Pacific Flyway Council

Recommendations, Informational Notes,
and Subcommittee Reports

A Product from the Meetings of the:

Pacific Flyway Nongame Technical Committee

and the

Pacific Flyway Study Committee

February 10-14, 2025

In-person and Virtual Meeting

for the

Pacific Flyway Council

March 11, 2025

In-Person and Virtual Meeting

Spring 2025

Preface

The Migratory Bird Treaty Act implemented multiple international treaties addressing migratory bird conservation and established federal authority over migratory birds. The U.S. Fish and Wildlife Service (Service), under the authority of the Secretary of the Interior, collaborates with the Pacific Flyway Council (Council) to develop regulations for migratory birds in the United States Pacific Flyway. Two technical committees advise the Council: the Study Committee (SC) and the Nongame Technical Committee (NTC), collectively referred to as Committees. The Committees are scientific fact-finding bodies whereas the Council is an administrative and policy setting body.

The Service develops migratory game bird hunting regulations annually by establishing frameworks including outside dates, season lengths, bag limits, and hunting areas. The Council makes framework recommendations annually to the Service according to biological status, management objectives, and policy considerations. Members of the Council and the SC meet in late summer/early fall to share data, review the status of populations and actions outlined in management plans, and propose annual hunting frameworks. They meet again in late winter to develop cooperative management programs, and coordinate research and management for the protection and conservation of migratory game birds. The Council typically makes season framework recommendations to the Service in October.

The NTC also meets twice each year with the Council and SC. The NTC provides a consolidated forum for the Service and state fish and wildlife agencies to discuss, plan, and coordinate actions to address management, regulations, monitoring, and other issues related to nongame migratory birds. The NTC both responds to emerging issues originating with the Council or the Service and works proactively with conservation partners and with other states to identify and prioritize flyway-relevant issues that require attention.

Recommendations, informational notes, and subcommittee reports are prepared by the Committees and forwarded to the Council for consideration or adoption. The Council may develop or modify Committee recommendations as necessary. The Council has a policy of considering management plans for adoption only after having received the management plan for review at least 45 days in advance. The Service assumes Council's support for continuation of the previous year's frameworks if no recommendation is received.

Each recommendation and informational note identifies a contact person. The contact person drafts the recommendation or informational note (or facilitates its development) to represent the position of the Committee or the Council. The contact person is usually knowledgeable on the specific subject matter and serves as a contact for more information. If the recommendation or informational note comes from a subcommittee, that subcommittee is identified on the recommendation or note. The Chair of each subcommittee ensures the preparation of the subcommittee's report and is identified on that report.

Table of Contents

Contents

Members, Officers, and Representative Pacific Flyway Council iv

Pacific Flyway Study Committee v

Pacific Flyway Nongame Technical Committee v

RECOMMENDATIONS 6

Recommendation 1 — Amendment to the 2025 Budget for Alaska Duck Banding Support 7

Waterfowl Banding Needs: 9

Recommendation 2 — Budget Amendment for Pacific Flyway Support of a National Harvest Derivation Analysis 22

Distribution and Derivation of Harvest for North American Ducks 24

Recommendation 3 — Allocation of Captive-reared Trumpeter Swans to Approved Restoration Sites 28

Recommendation 4 — Letter of Support for the Bird Banding Lab and the Breeding Bird Survey 30

Recommendation 5 — Amendment of the Pacific Flyway Council Funding Agreement with the Canadian Wildlife Service for Western Arctic Population Lesser Snow Goose Banding on Banks Island 34

Recommendation 6 — Support for the 16th North American Arctic Goose Conference 35

Recommendation 7 — AFWA HIP Working Group Support Letter 37

INFORMATIONAL NOTES 39

Informational Note 1 — Two-tier Working Group Representation 40

Informational Note 2 — Golden Eagle Allocation Procedure 41

Informational Note 3 — Harvest Allocation of Peregrine Falcons for Falconry Purposes in the United States West of 100° West Longitude 43

Informational Note 4 – 2024 Status Report on the Pacific Flyway Council Funded Southern Wings Projects 44

Informational Note 5 – 2025 Southern Wings Projects 51

SUBCOMMITTEE REPORTS 58

Rocky Mountain Population Trumpeter Swan Subcommittee 59

Banding Subcommittee 62

OFF-CYCLE PRODUCTS 63

February 14, 2025 Federal Register Comments for the Proposed Rule on New Federal Rulemaking Process 64

Members, Officers, and Representative Pacific Flyway Council

Members

Mark Burch, Alaska Department of Fish and Game
Josh Avey, Arizona Game and Fish Department
Scott Gardner, California Department of Fish and Wildlife
Matthew Eckert, Colorado Parks and Wildlife
Shane Roberts, Idaho Department of Fish and Game
Ken McDonald, Montana Fish, Wildlife, and Parks
Shawn Espinosa, Nevada Department of Wildlife
Bernadette Graham-Hudson, Oregon Department of Fish and Wildlife
Blair Stringham, Utah Division of Wildlife Resources
Mick Cope, Washington Department of Fish and Wildlife
Doug Brimeyer, Wyoming Game and Fish Department

Officers

Chair, Blair Stringham, Utah
Vice-chair, Shawn Espinosa, Nevada
Secretary, Jason Schamber, Alaska
Treasurer, Jeff Knetter, Idaho

Consultants to U.S. Fish and Wildlife Service Migratory Bird Regulation Committee

Scott Gardner, California (Sr.), Shawn Espinoza, Nevada (Jr.)

Representative on the National Flyway Council

Shawn Espinoza, Nevada (Jr.)

Representative on the North American Wetlands Conservation Council

Riley Peck, Utah (Pending)

Representative on the North American Waterfowl Management Plan Committee

Blair Stringham, Utah

Representative on the Sea Duck Joint Venture Management Board

Mark Burch, Alaska

Representative on the Arctic Goose Joint Venture Management Board

Vacant

Pacific Flyway Study Committee

Members
Jason Schamber, Alaska
Larisa Harding, Arizona
Melanie Weaver, California
Adam Behney, Colorado
Jeff Knetter, Idaho
Claire Gower, Montana
Russell Woolstenhulme, Nevada
Brandon Reishus, Oregon
Jason Jones, Utah
Kyle Spragens, Washington
Sean Yancey, Wyoming

Officers
Chair, Jason Jones, Utah
Vice Chair, Russell Woolstenhulme, Nevada
Treasurer, Jeff Knetter, Idaho

Subcommittees
Aleutian Cackling Goose
Banding
Cackling/Minima Cackling Goose
Dusky Canada Goose
Emperor Goose
Interior Band-Tailed Pigeon
Taverner's Cackling Goose and Lesser Canada Goose
Lower Colorado River Valley Sandhill Crane
Midcontinent Sandhill Crane
Mourning and White-Winged Dove
Pacific Brant
Pacific Coast and Central Valley Sandhill Cranes
Pacific Coast Band-Tailed Pigeon
Pacific Trumpeter Swan
Rocky Mountain Sandhill Crane
Rocky Mountain Trumpeter Swan
Western and Eastern Tundra Swans
Western Canada Goose
White Geese
White-Fronted Goose

Pacific Flyway Nongame Technical Committee

Members
Julie Hagelin, Alaska
Edwin Juarez, Arizona

Dan Applebee, California
Brett Walker, Colorado
Michelle Commons Kemner, Idaho
Allison Begley, Montana
Jessica Brooks, Nevada
Emily VanWyk, Oregon
Russell Norvell, Utah
Jessica Stocking, Washington
Grant Frost, Wyoming

Officers
Chair, Russell Norvell, Utah
Vice chair, Jessica Brooks, Nevada
Treasurer, Jessica Stocking, Washington
Secretary, Edwin Juarez, Arizona

Subcommittees
American White Pelican
Banding
Double-crested Cormorant Pelican
Flyway Engagement
Raptors

Representatives to the Pacific Flyway Council and Technical Committees

U.S. Fish and Wildlife Service
Todd Sanders, Division of Migratory Bird Management, Grand Junction
Steve Olson, Division of Migratory Bird Management, Vancouver
Joe Sands, Columbia-Pacific Region, Portland
Michelle McDowell, Columbia-Pacific Region, Portland
Dan Collins, Lower Colorado Basin Region, Albuquerque
Corrie Borgman, Lower Colorado Basin Region, Albuquerque
David Olson, Missouri and Upper Colorado River Basin Region, Denver
David Safine, Alaska Region, Anchorage
Rick Lanctot, Alaska Region, Anchorage
Thomas Leeman, California-Great Basin Region, Sacramento
Emily Wells, California-Great Basin Region, Sacramento

Canadian Wildlife Service
Megan Ross, British Columbia
Garnet Raven, Alberta

Alberta Environment and Sustainable Resource Development
Jason Caswell, Alberta

Alaska Migratory Bird Co-Management Council
Patty Schwalenberg, Alaska

RECOMMENDATIONS

Recommendation 1 — Amendment to the 2025 Budget for Alaska Duck Banding Support

Recommendation

The Pacific Flyway Council (Council) authorizes an expenditure of $40,000 towards flyway duck banding priorities in Alaska. The funds will be provided to support banding needs for mallard and northern pintail on National Wildlife Refuges in Alaska.

Justification

To ensure prioritization of duck banding activities and to improve total deployment numbers on National Wildlife Refuges in Alaska, the Pacific Flyway states will provide financial support to Tetlin, Yukon Delta, and Yukon Flats National Wildlife Refuges starting in summer 2025. Ongoing financial support is anticipated to maintain banding activities in future years.

Duck banding efforts are essential to informing annual regulatory alternatives for harvest management. Specifically, banding of mallards directly informs the Western Mallard Adaptive Harvest Management (AHM) harvest strategy for Pacific Flyway states and banding of northern pintail to support the interim AHM strategy informing regulatory alternatives starting with the 2025-2026 hunting season.

Pre-season mallard banding objectives have been identified for all Pacific Flyway regions, with a goal of 6,000 total mallard bands to be deployed in Alaska, split between the different age-sex cohorts (Koneff 2010 – Waterfowl Banding Needs Memo). Minimum banding quotas have been met annually for each banding reference area, except Alaska (Sanders 2018 – Preseason Waterfowl and Dove Banding in the Western U.S.). Additionally, the adoption of the interim pintail harvest strategy uses an Integrated Population Model (IPM) that integrates breeding population size, banding data and harvest surveys into a Bayesian estimation framework, elevating the importance of annual pre-season banding activities for northern pintail. While no explicit quota or goals exist, band deployments in Alaska are of high priority to the Pacific Flyway states.

Adoption Contact: Kyle Spragens
Pacific Flyway Study Committee
February 14, 2025

Jason Jones, Chair

Pacific Flyway Council
March 11, 2025

Blair Stringham, Chair

Waterfowl Banding Needs:

I recognize that many of our partners are anxiously awaiting new banding goals from a revised Continental Banding Needs Assessment. We have been working for several years on a revised protocol for developing continental banding goals for migratory game birds. It is our desire, through the new assessment protocol we are developing, to offer a more objective and flexible means for specifying continental banding goals than we have had for past Banding Needs Assessments. In particular, the framework we are developing, in collaboration with USGS, would allow us to more directly evaluate the effect of varying levels of banding effort on our ability to meet fundamental harvest management objectives, and would provide a flexible toolset for evaluating the effects of spatial heterogeneity in allocating banding effort across space. We had hoped to release a draft chapter for mid-continent mallards as well as a description of the technique used in developing revised goals in time for deliberations at the upcoming 2010 winter Flyway meetings. Unfortunately, we will not be able to meet that commitment due to a number of technical challenges that remain unresolved. Despite these remaining challenges we still believe that, when completed, the revised framework will offer an improved framework for developing banding goals to meet management needs and to inform the allocation of bands across the landscape. When these challenges have been addressed, a draft report will be distributed for comment.

To offer some interim guidance on minimum banding goals for mallards, we have conducted an analysis of contemporary data using the methods set forth in the 1989 Continental Banding Needs Assessment document. We estimated banded sample sizes necessary to meet the statistical criteria specified in the 1989 Continental Banding Needs Assessment document using Band2 and survival and recovery probabilities from mallards banded from 1988 to 2008. First, we used dead recovery models (Brownie et al. 1985) and program MARK (White and Burnham 1999) to estimate survival and recovery probabilities for mallards banded at 36 different reference areas, including some states that were not considered during the 1989 assessment (Figure 1). We included all wild captured mid continental male mallards banded between July and August, and direct and indirect recoveries of birds shot or found dead between September and mid-February. For each reference area, we assumed survival (S) varied by age and was constant among years. We pooled recovery probability (f) across age and time from 1988 to 1999, and from 2000 to 2007. Therefore, we estimated two survival probabilities ($\overline{S}^{\text{Juvenile}}_{1988-2007}$ and $\overline{S}^{\text{Adult}}_{1988-2007}$) and two recovery probabilities ($\overline{f}_{1988\text{-}1999}$, and $\overline{f}_{2000\text{-}2007}$) (Table 1). We assumed that the most recent recovery probability was the most representative estimate for the near future. Thus, we entered $\overline{f}_{2000\text{-}2007}$ and the two age-specific mean survival probabilities for each reference area into Band2. Note, Band2 does not incorporate uncertainty around parameter estimates for determining band quotas. Therefore, we did not enter standard errors for the three parameter estimates (i.e., $\overline{S}^{\text{Juvenile}}_{1988-2007}$, $\overline{S}^{\text{Adult}}_{1988-2007}$, $\overline{f}_{2000\text{-}2007}$). We selected the banding quota that was closest to a 1:1 age ratio that would yield a CV ≤10% for a 5-year mean survival estimate. Consistent with the 1989 Assessment, we present banding quotas rounded up to the nearest 500.

