



PACIFIC BIRDS

HABITAT JOINT VENTURE



Conservation Report

2024-2025

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Al Hodaly, Canadian Wildlife Service, Pacific Region, Canada Co-Chair
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Rock Sandpipers (*Calidris ptilocnemis*) in Kachemak Bay, AK.
Photo: Lisa Hupp/USFWS



Vision

A Pacific Region United for Bird Habitat Conservation: By working together, we will ensure wild birds thrive in abundant and diverse habitats that we all help safeguard for future generations.

Mission

Creating the Ideal Environment for Bird Habitat Conservation

Land Acknowledgement

Pacific Birds Habitat Joint Venture acknowledges that the lands on which we work are the traditional lands of many different Indigenous nations. Acknowledging these lands, and the signed treaties where applicable, reminds us that our places of work, where we live and where we gather, are on the traditional lands of more than 350 Tribes, First Nations, and Indigenous Peoples, people who resided here since time immemorial and still do.

Cover Photo:
Pacific Golden-Plover (*Pluvialis fulva*).
Mick Thompson

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Pacific Birds staff, board members, and partners at a 2025 meeting in Vancouver, BC.



Note from International Board

As we reflect on the last year, it is clear that the suite of accomplishments highlighted in this report reflect the strength of our partnerships and the power of collective action. In a year punctuated by change, the progress made this year can only be attributed to the dedication and creativity of the staff, Board, and partners. Because of the continued passion and drive of the individuals that comprise this large-scale partnership, the impact of Pacific Birds has grown to tangible progress.

Together, we are building resilient landscapes, protecting both common and declining species, and inspiring communities to join us in conservation. The past year has seen our service pillars take flight — from building capacities for invasive mangrove removal in Hawai'i to administering large grants in support of oak and prairie restoration in the Klamath-Siskiyou region and Willamette Valley. We are working to use the best available science and Indigenous Knowledge to guide meaningful conservation work that benefits not only migratory birds but the people that live in the places the birds rely on. Together, we are supporting communities connected by migratory wings across land and sea and supporting the protection, conservation, and restoration of the healthy ecosystems we all need.

Across the Pacific Birds service area, collective and collaborative leadership is driving significant investments to some of the most important habitats in the West, and ensuring that the work does not exist in isolation. By bringing together Tribes and First Nations, landowners, agencies, non-profit organizations, conservation districts, and communities around shared priorities, the Joint Venture is strengthening planning and implementation efforts, and leveraging funding for greater impact. This work is restoring oak and prairie habitats across the Pacific Northwest, conserving and protecting wetlands and adjacent farmlands in coastal watersheds of the Pacific Northwest and Alaska, and accelerating wetland and waterbird conservation in Hawai'i.

As we look to the year ahead, Pacific Birds remains committed to accelerating conservation, expanding collaboration, and advancing knowledge to ensure a thriving future for birds and people across the region.

Sincerely,

Bar-tailed Godwit
(*Limosa lapponica*) on the
Yukon-Kuskokwim Delta, AK.
Photo: Lisa Hupp/USFWS

Kyle Spragens

U.S. Steering
Committee Co-Chair



Blair Hammond

Former Canada Steering
Committee Co-Chair



Andrew Huang

Canada
Coordinator



Monica Iglecia

U.S.
Coordinator



Board and Staff Changes



In 2025, we welcomed two new members to the Pacific Birds International Management Board.

Al Hodaly (left) is the Pacific Region Director of the Canadian Wildlife Service, a branch of Environment and Climate Change Canada.

Robin Lawson (right) is Program Director at Wildlife Habitat Canada.

We thank **Jessica Burns**, **Blair Hammond**, **Cameron Mack**, and **Sarah Nathan** (left to right below) for their service on the Management Board, their invaluable contributions, and their ongoing commitment to the success of the Joint Venture.



Please join us in also thanking **Blair Hammond** for serving as the Canada Co-Chair of the International Management Board. Welcome to **Al Hodaly** as he steps into this leadership role.

We welcomed three new employees to Pacific Birds: **Kelly Missett**, **Eric Stauder**, and **Jenny Muñoz**.



Kelly Missett joins Pacific Birds as our new Communications and Marketing Coordinator. She leads strategic communications efforts for both the Pacific Birds Habitat Joint Venture and the Sea Duck Joint Venture.



As the Umpqua Oak Partnership Liaison, **Eric Stauder** builds capacity for oak habitat restoration and conservation. Eric provides technical assistance and facilitates community-based projects in Douglas County, Oregon.



Jenny Muñoz is the Science Coordinator for both Pacific Birds Habitat Joint Venture–Canada and Canadian Intermountain Joint Venture. She bridges research and practice to support a wide network of partners.



In 2025, we wished **Natalie Myers** farewell from the Pacific Birds staff. She will be greatly missed in the Joint Venture community!

We also congratulate **Kathleen Moore**, our long time Conservation Planner in British Columbia, on her retirement.



Graduate Students and Interns



Rekha Marcus, a graduate student at the University of Victoria, is interning with Pacific Birds through a Mitacs research grant. Rekha is working to improve conservation planning through climate risk assessments for coastal wetlands. She will incorporate the [2019 British Columbia estuary](#) ranking into a climate risk assessment and expand this assessment across the Pacific Northwest. She will also improve the estuary assessment by incorporating eBird data on species occurrence.



Jenna Loesberg is interning with Pacific Birds through the University of British Columbia's Biodiversity Research: Integrative Training and Education (BRITE) program. She is assessing how increasing wildfire activity may affect bird communities in British Columbia. This includes developing a trait-based vulnerability index that identifies the species at greatest risk under future climate scenarios and mapping high-risk areas where bird communities are most vulnerable.



Semipalmated Sandpiper
(*Calidris pusilla*).
Photo: Lisa Hupp/USFWS



“Bret brings light, rigor, and deep aloha. His embodiment of the award’s values has not only shaped ecosystems — it has held people together, made our work better, and made our community stronger.”

- Jordan Lerna, Executive Director of Nēnē Research and Conservation; Native Hawaiian Field Biologist at Cascadia Research Collective

Dr. Fern Duvall Award

Bret Nainoa Mossman, Forest Bird Recovery Coordinator at Hawai'i Division of Fish and Wildlife (DOFAW) and founder of Birds Hawai'i Past Present, received the [2025 Dr. Fern Duvall Conservation and Collaboration Award](#).

Bret is a Native Hawaiian biologist and dedicated conservationist, known for his strong yet humble conservation leadership and his commitment to cultural preservation and community engagement.

This award was started by Pacific Birds to honor the [legacy of Dr. Fern Duvall](#). The award recognizes the conservation efforts of individuals who embody the innovative, inclusive, humble, and collaborative spirit that Fern brought to conservation endeavors.



“It’s quite humbling and fulfilling to see a project being implemented when you remember the first spark of an idea written on the back of a napkin that started that snowball rolling down the mountain.”

- Eric Balke

Pacific Birds Conservation Award

Pacific Birds awarded its [inaugural Conservationist Award](#) to Eric Balke of Ducks Unlimited Canada (DUC) for his work on the Fraser River Estuary.

The Pacific Birds International Management Board and staff selected Eric to be the first-ever recipient of the Conservationist Award, which recognizes exceptional commitment to achieving conservation success in one of the conservation priorities of this regional partnership. As a Senior Restoration Biologist at DUC, Eric leads ecological restoration and research projects throughout British Columbia’s Lower Mainland, including the Sturgeon Bank Sediment Enhancement Pilot Project in the Fraser River Delta.

Service Pillar Snapshots

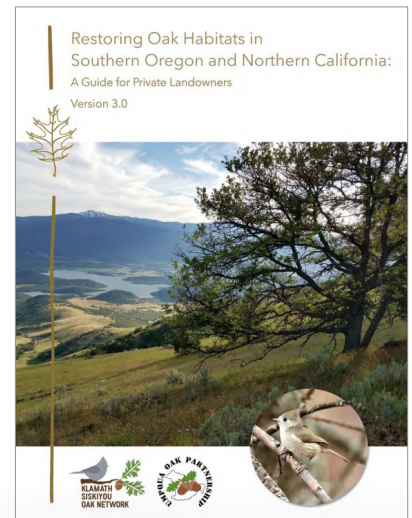


Pacific Birds catalyzes habitat conservation to benefit birds, other wildlife, and people, informed by the best available science and knowledge. Within our service area, Pacific Birds prioritizes conservation in coastal habitats and Western forests.

