 1991, Peery et al. 2004, Hebert & Golightly 2007, Golightly & Schneider 2011). In fact, reducing corvid predation has been identified as having a high potential for effectively increasing murrelet populations (Peery and Henry 2010). The corvid family is comprised of

generalist foragers, adept at exploiting anthropogenic food sources. Studies in California have shown that Steller's Jay densities are high in campgrounds where garbage left unattended by campers can be accessed compared to densities in forest habitat away from recreation areas (West & Peery 2017). After implementation of the "Crumb Clean" campaign by California State Parks in 2013, the density of jays in campgrounds decreased (Brunk et al. 2021). This campaign consisted of visitor education, improved food management through wildlife-proof garbage cans and food lockers, and enforcement by park rangers. Through this management strategy, anthropogenic food sources in the diets of jays were not completely eliminated, but were decreased enough to cause jay densities to fall to levels nearly identical to areas outside of campgrounds.

For Snowy Plovers, predation of eggs and chicks by predators was identified as one of three main factors limiting the population in the federal recovery plan (U.S. Fish and Wildlife Service 2007), and predator density affects the quality of nesting habitat (Stenzel et al. 1994). A member of the corvid family, the Common Raven (*Coruvs corax*), is the main agent of nest failures in Oregon (Lauten et al. 2021). Various techniques have been used to reduce predation on Snowy Plover nests across its range, including installation of nest exclosures and lethal predator control, with varying levels of success. The use of exclosures has been minimized due to the potential for adult plover mortality, and lethal predator control is often opposed by the public. Although research has not been done on the effects of an educational program on raven densities, it is likely that this corvid would show the same density response to lowered food availability as Steller's Jays.

One goal of this project is to conduct a spatial analysis to assist with planning for a longterm education and infrastructure program at recreation areas in Oregon in the coastal habitats of both Marbled Murrelets and Snowy Plovers. The first step will involve building a spatial database where habitat layers for murrelets and plovers can be overlaid with the locations of campgrounds, day use sites, trailheads, and other recreation areas. It is expected that funding and partner capacity will vary over the long term, so it is essential to develop a method for determining how to distribute resources and get the most "bang for the buck" as conditions change. Additional data will be collected at each recreation area to provide information on what opportunities for education or infrastructure exist at each site. For example, a record of the number of picnic tables and informational kiosks at a recreation site would allow for a tally of the number of signs needed for that site. This will also allow for prioritization of sites for interpretive presentations. Sites with higher visitation located closer to murrelet or plover habitat would be prioritized for educational interactions with the public. This project will fulfill the capstone requirement for a master's student from the University of Wisconsin. This student will gather the necessary GIS layers and collect additional data as needed at the recreation sites. The initial focus will be on recreation sites on the central coast of Oregon, between approximately Newport and Florence and up to 20 miles inland. However, the database will be constructed so that new sites within the species' ranges can be added as the program expands in the future.

This project will also build upon the groundwork laid by partner agencies within and outside of the state to develop a program tailored to Oregon. California State Parks provided the

signs that were developed as part of their "Crumb Clean" campaign with permissions to copy or modify the signs for use in Oregon. Development of signs and educational materials will be coordinated so that messaging is consistent across land ownerships. Interpretive staff at Siuslaw NF previously identified the need for this type of program and developed educational materials with the theme "Keep Wildlife Wild". Rangers and interns provided interpretation to Siuslaw NF and Oregon State Park visitors in murrelet and plover habitats, which included Junior Ranger activities for children. Due to the COVID-19 pandemic, staff capacity was reduced and this program was suspended for the last several years but Siuslaw NF staff are eager to reinstate it. These materials will be updated as necessary and ordered for immediate use. The Oregon Department of Parks and Recreation does not currently have staff capacity for educational outreach, but is able to install signs if they are provided along with a list of priority sites. In 2021, the Marbled Murrelet was elevated from threatened to endangered under Oregon's Endangered Species Act. As a result, the Oregon Department of Forestry is interested in educating their forest visitors about how to help the species. Their main need is for signage to be installed at trailheads and informational kiosks. For all partners, information to assess the need for additional elements of the Crumb Clean campaign, such as food lockers, will be included in the field data collection. On-site rangers and maintenance staff at recreation sites will be consulted as they have the best knowledge of what trash management strategies are needed or have the highest likelihood of success at each unique site. Staff from American Bird Conservancy will coordinate with these partners to identify high priority sites and ensure than management actions are consistent across ownerships.