In most cases, the guidance offered in 1989 is still relevant considering more contemporary data and rounding rules similar to those used in 1989. Where changes to banding goals did occur, the change

was typically a reduction, with the exception of Alaska and Wyoming where data suggested an increase in minimum banding effort (Table 2). In some cases, contemporary data were insufficient to estimate survival rates. In these cases we were unable to update banding goals.

Again, we view these as interim updated banding goals for mallards while we continue to work toward a revised assessment framework. Should technical challenges in the end prove intractable, or should it become clear that delays in completing the new assessment framework could be prolonged, we will apply the methods from the 1989 Assessment to other species and. Given the similarity between the updated and original 1989 banding goals for mallards, it is likely that guidance provided in the 1989 assessment or in more recent species- specific assessments continues to provide a reasonable basis for allocation of banding effort.

Mark Koneff
Chief, Population and Habitat Assessment Branch

Table 1. Mean survival (1988-2007) and recovery (2000-2007) probabilities for mallards banded in the North America.

					95% CI	
Area	Parameter	Detail	Estimate	Standard Error	Lower	Upper
Alaska (1)	Recovery (f)	2000-2007	0.066	0.003	0.060	0.072
	Survival	Adult	0.570	0.011	0.549	0.591
	Survival	Immature	0.238	0.023	0.197	0.285
British Columbia (2)	Recovery (f)	2000-2007	0.089	0.003	0.083	0.094
	Survival	Adult	0.629	0.005	0.619	0.640
	Survival	Immature	0.509	0.020	0.469	0.549
N. Alta. – NWT (3)	Recovery (f)	2000-2007	0.073	0.001	0.071	0.075
	Survival	Adult	0.642	0.003	0.635	0.648
	Survival	Immature	0.542	0.012	0.518	0.565
N. Sask. - N. Man. (4)	Recovery (f)	2000-2007	0.079	0.002	0.075	0.083
	Survival	Adult	0.665	0.005	0.656	0.674
	Survival	Immature	0.567	0.021	0.526	0.606
Cen. Alta. (5)	Recovery (f)	2000-2007	0.066	0.001	0.064	0.068
	Survival	Adult	0.685	0.003	0.679	0.691
	Survival	Immature	0.605	0.016	0.573	0.637
SE Alta. (6)	Recovery (f)	2000-2007	0.070	0.001	0.069	0.072
	Survival	Adult	0.668	0.003	0.662	0.673
	Survival	Immature	0.592	0.018	0.555	0.627
Cen. Sask. (7)	Recovery (f)	2000-2007	0.066	0.001	0.064	0.069
	Survival	Adult	0.702	0.004	0.694	0.710
	Survival	Immature	0.489	0.024	0.442	0.536
SW Sask. (8)	Recovery (f)	2000-2007	0.070	0.001	0.068	0.072
	Survival	Adult	0.707	0.002	0.702	0.711
	Survival	Immature	0.626	0.013	0.599	0.651
SE Sask. (9)	Recovery (f)	2000-2007	0.063	0.001	0.061	0.065
	Survival	Adult	0.709	0.003	0.703	0.714
	Survival	Immature	0.657	0.020	0.617	0.695
Cen. Man. (10)	Recovery (f)	2000-2007	0.074	0.001	0.071	0.076
	Survival	Adult	0.683	0.003	0.678	0.688
	Survival	Immature	0.615	0.016	0.584	0.646
SW Man. (11)	Recovery (f)	2000-2007	0.058	0.001	0.056	0.060
	Survival	Adult	0.702	0.004	0.694	0.710
	Survival	Immature	0.600	0.025	0.550	0.647
W. Ontario (12)	Recovery (f)	2000-2007	0.093	0.003	0.087	0.099
	Survival	Adult	0.638	0.007	0.624	0.651
	Survival	Immature	0.583	0.022	0.540	0.626
E. Ontario-Quebec (13)	Recovery (f)	2000-2007	0.104	0.001	0.102	0.107

	Survival	Adult	0.559	0.004	0.552	0.566
	Survival	Immature	0.358	0.007	0.344	0.371
PEI, NB, NS, Nfld. (14)	Recovery (f)	2000-2007	0.125	0.083	0.031	0.386
	Survival	Adult	0.000	0.000	0.000	0.000
	Survival	Immature	0.000	0.000	0.000	0.000
Northeastern U. S. (15)	Recovery (f)	2000-2007	0.105	0.002	0.102	0.109
	Survival	Adult	0.598	0.004	0.591	0.605
	Survival	Immature	0.467	0.010	0.448	0.486
Michigan (16)	Recovery (f)	2000-2007	0.101	0.004	0.094	0.108
	Survival	Adult	0.608	0.007	0.594	0.622
	Survival	Immature	0.453	0.020	0.413	0.493
Wisconsin (17)	Recovery (f)	2000-2007	0.141	0.002	0.137	0.145
	Survival	Adult	0.569	0.004	0.561	0.577
	Survival	Immature	0.377	0.009	0.360	0.393
Minnesota (19)	Recovery (f)	2000-2007	0.097	0.002	0.094	0.100
	Survival	Adult	0.617	0.004	0.609	0.625
	Survival	Immature	0.513	0.012	0.490	0.537
E. Dakotas (20)	Recovery (f)	2000-2007	0.066	0.001	0.064	0.067
	Survival	Adult	0.663	0.002	0.659	0.668
	Survival	Immature	0.647	0.011	0.625	0.670
W. Dakotas - E. Mont. (21)	Recovery (f)	2000-2007	0.064	0.001	0.062	0.067
	Survival	Adult	0.652	0.004	0.643	0.661
	Survival	Immature	0.661	0.005	0.652	0.671
Colorado (23)	Recovery (f)	2000-2007	0.072	0.003	0.067	0.077
	Survival	Adult	0.649	0.007	0.636	0.662
	Survival	Immature	0.571	0.024	0.523	0.618
Wash-Ore-Ida (26)	Recovery (f)	2000-2007	0.101	0.001	0.099	0.104
	Survival	Adult	0.620	0.002	0.616	0.624
	Survival	Immature	0.465	0.008	0.451	0.480
California (27)	Recovery (f)	2000-2007	0.123	0.002	0.120	0.127
	Survival	Adult	0.592	0.004	0.584	0.599
	Survival	Immature	0.397	0.009	0.379	0.414
Wyoming (28)	Recovery (f)	2000-2007	0.059	0.008	0.045	0.076
	Survival	Adult	0.666	0.016	0.634	0.696
	Survival	Immature	0.570	0.069	0.432	0.698
Nebraska (29)	Recovery (f)	2000-2007	0.113	0.051	0.045	0.257
	Survival	Adult	0.000	0.000	0.000	0.000
	Survival	Immature	0.429	0.463	0.018	0.968
Ohio (30)	Recovery (f)	2000-2007	0.129	0.002	0.125	0.134
	Survival	Adult	0.570	0.004	0.562	0.579
	Survival	Immature	0.437	0.010	0.417	0.457
Indiana (31)	Recovery (f)	2000-2007	0.119	0.030	0.072	0.190
	Survival	Adult	0.667	0.063	0.535	0.777

	Survival	Immature	0.412	0.144	0.179	0.692
Illinois (32)	Recovery (f)	2000-2007	0.063	0.093	0.003	0.589
	Survival	Adult	0.637	0.061	0.511	0.746
	Survival	Immature	0.745	0.300	0.117	0.985
Iowa (33)	Recovery (f)	2000-2007	0.177	0.009	0.160	0.194
	Survival	Adult	0.648	0.020	0.609	0.685
	Survival	Immature	0.210	0.020	0.173	0.252
Utah (35)	Recovery (f)	2000-2007	0.101	0.014	0.077	0.131
	Survival	Adult	0.606	0.017	0.572	0.639
	Survival	Immature	0.544	0.064	0.418	0.665
Nevada (36)	Recovery (f)	2000-2007	0.065	0.013	0.044	0.096
	Survival	Adult	0.677	0.020	0.636	0.716
	Survival	Immature	0.497	0.063	0.375	0.619

Table 2. Comparison of updated banding objectives with those of the 1989 Assessment.

		Updated Assessment		1989 BNA	
Banding Area	Sex	Adults	Young	Adults	Young
Alaska (1)	M	1000	2000	500	500
	F	1000	2000	500	500
British Columbia (2)	M	500	500	500	500
	F	500	500	500	500
N. Alta. – NWT (3)	M	1000	1000	1000	1000
	F	1000	1000	1000	1000
N. Sask. - N. Man. (4)	M	500	500	1000	1000
	F	500	500	1000	1000
Cen. Alta. (5)	M	1000	1000	1000	1000
	F	1000	1000	1000	1000
SE Alta. (6)	M	500	1000	1000	1000
	F	500	1000	1000	1000
Cen. Sask. (7)	M	1000	1000	1000	1000
	F	1000	1000	1000	1000
SW Sask. (8)	M	500	1000	1000	1000
	F	500	1000	1000	1000
SE Sask. (9)	M	1000	1000	1000	1000
	F	1000	1000	1000	1000
Cen. Man. (10)	M	500	500	1000	1000
	F	500	500	1000	1000
SW Man. (11)	M	1000	1000	1000	1000
	F	1000	1000	1000	1000
W. Ontario (12)	M	500	500	500	500
	F	500	500	500	500
E. Ontario-Quebec (13)	M	1000	1000	1000	1500
	F	1000	1000	1000	1700
PEI, NB, NS, Nfld. (14)	M			500	500
	F			500	500
Northeastern U. S. (15)	M	500	500	1000	1000
	F	500	500	1000	1000
Michigan (16)	M	500	500	500	1000
	F	500	500	500	1000
Wisconsin (17)	M	500	500	1000	1000
	F	500	500	1000	1000
Minnesota (19)	M	500	500	1000	1200
	F	500	500	1000	1200

Table 2. Continued.

Banding Area	Sex	Updated Assessment		1989 BNA	
		Adults	Young	Adults	Young
E. Dakotas (20)	M	1000	1000	1000	1000
	F	1000	1000	1000	1000
W. Dakotas - E. Mont. (21)	M	1000	1000	1000	1000
	F	1000	1000	1000	1000
Colorado (23)	M	1000	1000	1000	1000
	F	1000	1000	1000	1000
Wash-Ore-Ida (26)	M	500	500	1000	1000
	F	500	500	1000	1000
California (27)	M	500	500	1000	1000
	F	500	500	1000	1000
Wyoming (28)	M	1000	1000	500	500
	F	1000	1000	500	500
Nebraska (29)	M			500	500
	F			500	500
Ohio (30)	M	500	500		
	F	500	500		
Indiana (31)	M	500	500		
	F	500	500		
Illinois (32)	M	500	1000		
	F	500	1000		
Iowa (33)	M	500	500		
	F	500	500		
Utah (35)	M	500	500		
	F	500	500		
Nevada (36)	M	1000	1000		
	F	1000	1000		

Figure 1. Map of banding reference areas used in the interim banding needs assessment for mallards, 2010.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Division of Migratory Bird
Management 1211 SE
Cardinal Court, Suite 100
Vancouver, WA 98683

MEMORANDUM

TO: Migratory Bird Program Chiefs, Regions 1, 7, and 8
Refuge Supervisors, Regions 1, 7, and 8
Inventory and Monitoring Coordinators, Regions 1, 7, and 8
Regional Hunting and Fishing Chiefs, Regions 1, 7, and 8

FROM: Todd A. Sanders, Pacific Flyway Representative

CC: Regional Chiefs, NWRS, Regions 1, 7, and 8
Project Leaders/Refuge Managers, Regions 1, 7, and 8

DATE: February 16, 2018

SUBJECT: Preseason Waterfowl and Dove Banding in the Western U.S.

The U.S. Fish and Wildlife Service (Service) and its partners engage in a variety of large- scale cooperative monitoring programs for migratory birds to help meet our mandated responsibilities. The Service's Director identified in a memorandum the monitoring programs of national priority and where regional support is requested (attached). Along with substantial participation by Headquarters Migratory Bird Program staff, Regions provide staff and vehicles to help support waterfowl breeding population surveys and banding (primarily in Canada), but also at the annual wingbee (harvest survey) in each Flyway.

In addition to these off-site monitoring efforts, Refuges manage wetland habitats for breeding waterfowl, and therefore play an essential role locally in working with State agencies to help meet cooperative state-level banding quotas. Herein, I provide details on national waterfowl and dove banding quotas at the state level in the western U.S. and highlight the need for Regional Refuge and Migratory Bird programs to collaborate to help meet these quotas (particularly for waterfowl).

Shared Service and State responsibility for waterfowl and dove banding is critical to meeting our national monitoring priorities, maintaining partnerships with the States, and providing hunting opportunities for the American people.

Moreover, the waterfowl hunting tradition is integral to the Refuge System, where it represents a priority wildlife- dependent recreational use on many refuges. Refuges dedicate considerable staff time and funding to managing waterfowl habitat in support of waterfowl hunting.

The Service partnered with the States to develop operational banding programs for waterfowl and doves, and in 1995 adopted the Adaptive Harvest Management (AHM) process for regulating waterfowl harvest in the United States. AHM has long been recognized as one of the Service's best examples of adaptive resource management. The use of banding data as an integral part of waterfowl and dove harvest management is detailed in the annual AHM report and dove status report (attached).