The Pacific Birds service pillars represent the approach the Joint Venture takes to advance conservation across these priority habitats. Working collaboratively on natural and working lands managed by public, private, Tribal, and Indigenous entities is essential for conservation success. Brief examples of how Service Pillars come to life are provided below.

Accelerate and Deliver Conservation

- ▶ The Klamath Siskiyou Oak Network and the Umpqua Oak Partnership updated their [oak habitat restoration guide](#) for private landowners, which was first published in 2014. This update expands the geography served and reflects new information and advances in restoration to support oak conservation on private and Tribal lands.
- ▶ Pacific Birds supported Mālama Hulē'ia, the nonprofit that manages the Alakoko Fishpond on Kaua'i, in obtaining a \$10,000 Kaua'i Mayors Innovation Grant. The funds supported a community event where 500 people participated in the rebuilding of an ancient fishpond wall to help restore this culturally and ecologically important wetland site in Hawai'i.



The cover page from the updated oak restoration guide for private landowners.

Credit: Klamath Siskiyou Oak Network and Umpqua Oak Partnership

Alakoko Fishpond on Kaua'i, HI.
Photo: Helen Raine

Build Capacity

- ▶ Island Ecological Services received a Coastal Zone Management capacity-building grant from the National Ocean and Atmospheric Administration (NOAA) in partnership with Pacific Birds and DOFAW. The grant will enable this long-time partner to develop permitting guidance for the installation of three predator-proof fences needed to support endemic waterbirds in critical Hawaiian wetlands.
- ▶ Pacific Birds began facilitation of the [Oregon Central Coast Estuary Collaborative](#), which provides technical and strategic support for 40 organizations conducting regional estuary conservation and restoration. Pacific Birds will facilitate the group for two years and help update its strategic plan. This work also includes support of an ongoing collaborative restoration project funded by a Focused Investment Partnership grant from the Oregon Watershed Enhancement Board, which provided \$7.8 million for prioritized restoration and conservation actions in the Yaquina and Alsea estuaries.



The Hawai'i Land Trust Nu'u Preserve is receiving support on permitting for their upcoming predator proof fence.

Photo: Helen Raine

Members of the Oregon Central Coast Estuary Collaborative on a field trip to Tillamook, OR.

Photo: Laura Farwell



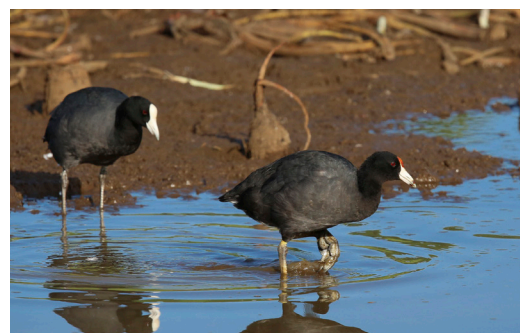
Promote Collaboration

- ▶ In support of multi-species conservation efforts, Pacific Birds staff joined the Pacific Marine and Estuarine Fish Habitat Partnership Steering Committee. This is a win-win for knowledge transfer between bird and fish conservation communities and for improved coordination of coastal wetland planning.
- ▶ The newly-initiated Kaua'i Wetland Partnership is connecting partners and formulating goals and objectives for wetland conservation on the island. Like the Moloka'i Wetland Partnership, this partnership was seeded and is led by Pacific Birds.
- ▶ Pacific Birds staff engaged in the 2025 State Wildlife Action Plan updates in California, Oregon, Washington, and Alaska, reviewing proposed species lists, submitting comments, and participating on technical teams where possible.
- ▶ The [2025-2030 California Wildlife Conservation Board Strategic Plan](#) committed to investment in at least five projects that restore or enhance Joint Venture priority wetlands.



Siletz Bay NWR on the central Oregon coast.

Photo: Lila Bowen



A pair of 'alae ke'oke'o (Hawaiian coots, *Fulica alai*).

Photo: Hob Osterlund

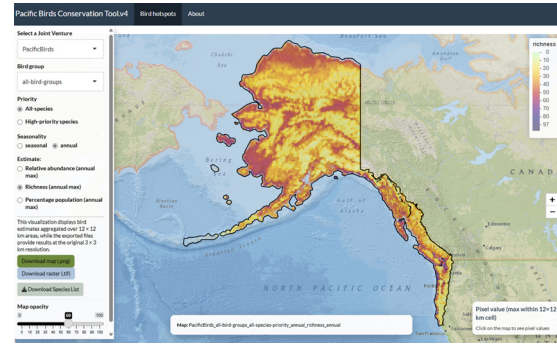


Hanalei NWR is part of the Kaua'i Wetland Partnership.

Photo: J. Waipa/USFWS

Advance Knowledge and Planning

- ▶ Two [online dashboards](#) now provide access to multi-species eBird layers for the Pacific Birds region from northern California to Alaska, and for British Columbia. Multi-species maps are available for all wetland-associated birds with sufficient data in eBird, for priority coastal birds, and within major bird groups.
- ▶ The [2025 State of the Birds report](#) highlighted the plight of Western Forest obligate bird species and the significant losses in oak and prairie ecosystems. It specifically spotlighted the landscape-scale partnerships to protect these habitats that are supported by Pacific Birds, including the launch of the [Prairie, Oaks, and People Investment Strategy](#).



A screenshot from the new eBird dashboard.

Inform and Inspire

- ▶ Hawai'i's state bird — the nēnē (Hawaiian goose, *Branta sandvicensis*) — faces a [rising threat from toxoplasmosis](#), a cat-borne disease also harming monk seals and dolphins. Experts from Pacific Birds and the U.S. Geological Survey (USGS) were featured on Hawai'i's [KITV 4 Island News](#) to share how community members can help protect nēnē and other wildlife.
- ▶ Pacific Birds launched the new [Pacific Northwest Oak Alliance website](#) last year, which serves as a hub of inspiration and information for public, private, and Tribal partners interested in landscape-scale oak and prairie conservation. This shared landing page unites the nine regional oak partnerships and provides a unified platform to share key messages, resources, and events.



The ash-throated flycatcher (*Myiarchus cinerascens*) is one of many oak-obligate bird species.

Photo: Becky Matsubara

Pacific Northwest Oak Alliance

The nine oak-prairie partnerships together comprise the Pacific Northwest Oak Alliance.



Nēnē (Hawaiian goose, *Branta sandvicensis*) in Hawai'i. Photo: Gary Kramer/USFWS

Connections Across Coastlines: Supporting Community-Informed and Indigenous-Led Conservation

Pacific Birds catalyzes conservation by supporting community-informed and Indigenous-led projects at the local level. We are working to uplift Tribal and local stewardship, advance collaborative solutions that include Traditional Ecological Knowledge, and build connections among people, nature, and each other.



Communities from Moloka'i, HI and south-central Alaska traveled to Cordova, AK for a cross-cultural exchange last year. *Photo: Eden McCall*

Improving Estuarine Stewardship and Management, with Shared Benefits for Birds and Local Communities

“Laulima” is an ‘Ōlelo Hawaiian word meaning “many hands working together.” This concept applies to many aspects of conservation, from on-the-ground restoration to large-scale initiatives. In April 2024, as part of a collaborative grant, staff from five NERRs, together with Indigenous community partners and staff from Pacific Birds, gathered for a [week-long workshop at He‘eia, Hawai‘i](#), with laulima as a central concept.

[New resources](#) — including a [final report](#) and a [project webinar](#) — describe this experience and the lessons learned. These resources summarize the technical, logistical, and qualitative aspects of both the grant and the workshop, and include participant feedback, post-workshop actions, and helpful resources for strengthening relationships with local communities and Indigenous partners.



Lo‘i kalo at He‘eia NERR provide vital habitat for Threatened and Endangered birds.