References:

- Betts, M. G., Northrup, J. M., Guerrero, J. A. B., Adrean, L. J., Nelson, S. K., Fisher, J. L., Gerber, B. D., Garcia-Heras, M.-S., Yang, Z., Roby, D. D., & Rivers, J. W. (2020). Squeezed by a habitat split: Warm ocean conditions and old-forest loss interact to reduce long-term occupancy of a threatened seabird. *Conservation Letters*, *13*(5), e12745. https://doi.org/10.1111/conl.12745
- Brunk, K. M., West, E. H., Peery, M. Z., & Pidgeon, A. M. (2021). Reducing anthropogenic subsidies can curb density of overabundant predators in protected areas. *Biological Conservation*, 256, 109081. https://doi.org/10.1016/j.biocon.2021.109081
- Golightly, R. T., & Schneider, S. R. (2011). Years 9 and 10 of a Long-term Monitoring Effort at a Marbled Murrelet Nest in Northern California. California Department of Fish and Game / National Park Service.
- Hébert, P. N., & Golightly, R. T. (2007). Observations of predation by corvids at a Marbled Murrelet nest. *Journal of Field Ornithology*, 78(2), 221–224. https://doi.org/10.1111/j.1557-9263.2007.00105.x
- Lauten, D.J., K.A. Castelein, J.D. Farrar, M. Lee, and E.P. Gaines. (2021). *The Distribution and Reproductive Success of the Western Snowy Plover along the Oregon Coast 2021*. Unpublished report for the Oregon Department of Fish and Wildlife Nongame Program,

- Portland, the Coos Bay District Bureau of Land Management, Coos Bay, and the Dunes Recreational Area, Reedsport.
- Lorenz, T. J., Raphael, M. G., & Bloxton, T. D. (2019). Nesting behavior of Marbled Murrelets Brachyramphus marmoratus in Washington and British Columbia. *Marine Ornithology*. 47(2): 157–166., 47(2), 155–167.
- Peery, M. Z., Beissinger, S. R., Newman, S. H., Burkett, E. B., & Williams, T. D. (2004). Applying the Declining Population Paradigm: Diagnosing Causes of Poor Reproduction in the Marbled Murrelet. *Conservation Biology*, *18*(4), 1088–1098. https://doi.org/10.1111/j.1523-1739.2004.00134.x
- Peery, M. Z., & Henry, R. W. (2010). Recovering marbled murrelets via corvid management: A population viability analysis approach. *Biological Conservation*, *143*(11), 2414–2424. https://doi.org/10.1016/j.biocon.2010.04.024
- Singer, S. W., Naslund, N. L., Singer, S. A., & Ralph, C. J. (1991). Discovery and Observations of Two Tree Nests of the Marbled Murrelet. *The Condor*, *93*(2), 330–339. https://doi.org/10.2307/1368948
- Stenzel, L.E., J.C. Warriner, J.S. Warriner, K.S. Wilson, F.C. Bidstrup, and G.W. Page. (1994). Long-distance breeding dispersal of snowy plovers in western North America. *Journal of Animal Ecology* 63:887-902.
- U.S. Fish and Wildlife Service. 2007. Recovery Plan for the Pacific Coast Population of the Western Snowy Plover (*Charadrius alexandrinus nivosus*). In 2 volumes. Sacramento, California. Xiv + 751 pages.
- West, E. H., & Peery, M. Z. (2017). Behavioral mechanisms leading to improved fitness in a subsidized predator. *Oecologia*, *184*(4), 787–798. https://doi.org/10.1007/s00442-017-3898-0

Oregon Wildlife Foundation 901 SE Oak St., Suite 103 Portland, OR 97214

Date: May 5, 2022

To: OWF Project Committee

From: DeAnna Williams, USFS Siuslaw National Forest, Siuslaw Wildlife Program Lead

Subject: Grant application for "Keeping Wildlife Wild on Oregon's Coast"

The Siuslaw National Forest hosts threatened Snowy Plovers and Marbled Murrelets, among other sensitive and federally listed species. The reproductive success of these two species is challenged by nest predation of various avian and mammalian nest predators who consume eggs and chicks. Prior to the COVID-19 pandemic, we developed a program on the National Forest titled "Keeping Wildlife Wild" to educate visitors about how they can help manage food waste to prevent increased populations of nest predators. We are excited to again implement this program and expand it in coordination with other public land owners. With funding for a spatial analysis of our recreation sites, we will be able to efficiently assign staff time and materials even as program resources vary with funding from year to year. This funding will also allow us to produce signs and educational materials for use at our recreation areas and by our interpretive staff. The coordination provided by American Bird Conservancy will ensure that we are able to spread a consistent message to recreation users as they enjoy Oregon's outdoors across public land ownerships.

I hope the Oregon Wildlife Foundation will support the success of this partnership as we aim to improve nesting conditions for two of our state's threatened species.

Sincerely,

DeAnna Williams

DeAnna Williams,
USFS Siuslaw National Forest
Siuslaw Wildlife Program Lead and
R6 Shorebird Coordinator
541-750-7013

Deanna.williams@usda.gov









THIS IS A CRUMB CLEAN



CAMPGROUND