In regard to waterfowl banding, the Service and State of Alaska did not band an adequate number of mallards in 2014, which caused some challenges in using the AHM protocol to inform decisions about harvest regulations in 2015. The primary banding station in Alaska was at Minto Flats, which was flooded in 2014. This highlights the need to diversify and expand the banding effort across the landscape and among the States and Service and the importance of meeting minimum banding quotas annually. Further, the Pacific Flyway Council expressed concern in 2017 that Service banding efforts on Refuges in some areas have dropped off considerably in the last 10 years or more. Thus, States have had to shoulder a greater burden in meeting banding quotas to support the Federal-State cooperative western mallard harvest management protocol.

A review of recent (last 5 years) banding efforts indicate that minimum banding quotas have been met annually for each banding reference area, except Alaska. However, the number of mallards banded annually by Service operated banding stations (i.e., under Service permits, but other cooperative partnerships to support banding may exist) has decreased to about 45 in Alaska (primarily Yukon Delta and Koyukuk NWRs); 270 in Washington, Oregon, and Idaho (primarily McNary, Turnbull, and Deer Flat NWRs); and near zero in Nevada. Although banding support by Service personnel in California generally remains strong at about 3,600 mallards (primarily Delevan-Sacramento, Lower Klamath-Tule Lake, Modoc, and San Luis NWRs), it has started to wane during the last couple of years.

Regional Refuge and Migratory Bird programs should collaborate to help meet specific waterfowl banding quotas (and dove banding quotas to the extent possible) established by the Service in cooperation with the States (Appendix A). States in the Pacific Flyway have identified the highest priority Refuges in Regions 1, 7, and 8 where continued or new waterfowl support is needed (Appendix B). Each Region should try to meet at least half (the other half by the States) of the mallard banding quota each year, and work with State partners to distribute banding efforts so that data are representative of the population to the extent possible. The specific location and process for banding support is left to

the discretion of Regional Refuge and Migratory Bird programs considering mallard and dove distribution, staff training and interest, and other considerations.

There are a number of avenues that can be pursued to reduce the burden to Refuge staff who would be participating in waterfowl banding. For example, funding could be provided to support State banding crews working on refuges, or crews could be assembled to assist staff and volunteers with banding, especially for those stations that may not have prior trapping and banding experience. As earlier mentioned, Refuges in some areas are currently banding waterfowl, particularly Regions 8 and 7.

Thank you for your continued support of operational migratory bird monitoring programs of national priority. Please contact me if I can provide additional information.

Appendix A. Details on waterfowl and dove banding quotas at the state-level in the western U.S. associated with cooperative Service-State operational monitoring programs.

Waterfowl Banding

The Service and Pacific Flyway Council (representing the 12 western States) adopted and implemented in 2008 an AHM protocol for setting duck hunting regulations in the Pacific Flyway based on the status and dynamics of western mallards (73 FR 43293, 24 July 2008). Prior to 2008, the regulatory decision for the Pacific Flyway was based on the status of mallards in central North America, but this did not adequately account for the areas where ducks harvested in the Pacific Flyway are derived. Abundance of western mallards during the breeding season is determined based on State and Federal waterfowl surveys in Alaska, northern Yukon Territory, British Columbia, Washington, Oregon, and California. The status of mallards is a surrogate for the status of most other duck populations in the Pacific Flyway; however, harvest regulations for some duck species are established via other protocols where they are not well represented by mallards (e.g., scaup, northern pintail, and canvasback).

Objectives for annual preseason banding have been identified for mallards in the western U.S. by the Service's Migratory Bird program at Headquarters. These are described as minimum banding quotas in a 2010 memo from the Chief of the branch of Population and Habitat Assessment (attached). Minimum banding quotas include 6,000 in Alaska; 2,000 in Washington, Oregon, and Idaho combined; 2,000 in California; 4,000 in Nevada; 1,000 in Utah, and 2,000 in British Columbia. There are no details in the memo about how banding responsibilities are divided up by the States and Service. Ideally, agency representatives would work together to identify the most effective areas and ways to meet minimum banding objectives and obtain a representative banding sample to evaluate western mallard population dynamics. Although there are no

banding objectives identified for other duck species in the western U.S. at this time, the HQ Migratory Bird program is working on an updated continental banding needs assessment that is expected to include banding objectives for at least mallards and pintails. Other duck species should be banded opportunistically in association with mallard banding until there is other guidance.

Mourning Dove Banding
The mourning dove is the most heavily harvested migratory game bird species in the U.S. Several years ago, in an effort to improve the scientific basis for managing mourning doves, the States and the Service collaborated to develop an operational national mourning dove banding program (78 FR 52662, 23 August 2013). These data are required for developing recommendations for harvest regulations each year. Banding quotas have been developed for each state in the Mourning Dove Banding Needs Assessment completed in 2009 (attached). Minimum banding quotas include 500 in Washington, 601 in Oregon, 633 in Idaho, 1,732 in California, 490 in Nevada, 707 in Utah, and 3,349 in Arizona). Refuges attract many breeding doves each summer, and therefore play an essential role in working with State wildlife agencies to help meet cooperative state-level banding quotas. The Migratory Bird Program has a fact sheet for implementation of the national dove banding program in the western US (attached), and a CD with instructions (available on request) on how to operate a dove banding station. Analyses of data are available in annual mourning dove status reports.

Appendix B. Highest priority National Wildlife Refuges in the western U.S. where continued or new waterfowl banding is requested by State wildlife agencies in the Pacific Flyway. Highest priority Refuges are ordered by rank (1=highest priority, 2=second highest priority, etc). Other Refuges could provide banding support too.

Region 1 Idaho
Minidoka-Grays Lake-Bear Lake (1) [Southeast Idaho NWR Complex] Camas (2) [Southeast Idaho NWR Complex]
Deer Flat (2)
Kootenai (2) [Inland Northwest NWR Complex]

Oregon
Malheur (1)
Umatilla/McNary (2)
Tualatin River (2)
Klamath Marsh (3)
Upper Klamath (3)

Washington
Turnbull (1)

McNary-Columbia-Toppenish (1)
Ridgefield (2)
Willapa (3)
Nisqually (3)
Little Pend Orielle (3)

Region 7 Alaska
Yukon Delta (1)
Koyukuk (1)
Tetlin (2)
Kenai (2)
Yukon Flats (2)
Kanuti (2)
Innoko (2)
Nowitna (2)

Region 8 California
Lower Klamath-Tule Lake (1) Sacramento-Delevan (1)
Modoc (2)
San Luis (2)

Nevada
Stillwater (1)
Pahranagat (2)
Ruby Lake (2)

Recommendation 2 — Budget Amendment for Pacific Flyway Support of a National Harvest Derivation Analysis

Recommendation

The Pacific Flyway Council (Council) recommends a budget amendment to provide financial support of $3,591 for a proposed national harvest derivation analysis to be conducted by the University of Minnesota.

Justification

This analysis aims to address challenges arising from incomplete knowledge regarding derivation of harvested waterfowl, which have made it increasingly difficult for states to base Fall Flights investment decisions solely on banding or harvest data. The proposed analysis will integrate population surveys, banding data, and harvest surveys to better identify the source of harvested birds for states and provinces. Additionally, the project will provide analytical code, allowing partners to expand or replicate the analysis for other species or future years.

The total project cost is estimated at just over $40,000. A proposed funding structure includes contributions from Ducks Unlimited Canada ($10,115), Ducks Unlimited Inc. ($10,000), and the four flyways ($20,000). Using the same formula applied to determine state Fall Flights goals—based on hunter numbers and harvest over a 20-year period, the suggested flyway contributions are as follows: Atlantic Flyway: $3,215; Mississippi Flyway: $9,171; Central Flyway: $4,023; Pacific Flyway: $3,591.

Adoption

Contact: Adam Behney

Pacific Flyway Study Committee
February 14, 2025

Jason Jones, Chair

Pacific Flyway Council
March 11, 2025

Blair Stringham, Chair

Distribution and Derivation of Harvest for North American Ducks

Todd Arnold, Dept. of Fisheries, Wildlife & Conservation Biology, U Minnesota

Establishing linkages between breeding and wintering areas is especially important for harvested species, because patterns of migrational connectivity between wintering and staging habitats (harvest regions) and breeding habitats (production and harvest regions) can affect optimal harvest strategies and allocation of conservation efforts. Harvest derivation utilizes breeding population surveys, banding and band-recovery data, and harvest surveys to estimate the breeding-ground origins of individuals that are harvested in different states and provinces.

Munro and Kimball (1982) first developed methods for assessing distribution and derivation of waterfowl harvests using continental-scale mallard data collected from 1961-1975. Although there have been a few follow-up analyses, they have included limited species and/or scales (e.g. continental blue-winged teal, Szymanski and Dubovsky 2013; Pacific Flyway dabbling ducks, de Sobrino et al. 2017).

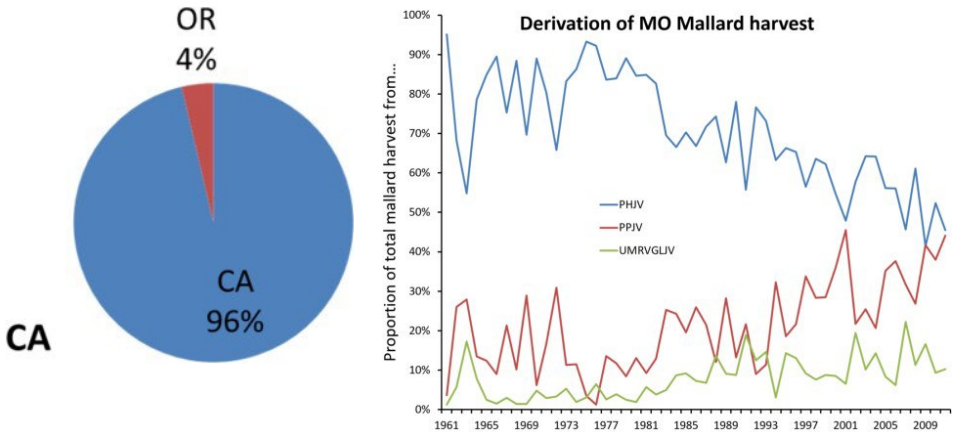
OBJECTIVES

My objectives are threefold:

(1) Compile data sources (harvest, banding, population estimates) needed to determine the distribution and derivation of harvest for important duck species from all major production areas.

2) Provide updated estimates of the distribution and derivation of harvest for mallards for all individual states and provinces within the 4 major North American flyways.

Understanding distribution of harvest is especially important for production areas (e.g., of mallards breeding in California during 1966-2013, 96% of those harvested were harvested in CA and 4% were harvested in OR; de Sobrino et al. 2017) whereas understanding derivation of harvest is of greater importance for important harvest regions (e.g., for mallards harvested in Missouri during 1961-2011, the proportional contribution from the Canadian Prairie Habitat Joint Venture (PHJV) declined, whereas the contribution from the U.S. Prairie Pothole Joint Venture (PPJV) increased; T. Arnold, unpubl.).



3) Provide estimates (necessary time and funding) needed to complete additional projects using these data sources (e.g. additional species or additional research questions such as changes in distribution or derivation of harvest by age or sex).

METHODS

Harvest derivation analysis requires breeding population estimates for each major breeding area, estimates of relative breeding productivity in each area (or an average estimate over all areas), plus a sample of banded birds from each breeding area. Previous studies of harvest derivation have generally used banding reference areas to delineate source areas and states or provinces as harvest areas (e.g., Munro and Kimball, 1982); however, I will use states and provinces as both source and harvest regions, combining adjacent states only to achieve necessary sample sizes.

Key data sources will include breeding waterfowl surveys from the traditional survey region (U.S. Fish and Wildlife Service 2023) plus state (MN, WI) or provincial reports (BC) from relevant agencies. I will also consider using Breeding Bird Survey or eBird data for species that are widespread outside of the traditional survey area (see de Sobrino et al. 2017). Band recoveries provide the means to connect breeding sites to harvest locations, and I will use Bayesian methods to provide robust estimates of direct recovery rates, including years and regions with limited banding or recovery data. At the continental scale, I will use Lincoln estimators of population size, recruitment, and sex ratios (Alisauskas et al. 2014). Previous analyses have assumed that sex ratios were constant across regions and over time, but recent evidence from mallards and northern pintails suggest increasingly male-biased sex ratios (Alisauskas et al. 2014; Arnold, unpubl. data). Likewise, estimates of breeding productivity have been treated as spatially constant in previous analyses of harvest derivation, but it may be possible to use age-ratios at banding to explore models with regional variation in productivity (Specht and Arnold 2018). These analyses will require access to banding and recovery data, age- and sex-specific harvest estimates, and survey data for mallards throughout North America. For this analysis, I will attempt to use Bayesian methods to produce full posterior distributions for all estimated variables (e.g. Zimmerman et al. 2010).