Photo: Shimi Rii



An eelgrass meadow at South Slough NERR near Coos Bay, OR.

Photo: Laura Farwell

A Practical Resource For Moving Forward Together

To support a growing community of practice, Pacific Birds collaborated with the National Estuarine Research Reserve Association (NERRA) to launch a [new webpage](#) on NERRA.org dedicated to Reserve engagement with Indigenous Nations, organizations, and communities. It offers guidance, case studies, and resources that reflect lessons learned and encourage new partnerships.

The page reflects [work catalyzed by a grant from the National Estuarine Research Reserve System Science Collaborative](#). With this support, Reserves in Hawai‘i, Alaska, Washington, Oregon, and Wisconsin partnered with Pacific Birds to explore cultural connections through shared migratory species, and to elevate the role of Indigenous Knowledge in estuary stewardship and conservation.



The workshop brought together partners in Cordova, AK. Photo: Natalie Myers

From Moloka'i to Cordova: Bridging Communities Through Migratory Birds

In May 2025, Pacific Birds helped coordinate a [cross-cultural exchange](#) that brought together Indigenous partners from Moloka'i, Hawai'i and southcentral Alaska. This trip to Cordova, Alaska, was an opportunity to bridge communities that are thousands of miles apart but are linked by migratory bird species like the Pacific Golden-Plover or kōlea (*Pluvialis fulva*).

Participants took part in Copper River Delta Shorebird Festival activities as well as multigenerational knowledge and culture exchanges. Discussions centered on connections through migratory birds, bird-related cultural knowledge and traditions, and local impacts and responses to climate change. The project was funded by a grant from the USGS Pacific Islands Climate Adaptation Science Center, which also produced a [story map](#) to chronicle this knowledge exchange workshop.

*He lolo ho'omana'o
ko ke kōlea.*

The kōlea (Pacific-Golden Plover) has a brain that remembers. When birding in Cordova, Alaska, the kōlea didn't come to us to reveal themselves. It wasn't until we chanted "Ia Wa'a Nui" did three kōlea come towards us to show themselves.

- Written and explained in Hawaiian by Hi'ikapu Lima, a youth from Moloka'i, and translated by Nāhulu Maioho



The Pacific Golden-Plover or Kōlea (*Pluvialis fulva*) breeds on Arctic tundra and winters widely across the Pacific, including on Hawai'i.

Photo: Hob Osterlund

Conservation Priorities

Pacific Birds focuses on conservation in coastal habitats and Western forests across our service area. Within coastal watersheds, this includes estuaries, freshwater wetlands, and shallow marine habitats in the United States and Canada. Within Western forests, this includes oak and prairie habitats in the Pacific Northwest, and riparian forests in British Columbia. Our habitat conservation priorities are based on where we can make the biggest difference for birds.



WESTERN FORESTS: Oak and Prairie

p. 16

William L. Finley NWR.
Photo: George Gentry/USFWS



WESTERN FORESTS: Riparian Forests

p. 20

Gates Creek Conservation Area.
Photo: Fernando Lessa



COASTAL HABITATS: Coastal Wetlands in the Pacific Northwest, British Columbia, and Alaska

p. 22

Willapa NWR.
Photo: Andrew LaValle/USFWS



COASTAL HABITATS: Hawai'i Wetlands

p. 27

Hulē'ia NWR.
Photo: Laurel Smith/USFWS

Western Forests: Oak and Prairie

Pacific Birds supports nine oak partnerships across the Pacific Northwest via the Pacific Northwest Oak Alliance. These partnerships are now united under a single partner-centered investment strategy and web hub. These resources help unify partners across the region under a common framework, and provide a shared platform to highlight accomplishments. Major progress in 2025 includes the implementation of the Upper Rogue Oak Initiative and the Willamette Valley Resilient Landscapes Initiative.

4

partnerships

actively restoring oak and prairie habitat

9

partnerships

aligned to advance the Prairie, Oaks, and People Investment Strategy

200+
people

gathered for the first Willamette Valley Oak and Prairie Summit

1

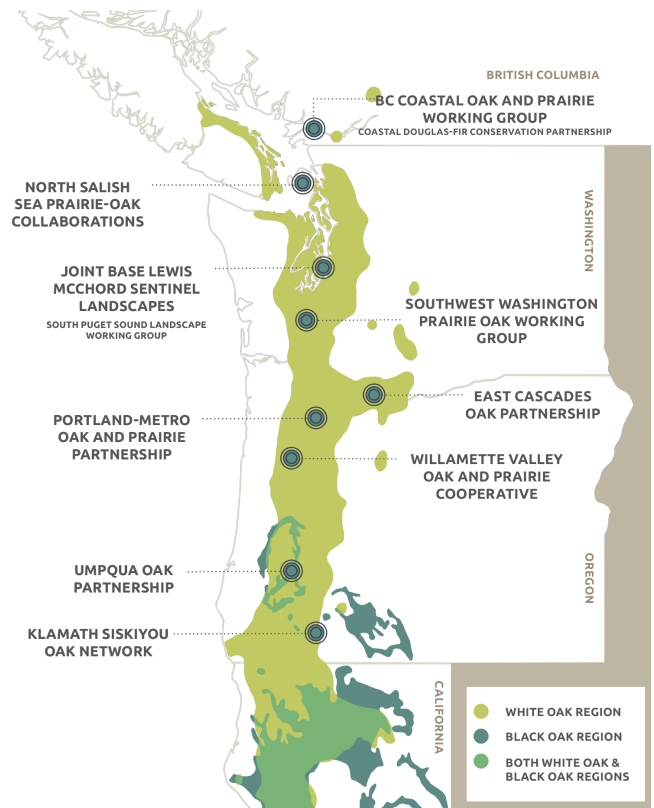
unified voice

for the Oak Alliance through a shared [online hub](#)

An Oregon white oak and camas meadow. Photo: Alanah Nasadyk

Pacific Northwest Oak Alliance Unites Under the Prairie, Oaks, and People Investment Strategy

Pacific Birds staff presented the [Prairie, Oaks, and People Investment Strategy](#) in a variety of partnership forums, including presentations at regional partnership meetings and Wildlife Society annual meetings. Pacific Birds staff led a [Special Session at the 2025 Cascadia Prairie Oak Partnership Conference](#) titled “Strategies to Leverage Resources and Amplify Impact.” Pacific Birds participated in conference planning and supported four partners’ attendance.



The Prairie, Oaks, and People investment strategy catalogues more than \$300 million in shovel-and-funding-ready projects across the nine oak and prairie partnerships that make up the Pacific Northwest Oak Alliance.



Cover page of the Prairie, Oaks, and People Investment Strategy.

“The goal of the strategy is to captivate a wide range of audiences — not just conservation practitioners but also private foundations, philanthropists, governments, and businesses — and to demonstrate how local efforts contribute to broader, impactful outcomes.”

- Glenn Lamb, Philanthropic Project Manager at Coalition of Oregon Land Trusts and Pacific Birds International Management Board Member

Upper Rogue Oak Initiative Restoration Advances

Implementation of the Klamath Siskiyou Oak Network’s [Upper Rogue Oak Initiative](#) is underway on private and public lands. This work leverages \$7,000,000 in Oregon Watershed Enhancement Board funding and will result in the restoration of over 3,000 acres of oak habitat using prescribed fire, ecological thinning, weed reduction, and native understory planting. Through this project, Klamath Siskiyou Oak Network partners have reached more than 600 landowners, increased community awareness, developed shared monitoring protocols, and expanded the partner network.



The Oregon vesper sparrow (*Pooecetes gramineus affinis*) has been extirpated from British Columbia and California partially due to loss and degradation of oak habitat.

Photo: Frank D. Lospalluto.

Boosting Ecosystem and Community Resilience in the Willamette Valley

Over the last year, the Willamette Valley Oak and Prairie Cooperative (WVOPC) has increased collaborative restoration capacity through improved coordination and establishing Tribal and monitoring effectiveness working groups. WVOPC continues to support future oak-prairie restoration projects under the [Willamette Valley Resilient Landscapes Initiative](#) via native seed production. Project implementation, including planting, prescribed fire, and invasive species treatments, will begin when cultural resource surveys and compliance are completed. Simultaneously, WVOPC has expanded its membership to over 80 participating organizations and 11 Declaration of Cooperation signatories. Over 200 people attended its [first annual Oak Summit](#) in November 2024.



An oak ecosystem in the Willamette Valley, OR.
Photo: Sara Evans-Peters



The oak titmouse (*Baeolophus inornatus*) is strongly tied to oak landscapes.

Photo: Joseph Oliver/ODFW



Prescribed fire plays a key role in oak habitat restoration.

Photo: Umpqua Prescribed Burn Association

Strengthening the Umpqua Oak Partnership Through Planning and Projects

In 2025, the Umpqua Oak Partnership celebrated two key milestones with the completion of their [Strategic Action Plan](#) and [Ecological Monitoring Plan](#). Taking concerted steps towards landscape-scale outcomes, partners secured over \$750,000 to pilot three multi-year, collaborative oak restoration projects on public and private lands. These projects will combine ecological thinning, invasive species removal, cultural and prescribed fire, and locally-adapted native seed production, while bolstering workforce development and career pathway opportunities for youth engaged in the Oregon Conservation Corps. Continued partnership coordination has strengthened capacity through writing grants, planning projects, facilitating working groups, and co-hosting community engagement events.

U.S. Partnership Grants that Benefited Oak and Prairie

Pacific Birds U.S. Partnership Grants support partners as they identify, prioritize, and implement actions that benefit birds and the habitats they need.



Kincaid's Lupine grows in an oak savanna.

Photo: Eric Stauder.

Cultivating Cultural Burning Practices in the Willamette Valley Oak-Prairie Landscapes — Long Tom Watershed Council

Recognizing the integral role of Indigenous fire stewardship in maintaining the Willamette Valley's oak and prairie ecosystems, this project aimed to accelerate the revitalization of cultural burning practices in the region.

Long Tom Watershed Council supported 42 local Native fire practitioners in participating in three cultural burns and three cultural fire exchanges. The local burns supported native plant regeneration and reduced invasive understory, while the out-of-region events provided stewardship training and intergenerational transmission of cultural fire practices.

Exploring Expansion of Land Protection Work into Douglas County — Oregon Agricultural Trust

Oregon Agricultural Trust worked through Umpqua Oak Partnership with landowners, nonprofits, and agency partners to extend their [Farm and Ranch Protection Plan](#) to Douglas County, Oregon. This project developed maps of primary data layers and focused investment zones, a summary of important agricultural, bird, and oak habitat conservation goals, and GIS data-driven recommendations for outreach to private landowners. The Umpqua Oak Partnership identified expanding the work of land trusts in this area as a high priority in its strategic planning process.



Prescribed fire in a stand of young oak trees.

Photo: Confederated Tribes of the Grand Ronde

Western Forests: Riparian Forests

In British Columbia, Pacific Birds focuses on riparian forests, which support a disproportionately large number of bird species and greater densities of birds than other forested habitats. These ecosystems also help to stabilize streambanks, regulate waterway temperatures, and provide nutrients and debris to waterways. More information about Pacific Birds' conservation strategies in riparian forests is available in our [2020-2030 Implementation Plan for British Columbia](#).



**Expanding
conservation areas**
in British Columbia

Gates Creek Conservation Area, BC. Photo: NCC



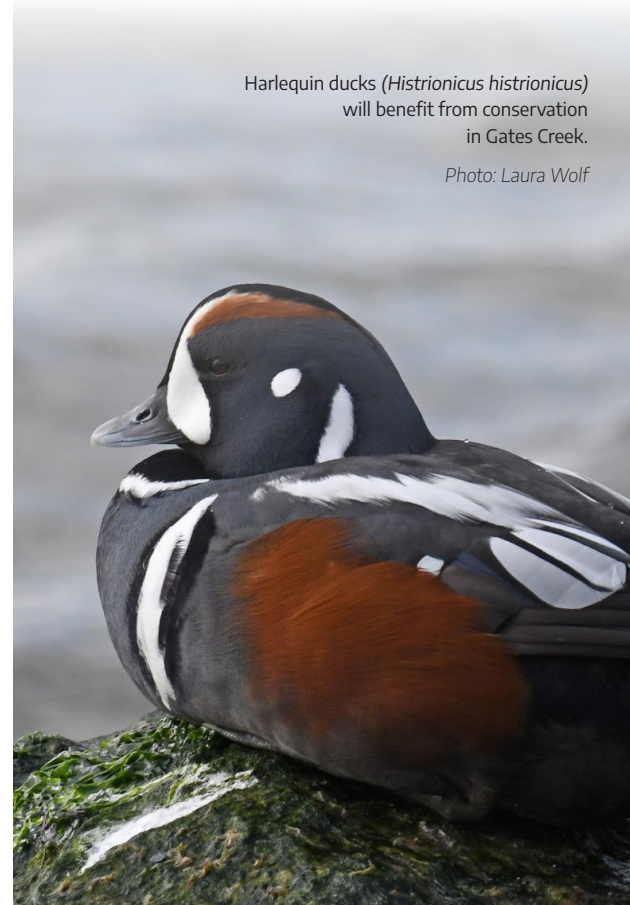
Bufflehead (*Bucephala albeol*) use the habitat provided in the Gates Creek Conservation Area. Photo: Allan Hack

Gates Creek Conservation Area Expansion

The Gates Creek Conservation Area expanded by 20 hectares (50 acres) in 2024, bringing its total size to 130 hectares (320 acres). This site is located near D'Arcy, British Columbia and supports many at-risk bird species. The site was established in 2021 through a partnership with the Fish and Wildlife Compensation Program, which transferred it to the Nature Conservancy of Canada (NCC) for long-term management. In 2024, NCC also launched a multi-year project to restore salmon habitat, broaden wetlands, slow erosion of the creek channel, and re-establish tree cover for shade.

Harlequin ducks (*Histrionicus histrionicus*) will benefit from conservation in Gates Creek.

Photo: Laura Wolf



Coastal Habitats: Coastal Wetlands in the Pacific Northwest, British Columbia, and Alaska

The Pacific Birds [Coastal Wetlands Strategic Plan](#) provides a north star for Pacific Birds work from Alaska to Northern California. Advancements in the application of science and knowledge in combination with local partnerships are supporting tidal wetlands and estuaries, eelgrass meadows, freshwater wetlands and lakes, and bird-friendly working lands and waters.

Harnessing eBird data

to inform conservation planning and actions

Tracking migratory bird connections

across the Pacific Flyway

Supporting access to green space

in British Columbia

Assessing historic tidal wetlands

to inform future work in the Pacific Northwest

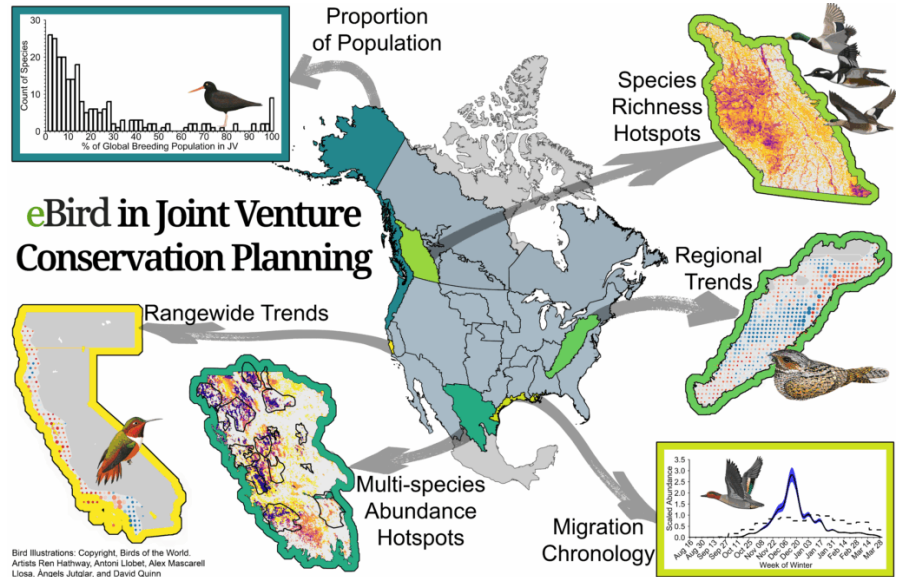
Restoring tidal flow

for birds and people in the Cowichan Estuary

Potter Marsh near Anchorage, AK is an important coastal wetland habitat for birds. *Photo: Laura Farwell*