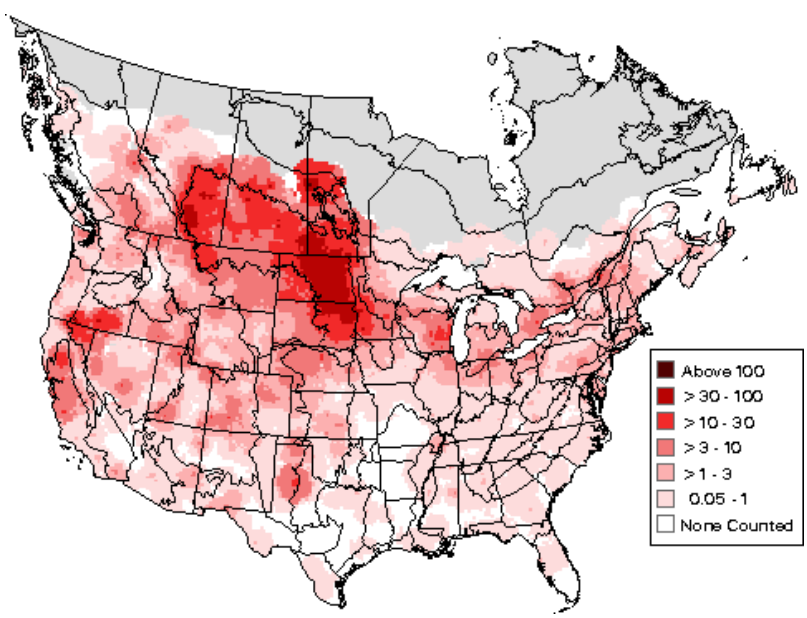


Figure 1. Summer distribution of mallards based on the Breeding Bird Survey, 2007-2013. Note the large concentrations of birds from outside traditional survey areas within the Prairie Pothole Region (Sauer et al. 2014). These birds have been mostly ignored for midcontinent harvest analysis (MN, WI, and MI are exceptions), but can be locally important sources of harvest in some regions (e.g. CO, OH).

DELIVERABLES AND TIMELINE:

1) Data files and R scripts that include all data and calculations, that can be used for creating any customized version of the items described in #2 (i.e., the ability to recreate figures using only adult female mallards). Finish 31-July-2025
2) A final report that includes a full description of methodology, plus tables and figures of long-term mallard harvest distribution and derivation (data permitting) for each state, province, and territory in Canada and the U.S. Finish 31-Aug-2025.
3) Provide exploratory analyses hinting at potential future steps using these data. Finish 31- Aug-2025.

Budget item:	**Detail:**	**Subtotal:**
Salary	4 x $6,361	$25,444
Fringe benefits	33.5% of salary	$8,524
Travel	Attend flyway meetings	$2,500
Indirect costs	10% negotiated rate MTDC	$3,647
Total budget		**$40,115**

Budget notes: Salary is for 2 months of summer salary support for Arnold for data preparation, analysis, and final report writing ($6,361 per 2-week pay period). Fringe benefits are based on established rates for faculty at UMN. Travel budget would cover expenses to attend and present results at flyway council meetings (pending invitations).

Budget request:

Organization	**Amount**
DU Canada	$10,115
DU Inc.	$10,000
Atlantic Flyway Council*	$3,215
Mississippi Flyway Council*	$9,171
Central Flyway Council*	$4,023
Pacific Flyway Council*	$3,591
Total	$40,115

*We are requesting a total of $20,000 from these four flyways. We determined each flyway's allocation based on the formula used by Fall Flights to establish state investment goals.
This formula is based on the equal weighting of the mean of the active waterfowl hunter numbers and duck harvest over the period of 2000-2019.

Literature cited:

Alisauskas, RT, TW Arnold, JO Leafloor, DL Otis, and JS Sedinger. 2014. Lincoln estimates of Mallard (*Anas platyrhynchos*) abundance in North America. Ecology and Evolution: doi 10.1002/ece3.906

de Sobrino, CN, CL Feldheim, and TW Arnold. 2017. Distribution and derivation of dabbling duck harvests in the Pacific Flyway. California Fish and Game 103:118-137.

Munro, RE, and CF Kimball. 1982. Population ecology of the mallard. VII: Distribution and derivation of the harvest. U.S. Fish and Wildlife Service Resource Publication No. 147.

Sauer, JR, JE Hines, JE Fallon, KL Pardieck, DJ Ziolkowski, Jr., and WA Link. 2014. *The North American Breeding Bird Survey, Results and Analysis 1966 - 2013. Version 01.30.2015* *USGS Patuxent Wildlife Research Center, Laurel, MD*

Specht, HM, and TW Arnold. 2018. Banding age ratios reveal that prairie waterfowl fecundity is affected by climate, density dependence and predator-prey dynamics. Journal of Applied Ecology 55:2854-2864.

Szymanski, ML, and JA Dubovsky. 2013. Distribution and derivation of the Blue-winged Teal (*Anas discors*) harvest, 1970-2003. US. Dept of the Interior.

U.S. Fish and Wildlife Service. 2023. Waterfowl population status, 2023. U.S. Department of the Interior, Washington, DC, USA.

Zimmerman, GS, WA Link, MJ Conroy, JR Sauer, KD Richkus, and GS Boomer. 2010. Estimating migratory game-bird productivity by integrating age ratio and banding data. Wildlife Research 37:612-622.

Recommendation 3 — Allocation of Captive-reared Trumpeter Swans to Approved Restoration Sites

Recommendation

The Pacific Flyway Council (Council) recommends allocation of captive-reared trumpeter swans to approved restoration sites in this priority order:
1. Summer Lake, Oregon
2. Middle Madison, Montana
3. Yellowstone National Park
4. Teton Basin, Idaho
5. Big Sandy, Wyoming

Additionally, Council recommends state leads meet by conference call in early July to determine the specific number of swans to allocate to each release site. The specific number of swans available for allocation to each restoration site will depend upon hatching success during spring 2025 (not known until early July) and genetic origin of swans.
In 2025, it is anticipated swans will be available from the Wyoming Wetlands Society (WWS); all swans from the WWS are of Rocky Mountain Population (RMP) origin. The only other sources of birds for the 2025 allocation include birds from Zoo Idaho; all swans from Zoo Idaho are of Pacific Coast Population (PCP) or mixed PCP/RMP origins and would only be available for release in Oregon.

Justification

As described in the allocation process document (Appendix E) in the Plan, the Study Committee will make a recommendation to Council regarding an equitable allocation of trumpeter swans for release at approved restoration sites. Only swans of RMP origin may be released in the tri-state region; however, swans of other origin, PCP or mixed PCP/RMP, may be released outside the tri-state region. As described in the Plan, allocation of captive-reared swans to areas outside the tri-state region will be constrained to no more than 20% of the total number of swans available for release in the tri-state region in any year. Therefore, not more than 20% of RMP origin birds available for release can be allocated to Summer Lake, OR; currently, the only restoration site outside the tri-state region.

Adoption Contact: Claire Gower
Pacific Flyway Study Committee
February 14, 2025

Jason Jones, Chair

Pacific Flyway Council
March 11, 2025

Blair Stringham, Chair

Recommendation 4 — Letter of Support for the Bird Banding Lab and the Breeding Bird Survey

Recommendation

The Pacific Flyway Council (Council) recommends sending the attached letter in support of the U.S. Geological Survey Bird Banding Lab (BBL) and Breeding Bird Survey (BBS).

Justification

This letter is being sent to emphasize the critical role of the BBL and the BBS in state and federal wildlife management. This letter highlights BBS and BBL contributions to conservation and harvest management, while advocating for necessary funding to ensure continuity and modernization of these essential programs.

Adoption

Contact: Jason Jones, Russell Norvell

Pacific Flyway Study Committee
March 6, 2025

Jason Jones, Chair

Pacific Flyway Nongame Technical Committee
Month 6, 2025

Russell Norvell, Chair

Pacific Flyway Council
March 11, 2025

Blair Stringham, Chair

PACIFIC FLYWAY COUNCIL

Alaska ▪ Arizona ▪ California ▪ Colorado ▪ Idaho ▪ Montana
Nevada ▪ New Mexico ▪ Oregon ▪ Utah ▪ Washington ▪ Wyoming

March xx, 2025

Dear Secretary Doug Burgum, Acting Director Sarah Ryker, Associate Director Anne Kinsinger, and Directors Peter Griffiths and Eric Reichard,

The Pacific Flyway Council (Council) represents state fish and wildlife agencies of the 12 western states (AK, AZ, CA, CO, ID, OR, MT, NM, NV, UT, WA, and WY). We work closely with federal agencies to sustain and enhance migratory bird populations across the U.S., Canada, and Mexico. We write today in strong support of two key federal programs essential to state wildlife management: the U.S. Geological Survey Bird Banding Laboratory (BBL) and the Breeding Bird Survey (BBS). These programs provide critical data for conservation and harvest management, informing science-based decisions that sustain migratory bird populations.

The BBL and BBS are foundational to monitoring bird populations across North America. They provide essential data on harvest and survival rates, species abundance, long-term population trends, and environmental drivers of change. The data allow states to proactively mitigate or reverse the decline of key wildlife resources in partnership with U.S. Fish and Wildlife Service Division of Migratory Bird Management. For example, the BBS has tracked long-term population trends for mourning and white-winged doves, helping shape harvest regulations. It has also identified steep declines in non-game species such as the pinyon jay, providing vital insights for conservation planning. Similarly, the BBL plays an essential role in waterfowl harvest management by informing decisions for species like northern pintail and for mallard, which serves as a surrogate for many other waterfowl species.

Beyond their biological importance, these programs have significant economic value. Waterfowl hunting contributes $4 billion annually to the U.S. Gross Domestic Product, while birdwatching supports $108 billion in economic activity nationwide. Council directly funds and coordinates field programs that annually deploy tens of thousands of bird bands. The BBL serves as the backbone of these efforts, administering permits, ensuring scientific integrity, and managing a centralized banding database relied upon by wildlife professionals.

However, these programs require additional federal investment to continue their critical work.

- $3.064 million is needed over the next four years to modernize the BBS Information Technology (IT) infrastructure, enhance data management for survey volunteers, and improve data accessibility for biologists and conservation decision-makers.
- An additional $402,000 is required annually to support long-term operations, including hiring an IT specialist and biologists, and covering inflationary costs.

The BBS is the most comprehensive dataset on North American breeding birds, tracking population trends for hundreds of species since the 1960s. These data inform science-based

management, help prevent species from becoming threatened or endangered, and directly support State Wildlife Action Plans.

Both programs exemplify the value of strong federal-state partnerships in managing migratory birds. The BBL engages tens of thousands of migratory bird hunters and bird watchers who report band recoveries each year, while the BBS mobilizes a dedicated nationwide network of volunteers to conduct surveys.

We strongly urge your support for these essential programs, ensuring they remain fully funded and operational. Sustaining these efforts is critical for migratory bird conservation and the economic benefits they provide to the nation.

Sincerely,

Blair Stringham
Pacific Flyway Council Chair

CC:
Tom O'Connell, Director, Eastern Ecological Science Center
Senator Chris Van Hollen, MD
Representative Steny Hoyer, MD
Senator Shelley Capito, WV

Recommendation 5 — Amendment of the Pacific Flyway Council Funding Agreement with the Canadian Wildlife Service for Western Arctic Population Lesser Snow Goose Banding on Banks Island

Recommendation

The Pacific Flyway Council (Council) recommends the Banks Island Western Arctic Population Lesser Snow Goose Banding Agreement, signed with Environment and Climate Change Canada - Canadian Wildlife Service (CWS), be amended to extend, at no cost, the duration of the agreement by two additional years, to March 31, 2027.

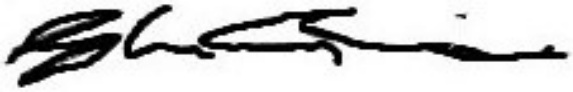
Justification

In August 2017, Council approved a recommendation (Recommendation 20) to provide $20,000/year (USD) for five years to support the CWS Banks Island goose banding program. Overall annual expenditures to operate this program have been approximately $160,000. Council funds have been used to help cover aircraft and fuel costs as well as crew expenses. To date, $60,000 of Council funds remain unspent because CWS was able to secure year-end funds to cover banding program costs. A no cost extension to the original agreement would allow CWS to use the unspent funds to support Banks Island goose banding efforts in 2025 and 2026. Continued banding is necessary to obtain more precise population demographic information.

Adoption Contact: Jeff Knetter
Pacific Flyway Study Committee
February 14, 2025

Jason Jones, Chair

Pacific Flyway Council
March 11, 2025



Blair Stringham, Chair

Recommendation 6 — Support for the 16th North American Arctic Goose Conference

Recommendation

The Pacific Flyway Council (Council) recommends amending the 2025 budget to provide $5,000 in support of the 16th North American Arctic Goose (NAAG) conference that will be held in Saskatoon, Saskatchewan, October 21–25, 2025. The 2025 Council budget includes $3,000 to support "Sponsorship of travel."

Justification

As the largest goose meeting in North America, the NAAG conference plays an important role in gathering scientists and managers to present contemporary arctic goose research and identify the most important topics for goose management and conservation. Plenary talks, contributed presentations, posters, special sessions, and workshops are currently being planned.

Because a conference of this scale requires more support than can be generated by registration fees alone, the organizing committee requested financial support from affiliated government and non-government agencies, universities, and non-profit conservation organizations. They are committed to keeping registration fees reasonable to enable maximum attendance and participation to promote professional development. A particular emphasis of this meeting is to support student attendance; they hope to provide $1,000 USD to each student interested in attending and presenting. The organizing committee asked each of the Flyway councils to consider a level of support of $7,500–$10,000 USD to help defray costs of the meeting.

Adoption Contact: Jeff Knetter
Pacific Flyway Study Committee
February 14, 2025

Jason Jones, Chair

Pacific Flyway Council
March 11, 2025

Blair Stringham, Chair

Recommendation 7 — AFWA HIP Working Group Support Letter

Recommendation

The Pacific Flyway Council (Council) recommends sending the attached letter in support of developing a Multistate Conservation Grant.

Justification

Improving HIP estimates is of high importance to Council as it is a critical tool for management of migratory game birds.