Migratory Bird Joint Venture – eBird Collaboration

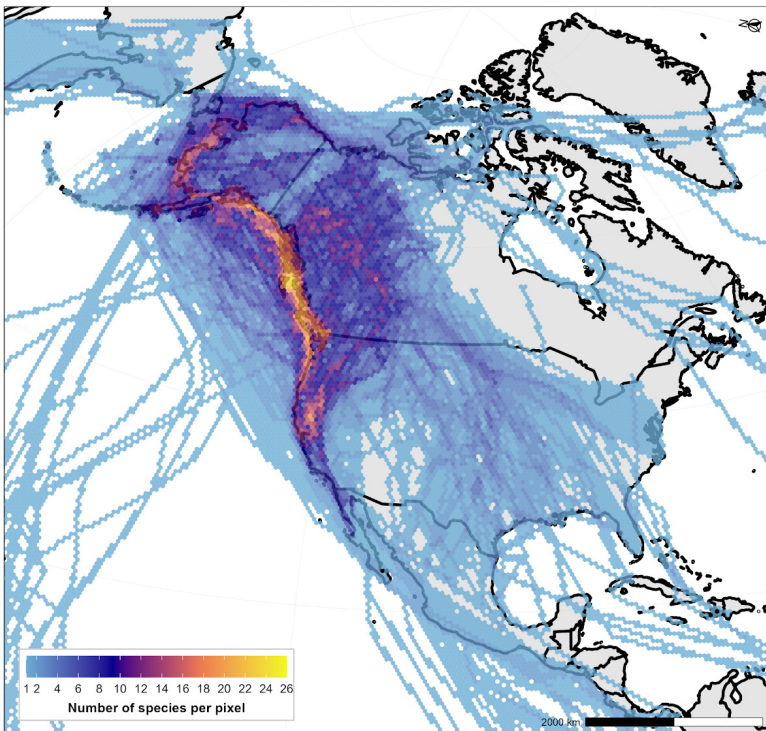
A [new study published in the journal *Ornithological Applications*](#) shows how Migratory Bird Joint Ventures are using data from birdwatchers to pinpoint opportunities to reverse population declines. The study demonstrates how freely available data can complement traditional monitoring programs to support more effective conservation planning. For example, the Pacific Birds case study used eBird data to quantify regional stewardship responsibility for coastal birds, informing selection of priority species and guiding coastal conservation priority actions.



Migratory Bird Joint Ventures are already using eBird data products to inform habitat conservation planning and decision making. *Credit: Farwell et al. (2025). Ornithological Applications*

Movement Patterns Along the Pacific Flyway

Number of birds species per 50 km pixel – Predicted



Includes tracking data from GPS- and Argos-based tracking devices from Movebank, USGS Alaska Science Center Wildlife Tracking Collection, and independent researcher contributions.

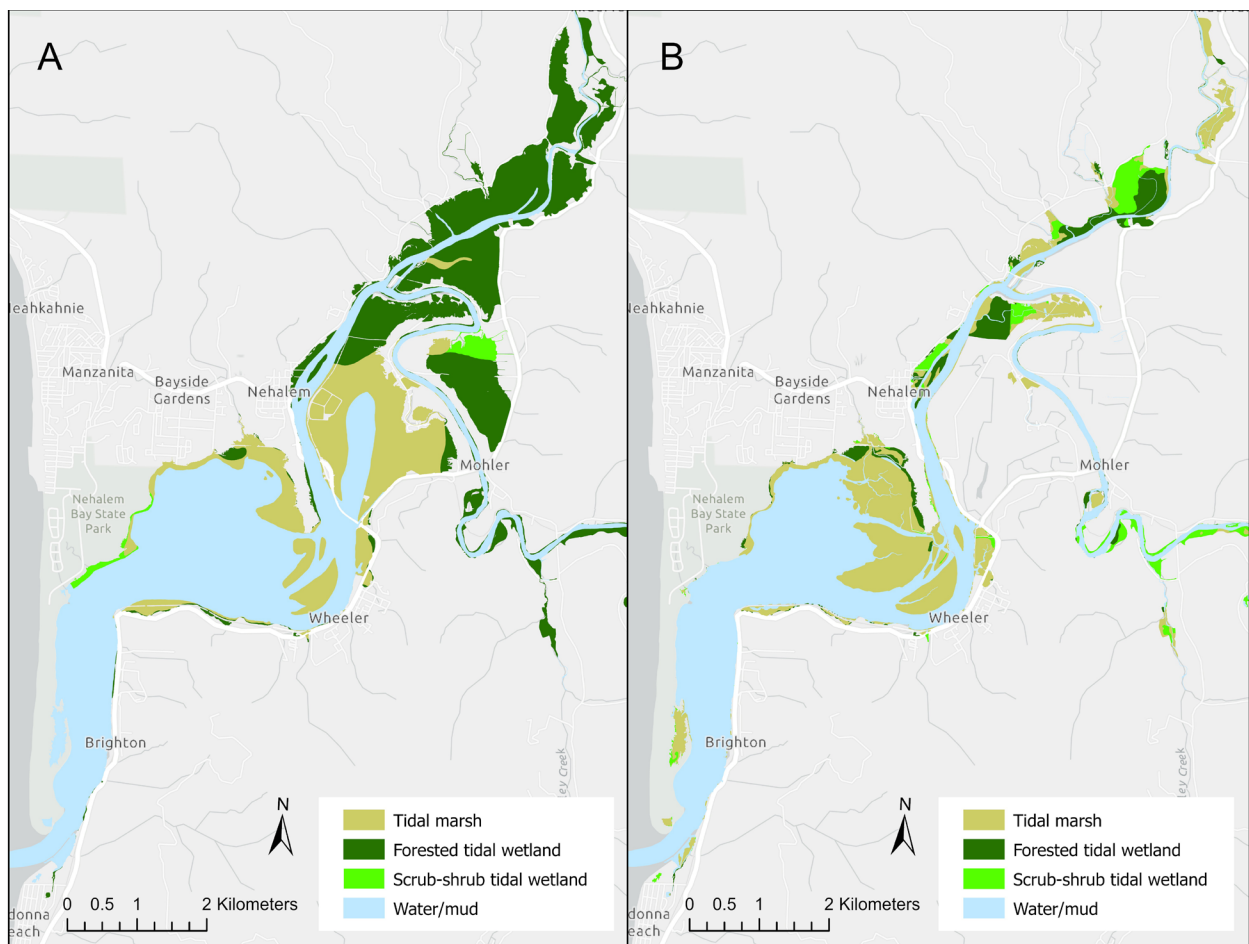
Lighter colors indicate areas of higher species richness, highlighting hotspots used by multiple tracked species. *Credit: Jenny Muñoz*

Mapping Bird Migration Connectivity along the Pacific Flyway

A [2025 Pacific Birds project](#) advanced understanding of migratory waterfowl, shorebird, and waterbird movements along the Pacific Flyway. Focusing on species that rely on British Columbia at any stage of their life cycle, this project aggregated and standardized high-resolution GPS and Argos telemetry data to produce heat maps and movement trajectories. Using continuous-time state-space models and data from nearly 2,000 individual birds, it predicted movement paths for 49 species, including 28 waterfowl, 7 shorebird, and 14 waterbird species. The completed product will be released online in 2026 and will inform targeted management actions to protect key habitats.

Historical Vegetation and Wetlands Mapping for Selected Pacific Coast Estuaries

This project extended previous mapping of the historical extent of vegetation and wetlands within estuaries on the Oregon coast, to include additional estuaries on the Pacific coast from Grays Harbor, Washington to Humboldt Bay, California. A new spatial layer will be made available online in 2026 for use in assessments of tidal wetland loss. These maps can be used to identify where specific tidal habitats have experienced the largest declines and inform where conservation investments can be targeted to recover key tidal wetland habitats. This product was developed in collaboration with John Christy and Laura Brophy from the Institute for Applied Ecology, and with funding support from Washington Department of Fish and Wildlife.



Example of a comparison of (A) historical (1800s) versus (B) current tidal wetland distribution by habitat class in Nehalem River Estuary, OR.
Credit: [Laura Brophy \(2026\) Estuarine, Coastal and Shelf Science through this collaboration](#)

Greenspace for All Connects Underserved Communities with Nature

The [Green Space for All initiative](#), led by the Stewardship Centre for British Columbia (SCBC) has significantly advanced equity-informed greenspace planning across eastern Vancouver Island. In its first year, the project reviewed greenspace and climate policies across three regional districts and produced a [comprehensive Policy Review Report](#) with recommended actions to support more equitable access. This foundational work was strengthened by a GIS analysis that mapped greenspace proximity against sociodemographic patterns, generating baseline data to inform subsequent activities. The project then shifted toward community outreach activities such as planting events and bird walks, which have engaged almost 500 people. SCBC is now developing a resource kit to help governments integrate equity concerns into greenspace and climate planning, preparing a webinar to support adoption of the resource kit, and drafting its final report.



Winter Bird Walk at Swan Lake Nature Sanctuary in Victoria, BC.
Photo: SCBC



Cowichan River estuary.
Photo: NTBC

Enhancing Tidal Flow for Birds and People in the Cowichan Estuary

The Cowichan Estuary on Vancouver Island is one of British Columbia's largest and most ecologically important estuaries. Decades of diking and industrial activity have altered its natural processes, and a major multi-partner effort is now underway to restore 70 hectares (175 acres) of salt marsh and re-establish tidal function. Led by Cowichan Tribes, the Nature Trust of British Columbia (NTBC), and the Cowichan Valley Regional District alongside numerous other partners, this initiative aims to enhance habitat for migratory waterfowl, shorebirds, and native fish while improving tidal flow, water quality, and coastal resilience.

U.S. Partnership Grants that Benefited Coastal Wetlands

Pacific Birds U.S. Partnership Grants support partners as they identify, prioritize, and implement actions that benefit birds and the habitats they need.



Intern Hayden Ayuktuula Johnson stands on the coast near lands recently re-matriated to Seldovia Village Tribe.

Photo: Amanda Kelly

Kachemak Heritage Land Trust and First Alaskans Institute Collaborative Partnership and Conservation Project — Kachemak Heritage Land Trust

Through this project, Kachemak Heritage Land Trust (KHLT) sought to better incorporate Indigenous stewardship practices into its conservation toolbox through a collaborative co-stewardship project in partnership with the First Alaskans Institute and with the Seldovia Village Tribe. KHLT hired a First Alaskans Institute intern to develop practices to foster relationship-building and trust-building with Alaska Native people on the Kenai Peninsula. Project funds also supported KHLT's first Land Back project, in which a property fee owned by KHLT was re-matriated to Seldovia Village Tribe.

Supporting Salish Sea Estuary Bird Monitoring & Pacific Flyway Partnerships — Ecostudies Institute

River deltas in the Salish Sea support over 70 species of landbirds, marshbirds, shorebirds, and waterfowl, some of which congregate in the tens of thousands during migration and wintering seasons. The [Salish Sea Estuaries Avian Monitoring \(SSEAM\) program](#), established in 2024, is a collaborative effort to establish a unified, standardized framework for monitoring estuarine birds across this region and quantifying their habitat use. The Partnership Grant supported the continued operation and expansion of the SSEAM program within Puget Sound and facilitated outreach and engagement of potential partners in other parts of the Pacific Flyway, including the Oregon coast.



Isabel Brofsky from the Ecostudies Institute and Rekha Marcus observe shorebirds at Billy Frank Jr. Nisqually NWR.

Photo: Laura Farwell



eBirding workshop co-hosted by Alaska Audubon and USFWS in the Mendenhall Wetlands State Game Refuge.

Photo: DevineConservation

Protecting Alaska's Priority Coastal Wetlands to Sustain Resilient Coastal Communities — Audubon Alaska

Audubon Alaska provided scientific and technical support to a consortium of local nonprofits that collaboratively support the Mendenhall Wetlands State Game Refuge, a globally important stopover and nesting sites for migratory waterbirds. The project included providing research on species of conservation concern, analyzing migration pathways, and conducting educational outreach through eBird workshops. These efforts strengthened local and regional capacity for science-based decision-making and elevated awareness of the Mendenhall Wetlands as a Globally Important Bird Area.

Coastal Habitats: Hawai‘i Wetlands

The [Strategic Plan for Hawai‘i Wetlands](#) provides the foundation for Pacific Birds efforts to build effective partnerships that conserve and restore Hawaiian wetland habitats. The plan provides information to support partners working on wetland acquisition, restoration and management, waterbird and migratory bird management, predator management, invasive plant control, and indigenous agroecology. This work benefits four Endangered waterbirds and one Threatened goose, as well to other wildlife and communities.

Demonstrating why monitoring wetlands matters

Building capacity
through skill-share workshops

New resources
for private landowners and community scientists

Insights on the role of Indigenous agriculture and aquaculture
for communities and waterbirds

Catalyzing wetland restoration
at priority sites

Kawainui Marsh Wildlife Sanctuary on O‘ahu, HI requires ongoing funding to remove invasive species. Photo: Hawai‘i DLNR

The Scientific Benefits of a Statewide, Standardized, Coastal Wetland Monitoring Program in Hawai‘i

Pacific Birds partnered with the USGS and additional conservation partners to publish a [paper in *Ecology and Evolution*](#) providing scientific justification for a coastal wetland monitoring program for Hawai‘i. Currently, numerous agencies and groups in Hawai‘i collect data on coastal wetlands, but information is not typically shared and methods are not standardized. Ultimately, the improved knowledge to be gained from long-term coastal wetland monitoring could inform landscape-scale restoration actions and adaptive management of coastal wetlands under sea-level rise and climate change.



Monitoring is vital to improve our understanding of Hawaiian wetlands such as this coastal fen on Moloka‘i, HI.

Photo: Helen Raine



The workshop group visits one of the wetlands at He‘eia NERR.

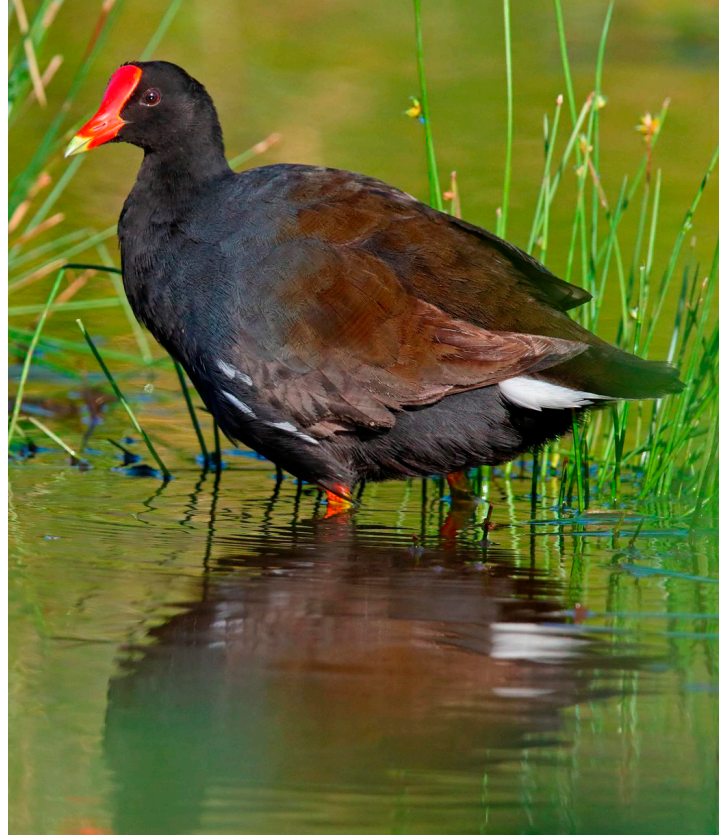
Photo: Monica Iglecia

Mangrove Removal for Biocultural Restoration: Getting into the Weeds at He‘eia National Estuarine Research Reserve