Adoption Contact: Melanie Weaver
Pacific Flyway Study Committee
February 14, 2025

Jason Jones, Chair

Pacific Flyway Council
March 11, 2025

Blair Stringham, Chair

March 11, 2025

Karen Waldrop, Chair
AFWA HIP Working Group
One Waterfowl Way
Memphis, TN 38120

Dear Dr. Waldrop:

The Pacific Flyway Council (Council) supports the development of a Multistate Conservation Grant proposal to investigate sources of bias and potential solutions in the Harvest Information Program (HIP) and US Fish and Wildlife Service (Service) Harvest Survey. We look forward to collaborating with the other Flyway Councils, Ducks Unlimited, the Service, and the Wildlife Management Institute in developing this proposal. Recent analyses suggest recent changes to the harvest survey may be affecting bias in survey estimates. A comprehensive evaluation of bias, beginning with a comparison of state and federal harvest surveys, is needed to ensure that our federal harvest estimates accurately measure migratory bird harvest.

Improving HIP and subsequent harvest estimates is a high priority for Council, as it is a critically important monitoring program for managing migratory gamebirds. Estimates from the Harvest Survey are vital for evidence-based management of waterfowl and webless species, observing trends in hunter participation, setting harvest strategies, and estimating population sizes. Improvements in the quality of harvest data will improve our collective conservation efforts of migratory birds.

The Council understands that funding levels within the Service budget are insufficient to undertake this investigation, as such Council supports the development of a Multi-State Grant proposal under the leadership of the AFWA HIP Working Group.

We thank you for your continued leadership of the HIP Working Group and your efforts to improve the cooperative management and conservation of migratory birds.

If you have questions or if Council can be of further assistance, please contact Jason Jones, our current Study Committee Chair.

Sincerely,

Chair, Pacific Flyway Council

INFORMATIONAL NOTES

Informational Note 1 — Two-tier Working Group Representation

The Pacific Flyway Study Committee selects Brandon Reishus (Oregon) and Larisa Harding (Arizona) to serve as representatives on the Two-Tier Working Group.
The Harvest Management Working Group (HMWG) recommended formation of a cross-flyway "Two-Tier Working Group" to develop a plan for a potential second phase of the Two-tier License Experiment (two-tier). South Dakota and Nebraska were involved in the first phase of this program which included the previous four hunting seasons. A final report on the experiment is due by September 1, 2025.

Although the final metrics of success of the first phase still need to be evaluated, some states have indicated interest in a second phase that would include expansion to additional states and flyways. Moreover, the Division of Migratory Bird Management has identified the need to collect data across more states and flyways to make more accurate inference regarding social and biological implications of the two-tier regulation structure. The two-tier regulation structure is not a special season, but part of the general season frameworks and any future operational program must be implemented at the Flyway scale.

Although the final report will not be available until later this year, the HMWG believes it is prudent to convene a working group now to discuss next steps given the interest from other states. The working group would help define objective(s), evaluation criteria, and monitoring requirements for participating states and hunters.

The HMWG would like to have two representatives from each Flyway serve on the working group, along with Service staff. They also believe a second phase should include at least one state in each Flyway that has significant waterfowl hunting participation (e.g., hunter-days afield) and/or harvests a significant proportion of species of concern (e.g., black duck, pintail, scaup, canvasback, etc.). The group would meet monthly (virtually) prior to summer Flyway meetings, with steps and timelines to be revised and finalized by the working group.

Adoption Contact: Brandon Reishus
Pacific Flyway Study Committee
February 14, 2025

Jason Jones, Chair

Informational Note 2 — Golden Eagle Allocation Procedure

In 2018 the U.S. Fish and Wildlife Service requested that the four Flyway Councils collectively establish and manage a golden eagle Allocation Procedure (NTC March 2019, Amended December 2019) to distribute the take opportunities of golden eagles (eagles) for falconry. These eagles could come from two sources: wild-caught eagles taken from designated depredation areas and rehabilitated eagles. No eagles have yet been allocated through the rehabilitation option.

To date, all wild eagles caught and allocated through this allocation procedure have come from Utah and Wyoming. Applications come from falconers in all four of the Flyways. For the 2025 draw, applications were received from 58 qualified falconers in 18 states: four states in the Atlantic Flyway (eight applications), two states in the Mississippi Flyway (four applications), one state in the Central Flyway (two applications), and eight states in the Pacific Flyway (32 applications). Four states are split between the Pacific and Central Flyways by the Continental Divide, and applications were received from three of these states (12 applications). In the seven years of the allocation procedure, the number of applicants initially increased approximately 5% per year but may have stabilized (Figure 1).

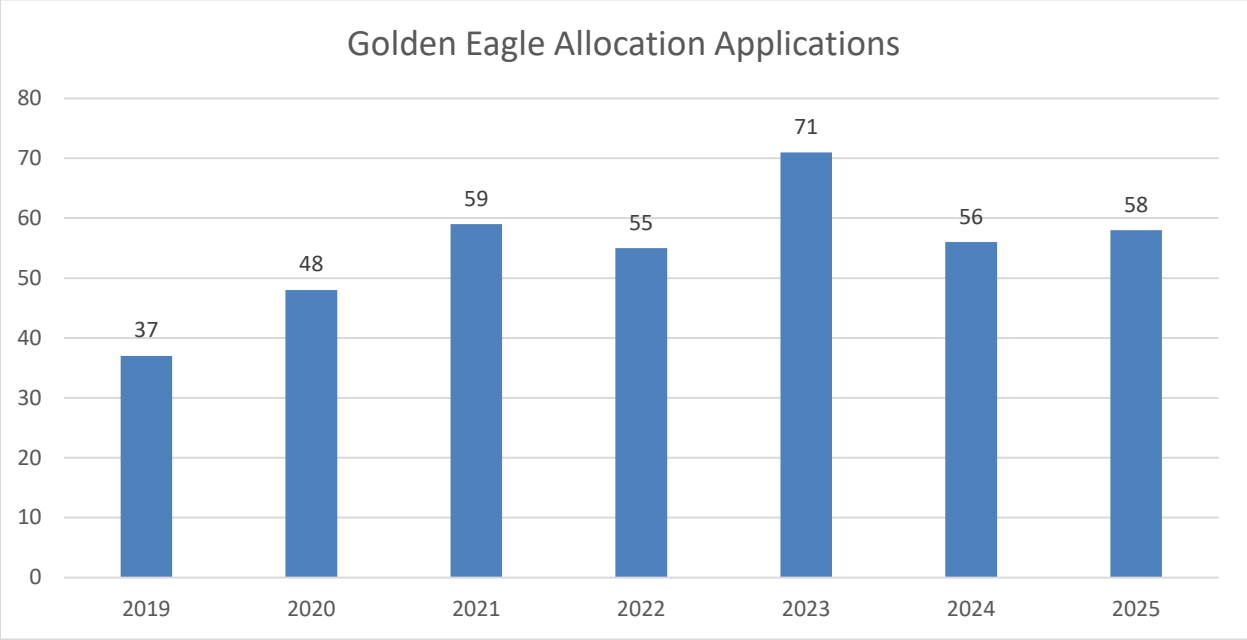


Figure 1. Total number of applications for a golden eagle permit by falconers, 2019-2025.

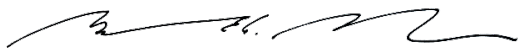
An important component of the procedure was to develop an equitable method to allocate and transfer eagles from source populations to qualified falconers nationally. Wildlife agencies with

jurisdiction submit the names of their qualified applicant falconers to one Designated State Wildlife Agency (DSWA). The DSWA annually conducts a random draw of the pooled applicants, informs the wildlife agencies with jurisdiction over the falconers involved with the drawing order of qualified applicants, and notifies applicants when take opportunities arise.

A DSWA will act in that capacity for three years, following the amended golden eagle allocation procedure. Utah served as the first DSWA for three years, Wyoming finished serving as the DSWA in 2024, and Connecticut has volunteered to serve 2025-2027. The National Flyway Council (NFC) directed a committee of representatives from each of the four Flyway Nongame Technical Committees to revise the allocation procedure in 2024. The direction was to provide a procedure for selecting a DSWA every three years. The committee has finished this work and is awaiting approval from the NFC, which will occur during the upcoming National Flyway Meeting in spring of 2025.

During the seven years of the allocation process, a total of 386 applications have been received by the DSWAs. Many of these applications come from falconers that apply each year.

Adoption Contact: Grant Frost
Pacific Flyway Nongame Technical Committee
February 13, 2025



Russell Norvell, Chair

Informational Note 3 — Harvest Allocation of Peregrine Falcons for Falconry Purposes in the United States West of 100° West Longitude

In March 2009, the Pacific Flyway Council adopted authorizations under the U.S. Fish and Wildlife Service's *Final Environmental Assessment and Management Plan on Take of Migrant Peregrine Falcons from the Wild for Use in Falconry, and Reallocation of Nestling/Fledgling Take*. This allowed for the harvest of up to 116 wild first-year peregrines per year (41 in Alaska, 75 apportioned among states west of 100° west longitude) for use in falconry.

In the 15 years since harvest has been allowed, nine Pacific Flyway states (excluding Alaska) have:

1. authorized permits for the harvest of an average of 67 (range 56 to 79) peregrine falcons per year.
2. removed an average of 25 (range 13 to 38) peregrine falcons from the wild per year.

Two states within the Pacific Flyway (Nevada and California) and six states within the Central Flyway (west of 100° west longitude) currently do not authorize the harvest of peregrine falcons. During the 2024 peregrine falcon harvest season, Pacific Flyway states (excluding Alaska) authorized the take of 67 individuals, with 23 peregrine falcons taken for falconry. Alaska, which has their own allocation, has authorized the annual harvest of 41 peregrine falcons most years, and harvests an average of just over one individual per year.

Pacific Flyway states (excluding Alaska) have not reached the overall harvest limit of 75 peregrine falcons. Thus, reallocation of permits across the Pacific Flyway, and across states within the Central Flyway west of 100° west longitude, has not been necessary. The Pacific Flyway Nongame Technical Committee, through coordination with the Central Flyway Nongame Technical Committee, will develop an allocation process when peregrine falcon harvest begins to approach the authorized limit.

Adoption
Pacific Flyway Nongame Technical Committee
February 13, 2025

Contact: Julie Hagelin

Russell Norvell, Chair

Informational Note 4 – 2024 Status Report on the Pacific Flyway Council Funded Southern Wings Projects

In February 2024, through voluntary special assessments totaling $34,400 the Pacific Flyway Council (Council) funded three Southern Wings projects representing Flyway priorities, plus two additional projects at the request of states providing voluntary assessments. In July 2019, Council asked for annual status reports on Council-funded projects. The following is a summary of the 2024 status reports for the five Council-funded projects. Full status reports are published in the spring by Southern Wings at https://southern-wings.fishwildlife.org/.

STATUS REPORTS ON 2024 PROJECTS FUNDED BY THE PACIFIC FLYWAY COUNCIL

Project 1. The Pacific Flyway Shorebird Survey: Identifying Threats and Conservation Hotspots in Northwest Mexico

Northwest Mexico (Baja California, Baja California Sur, Sonora, Sinaloa, Nayarit)

The Pacific Coast of the Western Hemisphere supports entire populations of neotropical migratory shorebird species during the non-breeding season. A network of coastal and interior wetlands stretching from Alaska to Chile hosts significant aggregations of shorebirds and is critical for their survival. These wetlands include 12 Western Hemisphere Shorebird Reserve Network sites in northwest Mexico. The Pacific Flyway Shorebird Survey and the Migratory Shorebird Project (MSP) work to fill gaps in Pacific Flyway species population status and trends, assess threats, and identify priority sites for conservation. Mexico is particularly important because globally significant populations of shorebird species spend the winter on the Pacific Coast. Primary species recorded during the annual winter surveys in Mexico include: western sandpiper, dunlin, marbled godwit, willet, black-bellied plover, sanderling, greater yellowlegs, dowitchers, snowy plover, black-necked stilt, and American avocet. The main conservation concerns for shorebirds in the region are human disturbance and habitat loss or degradation.

The MSP aims to complete annual non-breeding bird surveys at 21 sites across Mexico. These surveys collect data on a number of birds (shorebirds, waterbirds, and waterfowl), and assess human disturbance, habitat condition, and raptor presence. The project will also develop and implement a sampling design to improve monitoring for snowy plover, red knot, willet, and sanderling on sandy beaches and better understand human impacts centered on beaches. Bird survey data will be combined with habitat maps to identify conservation priority wintering sites for focal species identified in Pacific Flyway State Wildlife Action Plans. Terra Peninsular, a conservation NGO, is developing shorebird-friendly management and conservation strategies for important areas. Terra Peninsular is also working to establish private preserves within the Bahia San Quintin to conserve key wintering habitat for Pacific brant and other priority species. Surveys will also inform communication and outreach activities with local communities to raise environmental awareness of shorebird conservation.

Status Report: Conducted nonbreeding midwinter shorebird and waterfowl surveys at 21 sites (250 sampling units covered with 50 volunteers). Effort included monitoring five sites as part of the regional snowy plover midwinter survey. Also conducted three breeding waterbird surveys at Tobari Bay and Salinas Lobos (southern Sonora) and documented 12 species breeding on 11 dredge-spoil islands. Analyzed survey data and submitted/published several scientific articles with management implications, including *Evaluating the Response of Nonbreeding Shorebirds to Rate and Agents of Human Disturbance in Bahía Todos Santos* and *the Winter ecology of Wilson's plover in Ensenada de La Paz*. Habitat protection activities included: a) establishing temporary barriers around nesting grounds of snowy plovers and California least terns (three areas), and American oystercatchers (one area), and b) working with communities to install educational signage around sensitive habitat in the Comitan area. Also conducted an extension workshop for conservationists and park managers focused on human disturbance management. Outreach and education activities included organization of the first Tobari Bird Festival and participation in a World Wetlands Day celebration (Estero El Soldado, Sonora).