Pacific Birds worked with the Moloka‘i Land Trust and the State of Hawai‘i Division of Aquatic Resources (DAR) to deliver a [workshop at He‘eia National Estuarine Research Reserve \(NERR\)](#) focused on removing invasive mangroves. More than 20 cultural practitioners, scientists, and conservation managers attended. A Mangrove Removal Guide based on the workshop will be published in 2026. Pacific Birds is working with DAR and other partners to plan four more workshops

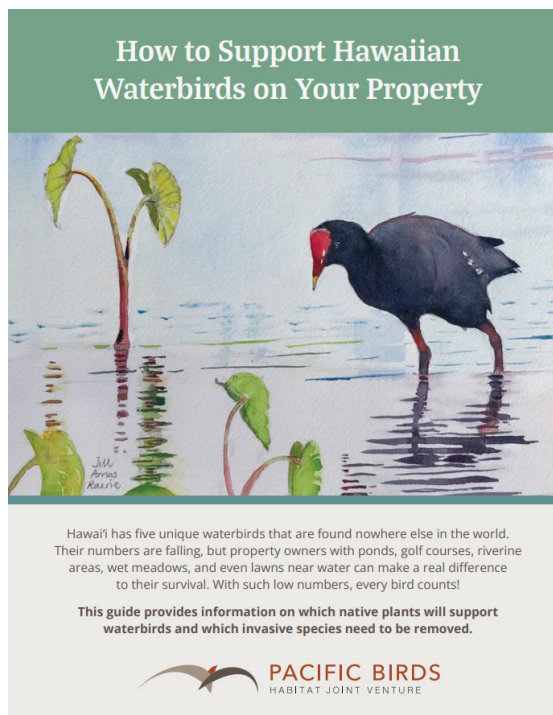
Recovering Native Hawaiian Waterbirds through Culture, History, and Indigenous Partnership

The report, [Native Hawaiian Waterbirds - Culture, History, and Indigenous Partnership to Recovery](#) by Hoku Cody, describes the importance of lo'i (taro pondfields) and loko i'a (fishponds), which provide critical habitat for waterbirds while providing sustainable food for local communities. This report covers the four endemic waterbirds and the nēnē (Hawaiian goose, *Branta sandvicensis*) and highlights their role in the culture and history of Hawai'i, their current conservation status, and pathways to species recovery. It also provides recommendations for forging stronger partnerships with Indigenous partners in the context of native bird conservation. Hoku Cody is a Native Hawaiian biologist and a lifelong advocate for conservation. She champions community stewardship and traditional rights in Hawai'i's natural and cultural resource management.



Only 700 'alae 'ula (Hawaiian common gallinule, *Gallinula galeata sandvicensis*) remain.

Photo: Gary Kramer/USFWS



Private properties support the population of 'alae 'ula. This guide helps landowners improve conditions for birds.

New Resources for Community Scientists and Private Landowners

Two new resources aim to help protect Hawai'i's five endemic waterbirds.

- ▶ A [guide for private landowners](#) provides information on which native plants support Endangered waterbirds and which invasive species should be removed.
- ▶ Pacific Birds [encourages collection of waterbird data](#) on the eBird app. This effort will help managers better understand waterbird populations in semi-urban habitats and more effectively direct resources.

U.S. Partnership Grants that Benefited Hawai‘i Wetlands

Pacific Birds U.S. Partnership Grants support partners as they identify, prioritize, and implement actions that benefit birds and the habitats they need.



Ae'o (*Himantopus mexicanus knudseni*).
Photo: Monica Iglecia

Keawāwa Wetland Enhancement for the Endangered ‘Alae ‘Ula and ‘Ae‘o — Livable Maunaloa Hui

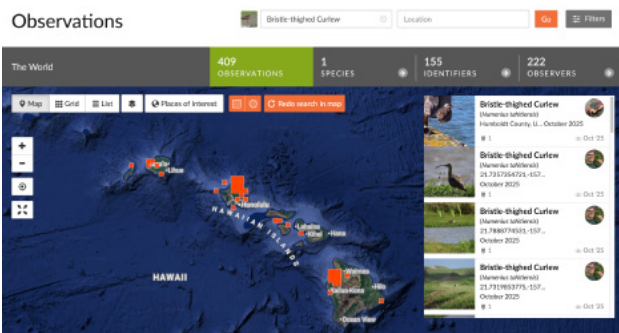
Keawāwa is a community wetland in an urbanized part of Maunaloa on O‘ahu. Breeding sites are scarce in that area, making Keawāwa a vital refuge for Endangered waterbirds. Livable Maunaloa Hui restored habitat at this site by removing invasive plants, restoring a mudflat to attract ae‘o (Hawaiian stilts, *Himantopus mexicanus knudseni*), enhancing bulrush stands with new channels, and reconnecting moats improve water flow. Last season, seven ‘alae ‘ula (Hawaiian common gallinule, *Gallinula galeata sandvicensis*) fledged, and two more hatched.

Lokowaka Pond Wetland Restoration Project — ‘Āina Ho‘ōla Initiative

‘Āina Ho‘ōla Initiative removed invasive species, implemented predator control, and replanted native wetland vegetation across a 3-acre section of the Lokowaka Pond complex, which is one of the few low-elevation coastal wetlands in Hilo, Hawai‘i. These efforts enhanced habitat quality and supported recovery of Endangered and native waterbirds. The project also included community engagement through approximately 90 volunteer days, field tours, and educational outreach activities. Additional teacher trainings, off-site outreach events, and media engagement are fostering long-term ecological and cultural stewardship.



Nēnē (Hawaiian goose, *Branta sandvicensis*) immediately began using the restored area at Lokowaka Pond.
Photo: Kumiko Mattison



An example of Learning Endeavors community observations during the participant training.

Credit: Diana Warren

Wetland Warriors of the Pacific — Learning Endeavors

The [Wetland Warriors of the Pacific](#) project is a hybrid education and community science initiative that aims to inspire action for bird conservation across the Hawaiian Islands. This statewide online course covers Hawaiian wetland ecology, bird conservation needs, priority habitats, and cultural perspectives and approaches. Program participants also had opportunities to collect data for the statewide Wetland Warriors [citizen science project on iNaturalist](#). Learning Endeavors partners launched these resources with Wetland Warrior Field Tours at a local wetland to share skills in bird observation, data collection, and habitat restoration.

National Grants Are Driving Major Conservation Achievements

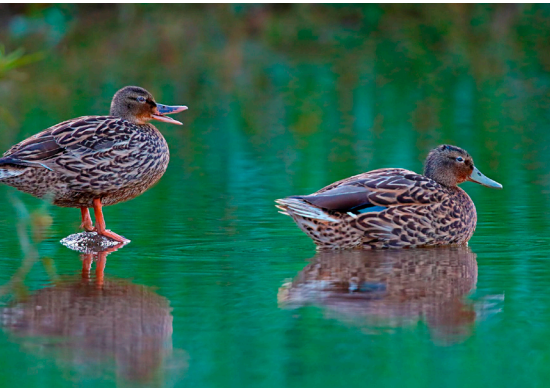
Large scale national grants provided key funding sources that help partners to advance conservation projects. U.S. Fish and Wildlife Service (USFWS) National Coastal Wetlands Conservation grants, and National Fish and Wildlife Foundation (NFWF) National Coastal Resilience Fund and America’s Ecosystem Restoration Initiative grant programs are three examples of funding sources that are leveraged by partners across the Pacific Birds service area to advance conservation priorities.



Pouhala Marsh on the island of O’ahu, HI. Photo: Hawai’i DLNR



A tidal channel within the Eel River estuary.
Photo: David Clendenen



Pair of koloa maoli (Hawaiian ducks, *Anas wyvilliana*).
Photo: Gary Kramer/USFWS

National Coastal Wetland Conservation Grants

USFWS National Coastal Wetland Conservation Grants are advancing conservation actions in coastal wetlands across the Pacific Birds service area.