Southern Wings Partners: Pacific Flyway Council ($5,250 in 2024), Arizona, California, Terra Peninsular, Centro de Investigación Científica y de Educación Superior de Ensenada (CICESE), Centro de Investigación en Alimentación y Desarrollo, A.C. (CIAD Guaymas, Sonora), Point Blue Conservation Science, Universidad Nacional Autónoma de México (UNAM), Centro de Investigaciones Biológicas del Noroeste (CIBNOR), Universidad Autónoma de Baja California Sur (UABCS), Grupo Aves del Noroeste De México (GANO), U.S. Forest Service International Program (USFSIP).

Project 2. Restoration of Wetland Hydrology in the Marismas Nacionales of Nayarit, Mexico to Benefit Migratory Waterfowl and Shorebirds

Northwest Mexico (Nayarit)

Marismas Nacionales in Nayarit, Mexico is a complex of wetlands that form a mixture of marine waters and 11 rivers, creating a varied mosaic of ecosystems such as meanders, river deltas, marshes, freshwater lagoons, estuaries, coastal lagoons, intertidal wetlands and coastal dunes. It supports the largest mangrove area on the Pacific coast. Marismas Nacionales is one of the most important energy resupply sites for waterfowl on the Mexican Pacific Flyway, providing high quality foraging and resting sites for 15 migratory species. The area is notable for its concentration of: northern shoveler (130,000), green-winged teal (25,000), pintail (12,000), and other waterfowl. It also provides habitat for more than 427,000 wintering shorebirds of 28 species, including American avocet (137,000-20% of its total population), and western sandpiper (145,000).

These networks of wetlands face numerous threats, including retention and excessive use of water for agriculture and livestock, establishment of shrimp farms, disruption of natural hydrological flows, and invasive plants. These combined threats have resulted in drastic mangrove mortality, higher lagoon salinity, and reduced habitat for wetland-dependent bird species. Restoring the habitat depends, to a great extent, on maintenance of freshwater flows from rivers, streams and springs and on a functional network of natural channels within the

mangrove system. This project focuses on restoring hydrological flows for the recovery and conservation of mangrove ecosystems in several tidal and sub-tidal basins within Marismas Nacionales. Actions include rehabilitating approximately eight miles of the Viejo River, part of the Chugüin-Chuiga tidal sub-basin. Restoration measures include cleaning and dredging (e.g., removal of dead mangroves) natural channels and the Rio Viejo, and reestablishment of mangroves through the collection and dispersal of seeds. Habitat enhancement work will proceed through the establishment and management of Wildlife Conservation Management Units (a formal habitat and wildlife management framework) in collaboration with private landowners, ejidos (communal landowners) and land managers.

Status Report: Trained 150 individuals and formed two community restoration brigades to conduct wetland restoration actions in Valle de la Urraca, Rio Viejo and Paso Hondo. Hydrological restoration work included cleaning and desilting along 18 miles of natural tidal channels to improve freshwater flows for 4,200 acres. Also worked with landowners to update and expand two Wildlife Conservation Management Units (6,916 acres established in Valle de la Urraca and an expansion to 81,544 acres in Paso Hondo). Established a 7,414-acre private (ejidal) reserve with a 15-year conservation easement. Also implemented two education/outreach workshops in the communities of Valle de la Urraca and Las Garzas that focused on wetland conservation and planning and sustainable fisheries practices. Visited a local elementary school to provide environmental education to children.

Conducted seasonal bird surveys (October-March) at 20 points in Laguna Las Garzas and Valle de la Urraca. Survey effort documented 66 species, with the majority (38%) consisting of shorebirds such as plovers, sandpipers and avocets. A total of 118,895 individuals in Valle de la Urraca and 79,402 individuals in Laguna Las Garzas were estimated.

Southern Wings Partners: Pacific Flyway Council ($6,250 in 2024), ejidos, farmers, ranchers, fisheries cooperatives, Marismas Nacionales Biosphere Reserve, Comisión Nacional de Áreas Naturales Protegidas (CONANP), Comisión Nacional Forestal (CONAFOR), Municipality of Tecuala, Organización Vida Silvestre A.C (OVIS), U.S. Fish and Wildlife Service.

Project 3: A Sustainable Grazing Network to Protect and Restore Grasslands on Private and Communal Lands in Mexico's Chihuahuan Desert

Northern Mexico (Chihuahua and Sonora)

Grassland birds are declining more rapidly than any other group of North American birds. The Chihuahuan Desert of northern Mexico is a continentally important wintering area, supporting significant populations of more than 90% of the migratory grassland bird species that breed in western North America. Intensive cropland agriculture is rapidly expanding in the Mexican Chihuahuan Desert, threatening to severely reduce the remaining low-slope native grassland habitat needed by nearly 30 high-priority grassland bird species. To reduce the threat of habitat degradation and conversion, Bird Conservancy of the Rockies and partners have created the Sustainable Grazing Network (SGN) to engage private and communal landowners in range improvement and habitat restoration projects on their lands through development of bird-friendly management plans and technical and financial assistance in implementing rotational grazing

systems (including needed infrastructure), protection of sensitive habitat, shrub-removal, erosion control, and other restoration techniques. The aim is to secure 15-year collaborative agreements with each major partnering landowner to protect conservation investments. Keeping ranchers on the land by helping them improve their management and profitability, while simultaneously improving wildlife habitat, is currently the most immediate and cost-effective way to prevent further loss of grasslands in the region. Species benefited include chestnut-collared longspur, Brewer's sparrow, grasshopper sparrow, lark bunting, clay-colored sparrow, Baird's sparrow, scaled quail, Sprague's pipit, loggerhead shrike, Western meadowlark, ferruginous hawk, Aplomado falcon, Mexican pronghorn, and prairie dogs.

Status Report: Since 2013, we have enrolled 34 ranches encompassing 638,581 acres in northern Mexico into the SGN, protecting them for at least 15 years while we work with the landowners to improve range management and grassland habitat on the properties. We enrolled two new ranches into the SGN in 2024, El Parreño (1,729 acres) and Pozo Caliente (17,804 acres), located in the Janos and Valles Centrales Priority Conservation Areas in Chihuahua, respectively. We enhanced 83,652 acres in 2024 via six projects that improved capacity for grazing management on SGN lands, in part with support from Southern Wings partners, bringing the total area directly impacted by range and habitat projects up to 521,476 acres. We have completed integrated range and wildlife management plans for 22 SGN ranches and are working on several more; we also conducted outreach to SGN partners on grazing management in 2024 through site visits and one-on-one meetings. We also conducted our 10th year of winter grassland bird monitoring on SGN lands in 2024.

We also implemented the 2nd annual "Encuentro Ganadero" in Chihuahua in 2024, bringing together over 140 ranchers and conservation partners from NGOs, government, academia and the private sector. The goal of this event is to share experiences and information around grazing management and wildlife conservation, create bonds and form new partnerships, and build a constituency and movement for grasslands conservation in northern Mexico. We conducted environmental education programs in 2024 with Mennonite students and educators in the rural farming community of Buenavista, Chihuahua, the first-ever event of its kind, reaching over 90 people, mostly students, and getting them into the field to watch birds.

Southern Wings Partners: Pacific Flyway Council ($10,000 in 2024), Arizona, Colorado, Minnesota, New Mexico, Colorado Field Ornithologists, and City of Fort Collins. This project leverages significant additional investment from Mexican landowners, Comisión Nacional de Áreas Naturales Protegidas (CONANP), Carlos Slim Foundation-WWF, Bobolink Foundation, Dixon Water Foundation, Canadian Wildlife Service, U.S. Fish and Wildlife Service (Neotropical Migratory Bird Conservation Act), Bureau of Land Management, U.S. Forest Service International Program.

Additional Project 1. Protection of Desert Grasslands Migratory Bird Habitat in the El Tokio Grassland Priority Conservation Area

Northern Mexico (Coahuila, Zacatecas, San Luis Potosi, Nuevo Leon)

The desert grasslands, located south of the city of Saltillo (Coahuila) in northern Mexico, are high-elevation (6,000 to 7,000 feet) grasslands important to numerous wintering migratory birds as well as threatened resident bird species. More than 250 bird species are found in El Tokio Grassland Priority Conservation Area (GPCA), including significant numbers of wintering long-billed curlews (up to 2,000 individuals have been seen in a single flock). This region is one of the most important wintering areas for mountain plover and Sprague's pipit. Other species include loggerhead shrike, lark bunting, Brewer's and Baird's sparrows and ferruginous hawk. One of the most significant threats to grassland habitat in El Tokio is overgrazing by cattle and goats. The loss of vegetative cover, in a region with naturally arid soil, has exacerbated drought conditions and is leading to desertification. Erosion and a proliferation of invasive plant species are side effects of overgrazing and contribute to a loss of grassland habitat. Another significant threat is the rapid conversion of the land to agriculture, primarily for potato production.

Pronatura Noreste's (PNE) Chihuahuan Desert Grasslands program goal is to ensure the protection and management of 2,400,000 acres of grassland habitat. American Bird Conservancy (ABC) is working with PNE to help them achieve this goal, and specifically for the improved protection, management, and restoration of grasslands within the El Tokio GPCA. Pronatura Noreste and ABC have supported conservation efforts on more than 140,000 acres of habitat through the creation of private reserves, ejido reserves, and conservation agreements that restrict cattle ranching and agriculture practices. The project's long-term goal is to directly impact at least 370,000 acres of grasslands through improved grassland management and erosion control. A key part of achieving this goal is to create a habitat corridor that would connect approximately 15 ejidos and ensure that each has at least some percentage of ejido land dedicated to conservation. Specific conservation activities include creation of management plans and grazing recommendations, installation of erosion control systems to help restore grasslands, and installation of water infrastructure and fencing for livestock control.

Status Report: ABC and PNE implemented several grassland conservation and management actions, including: 1) removed invasive plant species from 15 acres in Ejido San Francisco del Ejido to support grassland natural regeneration, 2) implemented soil restoration practices on 15 acres in Ejido Nuevo Gómez Farías to prevent soil erosion and contribute to grassland natural regeneration, and 3) installed nearly 2 miles of fencing in Ejido Nuevo Gomez Farías to improve cattle management infrastructure and facilitate better grassland conservation.

Also conducted two environmental education workshops on grassland birds in Ejidos San Francisco del Ejido and Nuevo Gómez Farías. These workshops included bird walks, allowing participants to observe migratory grassland species and reinforcing the importance of grasslands for birds.

Southern Wings Partners: Pacific Flyway Council ($9,900 in 2024), Pronatura Noreste (PNE), American Bird Conservancy (ABC), ejidos, Oklahoma, South Dakota, Nebraska, Iowa, Texas, Kansas.

Additional Project 2. Conservation of Neotropical Migratory Birds in the Dry Tropical Forests of El Salvador: Assessing and Addressing Threats to Overwintering Habitat and Bird Populations

El Salvador

Numerous migratory birds from throughout the Pacific Flyway use Central America's Pacific coast during stopover migration and overwintering. Most of this geography was once dominated by seasonally dry tropical forests. However, large-scale conversion to agriculture and pasture has made the dry tropical forest one of the world's most endangered ecosystems, with less than 2% of the original forest intact. Only 5% of remaining dry forest in Mexico and Central America receive some degree of protection. Primary threats to dry tropical forest in El Salvador include habitat conversion from forest to intensive agriculture, and degradation through timber and firewood extraction and wildfires. Approximately 364 bird species have been recorded in the dry tropical forests of El Salvador, including 38 species that are considered Species of Greatest Conservation Need (SGCN) from across 12 western states. Some SGCN species using these dry tropical forests include willow flycatcher (potentially the southwestern subspecies), yellow-billed cuckoo, Mississippi kite, peregrine falcon, Swainson's hawk, brown-crested flycatcher, Macgillivray's warbler, summer tanager, and Bell's vireo, among others.

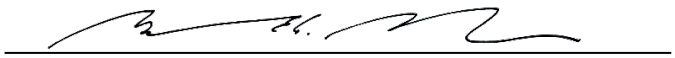
The project aims to conserve overwintering birds and their dry tropical forest habitats in the eastern region of El Salvador. The eastern region has high conservation potential for birds due to its relatively low human population density and high cover of tropical forest. The project will use a three-pronged strategy: 1) restore and protect dry tropical forest habitat, 2) carry out targeted monitoring and research of species of special concern, and 3) build capacity amongst local people, private sector partners, and governments for improved habitat management and awareness of migratory birds.

Status Report: Enabled the establishment of the World Surfing Reserve Oriente Salvaje (25,469 acres). This designation encompasses the 507-acre public reserve "Caballito" which includes vital dry tropical deciduous and mangrove forests. Efforts are underway to draft a management plan to integrate the surfing reserve, promote sustainable management, and foster community engagement. Also organized an ongoing iNaturalist Challenge for the reserve to gather baseline biodiversity information. Structured bird surveys (targeting willow flycatchers and other species) were conducted during the non-breeding season across previously established transects in Laguna Jocotal, Olomega, and Embalse 15 de Septiembre. Previous surveys demonstrated that these pacific slope wetlands provide valuable wintering habitat for numerous neotropical migratory birds. Work also continued on building the Motus network in El Salvador, by obtaining station components, coordinating with the Ministry of Environment (for permits), and outreach to the cellular company (for potential data and infrastructure access).

Engaged several local communities in habitat and bird conservation and human well-being needs: 1) conducted a detailed assessment of water and sanitation conditions in communities around Laguna Olomega and Ahuachapán, 2) supported park ranger patrols in Laguna el Jocotal (a Ramsar site) and implemented environmental education activities in adjacent communities, and 3) established a collaboration with three community members from Playa Icacal to promote species monitoring, habitat protection (mangroves), and outreach to local children. These efforts have strengthened community trust and partnerships, aligning local needs with broader conservation goals in the region.