In California:

► Lower Eel River Wetlands Restoration

The California State Coastal Conservancy, in partnership with the City of Fortuna and the Wiyot Tribe, was awarded a grant to acquire and protect 237 acres of wetlands and uplands in Humboldt County, CA. The City of Fortuna will transfer most of this land back to the Wiyot Tribe for ceremonial purposes, restoration, and public access.

In Hawai'i:

► Pouhala Marsh Restoration and Enhancement

Hawai'i Department of Forestry and Wildlife was awarded a grant to restore Pouhala Marsh. Pouhala Marsh is a 73-acre Wildlife Sanctuary and the largest remaining estuarine wetland in the Pearl Harbor basin. The project will restore 10 acres and install a predator proof fence, which will protect breeding habitat for four endangered Hawaiian waterbirds and the endangered Hawaiian hoary bat or 'ōpe'ape'a (*Lasiurus semotus*).



Collaboration Leads to Priority Moloka'i Wetland Acquisition

In a significant collaboration among County, State, Federal and private partners, the Moloka'i Land Trust (MLT) acquired a 45-acre wetland parcel in Kahanui for restoration and management. This site includes a portion of the Punalau loko i'a (fishpond). The acquisition was made possible with assistance from DOFAW and a combination of funds including a National Coastal Wetland Conservation Grant, match from MLT, support from Pacific Birds, funds from the County of Maui Open Space Fund, and private contributions.

Punalau loko i'a was once directly connected to the ocean, but is currently invaded by invasive mangrove and has lost ocean connectivity. Photo: Moloka'i Wetland Partnership



Marbled godwits (*Limosa fedora*) winter on the Pacific coast.
Photo: Kim Stark

National Coastal Wetland Conservation Grants (continued)

In Washington:

▶ **East Tarboo Wildlife Preserve Acquisition**

The Washington Department of Ecology and the Northwest Watershed Institute acquired 81 acres in Jefferson County, WA for permanent protection. This is part of a long-term conservation effort to protect the Tarboo Creek and Dabob Bay ecosystem. Conservation of this key property will protect wetland and stream habitats and maintain water quality to benefit coastal fish and bird species.

▶ **Samish Bay Slough Protection**

Washington Department of Ecology and the Skagit Land Trust received a grant to acquire and conserve 1.6 acres and 430 feet of marine coastline along Samish Bay in northern Skagit County, WA. The project is located on the Samish Island isthmus between two larger bays in Puget Sound, Padilla and Samish Bays. This acquisition protects the historic channel entrance to Samish Bay, a critical piece needed for future restoration and reconnection of the two bays.



Tarboo Wildlife Area Unit. Photo: Washington Department of Fish and Wildlife



Members of the Moloka'i Wetland Partnership visit a site supported by a NFWF grant.

Photo: Helen Raine



National grants are building resilience for whimbrels, the most widespread of curlew species.

Photo: Monica Iglecia



The Willamette Valley Resilient Landscapes Initiative will strengthen both ecosystem and wildfire resilience.

Photo: Greg Shine (BLM)

National Coastal Resilience Fund Grants

NFWF National Coastal Resilience Fund Grants are supporting partners in advancing conservation priorities for coastal wetlands.

In Hawai'i:

▶ Designing Wetland Restoration for Resilient Communities and Native Waterbirds in Moloka'i

Pacific Birds worked closely with the Moloka'i Wetland Partnership to directly support a [grant to Moloka'i Land Trust](#). This grant advances community-based planning for wetland restoration at two key sites on Moloka'i, both benefitting waterbirds and improving coastal community resilience. This project builds on previous wetland prioritization planning to develop final design for two prioritized sites, Punalau Loko i'a and Kākāha'ia National Wildlife Refuge (NWR), conduct environmental compliance assessments, apply for permits, and engage landowners and community members.

In California:

▶ Building Capacity and Restoration Planning at Samoa Dunes and Wetlands

The Wiyot Tribe received a grant to develop a restoration and management plan for the 35-acre Samoa dunes and wetlands property in Humboldt Bay, CA. This project will fund Wiyot staff to patrol the property, collect data, and engage the community to inform coastal Whimbrel (*Numenius phaeopus*) resilience planning efforts.

America's Ecosystem Restoration Initiative Grants

Pacific Birds is leading the administration of two [NFWF America's Ecosystem Restoration Initiative Grants](#) totalling \$8,100,000 in partnership with Oregon Department of Fish and Wildlife and Oregon Wildlife Foundation. This includes a grant to the Klamath Siskiyou Oak Network awarded in 2022 and a new grant awarded in 2024:

▶ Willamette Valley Resilient Landscapes Restoring Oak and Prairie Habitat on Tribal, Private and Public Lands.

This [grant](#) will restore upwards of 2,000 acres of oak and prairie habitats across multiple sites in the Willamette River Basin on public, private and Tribal lands. This includes almost 800 acres that will be restored by Tribes on Tribal land. The initiative is led by the Willamette Valley Oak and Prairie Cooperative, one of nine regional oak partnerships that are led by Pacific Birds.

The Numbers by the Place

Take a look at some of the high-level impacts of Pacific Birds' staff and partners working across the Pacific Birds service area.

Washington

Through Pacific Birds Partnership Grants since 2020, we have:

- ▶ Distributed \$123,000 in funds
- ▶ Leveraged \$96,511 in partner funds
- ▶ Protected, restored, or enhanced 605 acres
- ▶ Involved 88 partner organizations
- ▶ Produced 12 grant proposals

Oregon

Through Pacific Birds Partnership Grants since 2020, we have:

- ▶ Distributed \$179,102 in funds
- ▶ Leveraged \$387,413 in partner funds
- ▶ Protected, restored, or enhanced 361 acres
- ▶ Created and sustained 12 positions
- ▶ Involved 169 partner organizations
- ▶ Produced 31 grant proposals

As a result of staff support to partners in 2024-2025, we helped:

- ▶ Generate \$11.1M for partners
- ▶ Leverage \$1.3M in partner funds

California

Through Pacific Birds Partnership Grants since 2020, we have:

- ▶ Distributed \$34,000 in funds
- ▶ Leveraged \$49,000 in partner funds
- ▶ Protected, restored, or enhanced 403 acres
- ▶ Involved 31 partner organizations
- ▶ Produced 1 grant proposal
- ▶ Developed 2 conservation plans

Alaska

Through Pacific Birds Partnership Grants since 2020, we have:

- ▶ Distributed \$72,075 in funds
- ▶ Leveraged \$533,039 in partner funds
- ▶ Protected, restored, or enhanced 309 acres
- ▶ Involved 21 partner organizations
- ▶ Produced 2 grant proposals

B.C.

In the last year, we have:

- ▶ Invested \$22.1M in land securement, habitat restoration, conservation planning, partnership building and more
- ▶ Secured 1,689 acres
- ▶ Restored 12,578 acres
- ▶ Stewarded 357 acres

Hawai'i

Through Pacific Birds Partnership Grants since 2020, we have:

- ▶ Distributed \$206,525 in funds
- ▶ Leveraged \$1,331,406 in partner funds
- ▶ Protected, restored, or enhanced 654 acres
- ▶ Involved 114 partner organizations
- ▶ Produced 18 grant proposals

As a result of staff support to partners in 2024-2025, we helped:

- ▶ Generate \$2.2M for partners
- ▶ Leverage \$968,900 in partner funds



In Memoriam: Dr. Shiloh Schulte

Pacific Birds honors the life and legacy of [Dr. Shiloh Schulte](#) from Manomet Conservation Sciences. Dr. Schulte was a deeply respected conservation colleague and cherished friend who lost his life in service of understanding, protecting, and recovering shorebird populations. His loss is felt deeply by Pacific Birds and reverberates across the flyways.



Whimbrel take flight in a saltmarsh,
Minimoy Island, MA.

Photo: Brad Winn

Thank you for being
part of the Joint Venture.



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Copper River Delta, AK.
Photo: USFS