Southern Wings Partners: Pacific Flyway Council ($3,000 in 2024), Arizona, Paso Pacífico, Zoo Boise, Zoological Foundation of El Salvador (FUNZEL), Fundación Enrique Figueroa Lemus, Ministerio de Medio Ambiente y Recursos Naturales (MARN), Sociedad Salvaje, Asociación de Desarrollo Turístico de la Costa Oriental De El Salvador (ADETCO), Compañía Azucarera Salvadoreña (CASSA), Southern Sierra Research Station (SSRS), Mujeres y Naturaleza (MUNAT).

Adoption Contact: Edwin Juarez
Pacific Flyway Nongame Technical Committee
February 14, 2025



Russell Norvell, Chair

Adoption
Pacific Flyway Study Committee
February 14, 2025

Jason Jones, Chair

Informational Note 5 – 2025 Southern Wings Projects

In July 2015, the Pacific Flyway Council (Council) adopted a process to evaluate, endorse, and collaboratively fund, if desired, Southern Wings projects that reflect priorities of Pacific Flyway states (Recommendation #10). Through this process, the Pacific Flyway Nongame Technical Committee (NTC) and Study Committee (SC) submit up to three projects to Council each year. The Southern Wings projects described below are projects that reflect Pacific Flyway priorities. The NTC and SC will continue to work with the Southern Wings Technical Committee to develop new projects or identify existing projects that reflect Pacific Flyway priorities.

In September 2018, Council approved a voluntary assessment process for states to contribute funds to Southern Wings through Council. Voluntary assessments totaled $2,500 in 2019 (three states), $23,499 in 2020 (seven states), $16,500.99 in 2021 (seven states), $26,800 in 2022 (seven states), $35,400 in 2023 (eight states), and $34,400 in 2024 (eight states). Voluntary assessments in 2025 totaled $37,495 (eight states) and will be directed toward projects that represent Pacific Flyway priorities. There are three selected projects, as well as three additional projects at the request of states providing voluntary assessments.

PROPOSED PROJECTS IDENTIFIED FOR THE PACIFIC FLYWAY

Project 1. The Pacific Flyway Shorebird Survey: Identifying Threats and Conservation Hotspots in Northwest Mexico ($6,500 allocation in 2025)
Northwest Mexico (Baja California, Baja California Sur, Sonora, Sinaloa, Nayarit)

The Pacific Coast of the Western Hemisphere supports entire populations of neotropical migratory shorebird species during the non-breeding season. A network of coastal and interior wetlands stretching from Alaska to Chile hosts significant aggregations of shorebirds, and is critical for their survival; these wetlands include 12 Western Hemisphere Shorebird Reserve Network sites in northwest Mexico. The Pacific Flyway Shorebird Survey (PFSS) and the Migratory Shorebird Project (MSP) work to fill gaps in Pacific Flyway species population status and trends, assess threats, and identify priority sites for conservation. Mexico is particularly important because globally significant populations of shorebird species spend the winter at numerous sites along the Pacific Coast of that country. Primary species recorded during the annual winter survey in Mexico include: western sandpiper, dunlin, marbled godwit, willet, black-bellied plover, sanderling, greater yellowlegs, dowitcher spp., snowy plover, black-necked stilt, and American avocet. The main conservation concerns for shorebirds in the region are human disturbance and habitat loss or degradation.

The MSP aims to complete standardized annual non-breeding bird surveys at 21 sites across Mexico. These surveys will collect data on a number of birds (shorebirds, waterbirds, and

waterfowl), and assess human disturbance, habitat condition, and raptor presence. The MSP database will be used for assessing population status, winter population trends and environmental drivers (temperature and precipitation) for priority shorebird species such as snowy plover, Wilson's plover, and Western sandpiper in northwest Mexico. Bird survey data will also be combined with habitat maps to identify priority overwintering sites for focal species identified in Pacific Flyway State Wildlife Action plans. Project partners will work with Terra Peninsular, a conservation NGO, to develop shorebird-friendly management and conservation strategies for important areas. Surveys will also inform communication and outreach activities with local communities to raise environmental awareness of shorebird conservation. Another action is to collaborate with local hunting organizations to strengthen conservation and management of designated wildlife conservation units through activities such as habitat enhancement, sustainable hunting and improvement of harvest data capture.

The budget need is approximately $20,000 per year. Funds will help conduct bird surveys across established sites, continue monitoring coverage at sandy beaches (targeting snowy plover, red knot, willet, and sanderling), conserve key wintering sites, and implement conservation strategies. Funds will also support work to manage irrigation canals to maintain waterfowl habitat, conduct management activities on private reserves, and engage in education/outreach activities (including outreach to land managers). Individual actions can be supported for $3,000 to $8,000 each.

Southern Wings Partners: Pacific Flyway Council ($5,250 in 2024), Arizona, California, Terra Peninsular, Centro de Investigación Científica y de Educación Superior de Ensenada (CICESE), Centro de Investigación en Alimentación y Desarrollo, A.C. (CIAD Guaymas, Sonora), Point Blue Conservation Science, Universidad Nacional Autónoma de México (UNAM), Centro de Investigaciones Biológicas del Noroeste (CIBNOR), Universidad Autónoma de Baja California Sur (UABCS), Grupo Aves del Noroeste De México (GANO) U.S. Forest Service International Program.

Project 2. A Sustainable Grazing Network to Protect and Restore Grasslands on Private and Communal Lands in Mexico's Chihuahuan Desert ($7,665 allocation in 2025)
Northern Mexico (Chihuahua and Sonora)

Grassland birds are declining more rapidly than any other group of North American birds. The Chihuahuan Desert of northern Mexico is a continentally important wintering area, supporting significant populations of more than 90% of the migratory grassland bird species that breed in western North America. Intensive cropland agriculture is rapidly expanding in the Mexican Chihuahuan Desert, threatening to severely reduce the remaining low-slope native grassland habitat needed by nearly 30 high-priority grassland bird species. To reduce the threat of habitat degradation and conversion, Bird Conservancy of the Rockies (BCR) and partners have created the Sustainable Grazing Network (SGN) to engage private and ejido (communal) landowners in range improvement and habitat restoration projects on their lands through development of bird-friendly management plans and technical and financial assistance in implementing rotational grazing systems (including needed infrastructure), protection of sensitive habitat, shrub-removal, erosion control, and other restoration techniques. The aim is to secure 15-year collaborative

agreements with each major partnering landowner to protect conservation investments. Keeping ranchers on the land by helping them improve their management and profitability, while simultaneously improving wildlife habitat, is currently the most immediate and cost-effective way to prevent further loss of grasslands in the region. Species benefited include chestnut-collared longspur, Brewer's sparrow, grasshopper sparrow, lark bunting, clay-colored sparrow, Baird's sparrow, scaled quail, Sprague's pipit, loggerhead shrike, Western meadowlark, ferruginous hawk, Aplomado falcon, Mexican pronghorn, and prairie dogs.

Bird Conservancy of the Rockies collaborates with other local partners with expertise in landowner outreach, grazing management and grassland birds. Thanks to support from many partners, BCR currently supports four full-time private lands wildlife biologists (PLWB) in northern Mexico who operate all aspects of the SGN program from outreach and landowner relations, to development and implementation of management plans and habitat restoration, to bird monitoring and evaluation. Funding is needed to cost-share on SGN infrastructure projects (i.e., cross-fencing, water lines and storage, etc.) to facilitate rest-rotational grazing and reach our grassland management goals. Funding is also needed to construct stock tank ladders ($40-$80/each, depending on size) to prevent accidental drowning of birds and Aplomado falcon nest platforms ($250/each) to improve reproductive success. Funding is also needed to help maintain and increase our on-the-ground capacity in this region, including operational support for vehicles, supplies and travel, and support for PLWB training and landowner outreach and engagement.

Southern Wings Partners: Pacific Flyway Council ($10,000 in 2024), Arizona, Colorado, Minnesota, New Mexico, Colorado Field Ornithologists, and City of Fort Collins. This project leverages significant additional investment from Mexican landowners, Comisión Nacional de Áreas Naturales Protegidas (CONANP), Carlos Slim Foundation-WWF, Bobolink Foundation, Dixon Water Foundation, Canadian Wildlife Service, U.S. Fish and Wildlife Service (Neotropical Migratory Bird Conservation Act), Bureau of Land Management, U.S. Forest Service International Program.

Project 3. Protection of Desert Grasslands Migratory Bird Habitat in the El Tokio Grassland Priority Conservation Area ($8,665 allocation in 2025)
Northern Mexico (Coahuila, Zacatecas, San Luis Potosi, Nuevo Leon)

The desert grasslands, located south of the city of Saltillo (Coahuila) in northern Mexico, are high-elevation (6,000 to 7,000 feet) grasslands important to numerous wintering migratory birds as well as threatened resident bird species. More than 250 bird species are found in El Tokio Grassland Priority Conservation Area (GPCA), including significant numbers of wintering long-billed curlews (up to 2,000 individuals have been seen in a single flock). This region is one of the most important wintering areas for mountain plover and Sprague's pipit. Other species include loggerhead shrike, lark bunting, Brewer's and Baird's sparrows and ferruginous hawk. One of the most significant threats to grassland habitat in El Tokio is overgrazing by cattle and goats. The loss of vegetative cover, in a region with naturally arid soil, has exacerbated drought conditions and is leading to desertification. Erosion and a proliferation of invasive plant species are side effects of overgrazing and contribute to a loss of grassland habitat. Another significant

threat is the rapid conversion of the land to agriculture, primarily for potato production.

Within El Tokio GPCA, American Bird Conservancy (ABC) and Pronatura Noreste (PNE) have supported conservation efforts on more than 140,000 acres of habitat through the creation of private reserves, ejido (community-owned) reserves, and conservation agreements that advance more sustainable cattle ranching and agriculture practices. They have also supported the installation of erosion control measures and ranching infrastructure, as well as implemented ranching best management practices.

The budget need is approximately $122,487. ABC and PNE would like to continue collaborating with ejidos already in the program to conduct habitat improvement activities and to expand this project to new properties in the region. Activities include installing and restoring ranching and water infrastructure, erosion control measures, and the removal of invasive plants. Also, engage and work with new ejidos to restore degraded grasslands and enhance their livestock grazing practices, and build ejidos' knowledge on grassland birds and their importance. Contributions of $5,000 to $10,000 will support implementation of project objectives.

Southern Wings Partners: Pacific Flyway Council ($9,900 in 2024), Pronatura Noreste (PNE), American Bird Conservancy (ABC), ejidos, Oklahoma, South Dakota, Nebraska, Iowa, Texas, Kansas.

Additional Project 1. Restoration of Wetland Hydrology in the Marismas Nacionales of Nayarit, Mexico to Benefit Migratory Waterfowl and Shorebirds ($8,000 allocation in 2025)
Northwest Mexico (Nayarit)

Marismas Nacionales in Nayarit, Mexico is a complex of wetlands that form a mixture of marine waters and 11 rivers, creating a varied mosaic of features such as meanders, river deltas, marshes, freshwater lagoons, estuaries, coastal lagoons, intertidal wetlands, and coastal dunes. It supports the largest mangrove area on the Pacific coast. Marismas Nacionales is one of the most important energy resupply sites for waterfowl on the Mexican portion of the Pacific Flyway, providing high quality foraging and resting sites for 15 migratory species. The area is notable for its concentration of: northern shoveler (130,000), green-winged teal (25,000), northern pintail (12,000), and other waterfowl. It also provides habitat for more than 427,000 wintering shorebirds of 28 species, including American avocet (137,000, which constitutes about 20% of its total population), and western sandpiper (145,000).

These networks of wetlands face numerous threats, including retention and excessive use of water for agriculture and livestock, establishment of shrimp farms, disruption of natural hydrological flows, and invasive vegetation. All these threats have resulted in drastic mangrove mortality, higher lagoon salinity and reduced habitat for wetland dependent bird species. Restoring the habitat depends, to a great extent, on maintenance of fresh water flows from rivers, streams and springs and on a functional network of natural channels within the mangrove systems. This project focuses on restoring hydrological flows for the recovery and conservation of mangrove ecosystems by rehabilitating approximately 8 miles of the Viejo River channel in

the Chugüin-Chuiga tidal sub-basin and 18 miles of tidal channels distributed across three other sub-basins. Restoration measures include cleaning and dredging (e.g., removal of dead mangroves) of natural channels and the Rio Viejo, reestablishment of mangroves through the collection and dispersal of seeds, and removal of invasive species. Bird monitoring and other ecological monitoring is conducted to track progress. Habitat conservation work will proceed through maintenance or establishment of Wildlife Conservation Management Units (WCMs), and wetland reserves conservation easements, in collaboration with ejidos (communal landowners), private landowners and land managers.

The budget need is approximately $10,000. Funding will help train and organize restoration brigades (from local communities) to conduct dredging and cleaning activities and other habitat work. Continued bird surveys (waterfowl, waterbirds and shorebirds) and hydrological monitoring at restoration sites will track progress. Compiled data (bird surveys and other assessments) will be analyzed and presented to land managers to inform conservation management and planning. Habitat conservation will involve managing WCMs in coordination with local communities and ejidos. Funding will also assist with community outreach and extension workshops with communities and fisheries cooperatives to raise awareness about wetland conservation and sustainable harvest practices. Contributions of $3,000 to $5,000 will support implementation of project objectives.

Southern Wings Partners: Pacific Flyway Council ($6,250 in 2024), ejidos, farmers and ranchers, fisheries cooperatives, Marismas Nacionales Biosphere Reserve, Comisión Nacional de Áreas Naturales Protegidas (CONANP), Comisión Nacional Forestal (CONAFOR), Municipality of Tecuala and Organización Vida Silvestre A.C (OVIS), US Fish and Wildlife Service.

Additional Project 2. Conservation of Neotropical Migratory Birds in the Dry Tropical Forests of El Salvador: Assessing and Addressing Threats to Overwintering Habitat and Bird Populations ($3,500 allocation in 2025)
El Salvador

Numerous migratory birds from throughout the Pacific Flyway use Central America's Pacific coast during migration and overwintering periods. Most of this geography was once dominated by seasonally dry tropical forests. However, large-scale conversion to agriculture and pasture has made the dry tropical forest one of the world's most endangered ecosystems, with less than 2% of the original forest remaining intact. Only 5% of remaining dry forest in Mexico and Central America receive some degree of protection. Primary threats to dry tropical forest in El Salvador include habitat conversion from forest to intensive agriculture, and degradation through timber and firewood extraction and wildfires. Approximately 364 bird species have been recorded in the dry tropical forests of El Salvador, including 38 species that are considered Species of Greatest Conservation Need (SGCN) from across 12 western states. Some SGCN species using these dry tropical forests include willow flycatcher, yellow-billed cuckoo, Mississippi kite, peregrine falcon, Swainson's hawk, brown-crested flycatcher, Macgillivray's warbler, summer tanager, and Bell's vireo, among others.

The project aims to protect overwintering bird species and their dry tropical forest habitats in the eastern region of El Salvador. The eastern region has high conservation potential for birds due to its relatively low human population density and high cover of tropical forest. The project will use a three-pronged strategy: 1) restore and protect dry tropical forest habitat, 2) conduct targeted monitoring and research of species of special concern, and 3) build capacity amongst local people, private sector partners, and governments for improved habitat management and awareness of migratory birds.

The budget need is approximately $17,000. Specific habitat conservation actions to implement include: a) sustain a team of community rangers at the Chilanguera and Olomega reserves focusing on habitat management, fire prevention (7,413 acres), community outreach, and wildlife monitoring, b) continue bird surveys targeting willow flycatchers and other migratory species at previously identified priority sites, and c) work with stakeholders to develop a sustainable management plan for the World Surfing Reserve Oriente Salvaje (containing tropical deciduous forests and mangroves). Another activity includes continuing educational workshops with community farmers and sugarcane mill staff focused on riparian habitats and overwintering habitat for willow flycatchers. The project will also continue to promote a culture of appreciation for birds through community education events, training workshops, and birding activities (e.g., Observadores de Aves de Oriente, iNaturalist Challenge). Funds will also support continued work on establishing the Motus network in El Salvador. Contributions of $2,500 to $5,000 would support implementation of project objectives.

Southern Wings Partners: Pacific Flyway Council ($3,000 in 2024), Arizona, Paso Pacífico, Zoo Boise, Zoological Foundation of El Salvador (FUNZEL), Fundación Enrique Figueroa Lemus, Ministerio de Medio Ambiente y Recursos Naturales (MARN), Sociedad Salvaje, Asociación de Desarrollo Turístico de la Costa Oriental De El Salvador (ADETCO), Compañía Azucarera Salvadoreña (CASSA), Southern Sierra Research Station (SSRS), Mujeres y Naturaleza (MUNAT).

Additional Project 3: Conservation and Management of Neotropical Migratory Birds and Thick- billed Parrots in Old-growth Forests of the Sierra Madre Occidental, Mexico
($3,165 allocation in 2025)
Sierra Madre Occidental (Chihuahua, Durango)

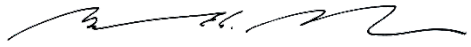
The birds of the Sierra Madre Occidental (SMO) are seriously threatened by habitat loss and degradation as a result of poor forest management policies for more than a hundred years, as well as by fire suppression and an increased incidence of catastrophic fires. Large-scale logging has been practiced for many decades without considering the need to manage biodiversity. Major threats have caused the imperial woodpecker to be considered extinct and two other endemic species to be critically endangered (Sierra Madre sparrow and thick-billed parrot). Mexico's national forest management policy, which now considers biodiversity, presents an opportunity to work at reducing significant threats (e.g., destructive fires, over-harvesting of timber) to maintain or restore populations of birds in remaining forests of the SMO.

The project focuses on conserving habitat and implementing sustainable forest management practices by establishing and maintaining a network of forests under conservation schemes and integrating beneficial management practices into forest management plans. Implementation of sustainable forestry management also includes annual biological monitoring. Activities to maintain breeding and wintering grounds for thick-billed parrots, an umbrella species of the SMO, will also drive habitat protection and management. The project is implemented with ejidos and private landowners in coordination with forestry associations, CONANP, and CONAFOR.

The budget need is approximately $12,000. The project will implement habitat conservation measures to protect, restore, and manage mixed coniferous forests in the SMO (Chihuahua and Durango), including: 1) train management staff and recreational companies on ways to reduce unregulated tourism activities (OHV) in sensitive habitat patches in the Madera Protected Area, 2) support and implement wildfire prevention measures, and 3) integrate and implement beneficial forest managements practices through forest management plans. Other actions will include conducting bird surveys, other wildlife monitoring, and tracking habitat restoration progress.

Southern Wings Partners: Organización Vida Silvestre A.C (OVIS), Arizona, Ejidos, Comisión Nacional de Áreas Naturales Protegidas (CONANP), Comisión Nacional Forestal (CONAFOR), Foresta S.A. de C.V. Tecnicos Forestales de Ejido El largo S.A. de C.V., Unidad Forestal Galván, Asociación de Silvicultores de Guadalupe y Calvo, San Diego Zoo Wildlife Alliance (SDZWA), US Fish and Wildlife Service, Universidad Autónoma de Nuevo León.

Adoption Contact: Edwin Juarez
Pacific Flyway Nongame Technical Committee
February 14, 2025



Russell Norvell, Chair

Pacific Flyway Study Committee
February 14, 2025

Jason Jones, Chair

SUBCOMMITTEE REPORTS

Rocky Mountain Population Trumpeter Swan Subcommittee

Claire Gower, Montana Fish, Wildlife, and Parks

Population Status

The U.S. Fish and Wildlife Service (USFWS) reported the most recent survey of the U.S. breeding segment of Rocky Mountain Population (RMP) trumpeter swans was conducted during September 2024. The survey includes data from the tri-state region (Idaho, Montana, and Wyoming) and restoration flocks (Montana [Blackfoot valley], Nevada, and Oregon). Fall survey data are used to monitor the total number of white birds and cygnets fledged in relation to Flyway Management Plan objectives. Survey highlights include:

- Observers counted 1,003 trumpeter swans (695 white birds and 308 cygnets) in the U.S. Breeding Segment for RMP trumpeter swans during fall of 2024, which was a 6.9% increase from the 2023 count of 938 (706 white birds and 232 cygnets).
- The number of white birds counted in the Greater Yellowstone Area was 426, this was a 6.0% decrease from last year's count of 453. The total number of cygnets increased 20.3% from 148 in 2023 to 178 in 2024.
- Cygnet count in Montana increased from 67 in 2023 to 101 in 2024 (50.8%); Wyoming cygnet production increased from 57 to 58 (1.8% increase), and decreased from 20 to 19 in Idaho (5% decrease).
- Thirty-eight white birds were observed at the Summer Lake Wildlife Area (SLWA) and vicinity, and three white birds were observed at Malheur National Wildlife Refuge (NWR). It should be noted that of the 38 white birds identified at SLWA, some were likely birds released during the summer. No birds were observed at Ruby Lakes NWR, Nevada, and no information is available for Turnbull NWR, Washington.
- Oregon's winter survey was conducted February 6, 2025, at SLWA, where 478 trumpeter swans (410 adults and 68 cygnets), 1,141 tundra swans, and 113 unclassified swans were counted. This was the highest count on record for trumpeter swans. Adverse weather has prohibited Malheur NWR conducting their portion to date.
- During Nevada's winter swan count (no species separation), 1,318 swans were observed, compared to last year's count of 1,260.
- Utah's winter swan survey was conducted on December 9, 2024, and counted 13,641 tundra swans. This count was slightly down from the 2023 winter count of 17,257 tundra swans.
- Colorado reported that they conduct a trumpeter swan survey in the Colorado portion of Browns Park; the goal is to complete a census along the 18-mile reach of the Green River in Browns Park and associated wetlands, three times throughout the winter (mid-month Dec, Jan and Feb). The 2023-2024 survey counted 85 total birds (68 white birds and 17 cygnets). The 2024-2025 survey is currently being conducted and will be reported at the fall meeting.

Harvest Information

Preliminary harvest estimates from the 2024-2025 swan hunting seasons show that Utah harvested approximately 951 tundra swans and eight trumpeter swans, Nevada's harvest is unknown at this time, but there were no trumpeter swans harvested. Idaho's harvest was the highest to date, with equal tundra and trumpeter swans in the harvest. No harvest estimate is available from Montana. Final estimates will be presented at the fall meeting.

Management Activity

The Study Committee has been working with Josh Dooley (USFWS) to develop a metric to replace the current objective for the Canadian breeding segment in the RMP Trumpeter Swan Management Plan. The current objective uses data from the North American Trumpeter Swan Survey, which was discontinued in 2020. The subcommittee will meet via zoom to finalize the metric, March 2025. The amended Management Plan, with the new objective, will be sent to Council prior to the September meeting.

A revision, of the current 2017 Management Plan, will start in 2026. The objective is to streamline the plan and make more consistent with other Flyway management plans,

In 2024, swan releases (spring and fall) occurred in Oregon (Summer Lake), Montana (Middle Madison), Yellowstone National Park, Idaho (Teton Basin), and Wyoming (Big Sandy). All birds released into MT, ID, and WY are RMP birds from Wyoming Wetlands Society (WWS). Oregon can release RMP, PCP, or RMP/PCP mixed genetics; so, released RMP yearlings from WWS in the spring 2024, and cygnets of PCP or mixed origin from Zoo Idaho in the summer. The Zoo Idaho birds were hatched from various zoos or private captive pairs coordinated by The Trumpeter Swan Society. There was high survival of the OR released birds until a pulse of significant mortality occurred in early August which coincided with these birds starting to fly. These naïve fliers appeared to go to meadows and were killed by coyotes.

As part of the 2024 releases Idaho and Wyoming instrumented birds with GSM/GSM collars. Idaho instrumented eight cygnets with collars, of which six died. Date of death ranged from a few days, to a few months, post release. The cause of death has been mostly undetermined. Surviving birds are utilizing the Teton Basin, and surviving birds collared in 2023 are utilizing Harriman State Park. In Wyoming five yearlings were collared of which four died. Three were found dead at the same location and were the result of possible golden eagle predation. One hit a fence and succumb to coyote predation, and the fifth hit a fence and survived but the collar was dropped. Collar instrumentation of the WY yearlings is not believed to have contributed to mortality but provided important information on known fate mortality of released trumpeter swans.

All five Council approved projects will be requesting an allocation of captive-reared trumpeter swans for release at approved restoration sites for 2025. The actual number of cygnets available for release depended upon hatching success during spring 2025. Following guidelines in the Management Plan, and as recommended by Council, state leads will discuss an equitable allocation of available cygnets in early July 2025. Oregon will only be requesting birds from Zoo Idaho; the other four projects are requesting birds from WWS. All five project reports have been sent to the RMP trumpeter swan subcommittee, per the direction set in the Management Plan.

The Greater Yellowstone Trumpeter Swan Working Group (GYSWG) plans to meet in person April 2025; this group plan to meet annually and develop more population and management applicable goals and share information on research projects pertaining to trumpeter swans in the GYE. One goal pertinent to the Study Committee is to work with Dave Olson (USFWS, R6) to develop a data base of nesting data to be incorporated into the fall report.

Research Activity

Utah plans to capture and instrument GPS / GSM units on trumpeter swans in the near future. Oregon has been involved in a collaring project, collaring birds during winter 2023 at SLWA, and Malheur NWR. No birds were collared in 2024, but one wintering bird was collared early

February 2025, and another collar will hopefully be deployed in the coming weeks.
Isotope work is being conducted by Todd Katzner (USGS) and Nicole Ibrahim at University of Maryland Center for Environmental Science. A manuscript is in preparation and will be finalized this fall.
A GSM collar evaluation is being led by Sharon Poessel (USGS). A manuscript titled "Movements and habitat use vary across the Rocky Mountain Population of Trumpeter Swans" has been submitted to Journal of Fish and Wildlife Management.

Recommendations

The subcommittee adopted one recommendation(s):

- The subcommittee recommends Pacific Flyway Council (Council) approval of the 2025 allocation of captive-reared trumpeter swans to approved restoration sites in this priority order:

1. Summer Lake, Oregon
2. Middle Madison, Montana
3. Yellowstone National Park
4. Teton Basin, Idaho
5. Big Sandy, Wyoming

Banding Subcommittee

Brandon Reishus, Oregon Department of Fish and Wildlife

The banding subcommittee heard a presentation from the BBL and discussed several issues during its meeting.

The BBL noted that banders should be conscious of their band requests, as the BBL is now only maintaining a year's worth of bands in inventory. Banders with large outstanding inventories will be scrutinized when ordering bands.

The BBL also noted that their database modernization project is getting some support, but more is needed to see it across the finish line.

The subcommittee had a back-and-forth discussion with the BBL regarding permit issues, especially related to adding additional authorizations and subpermittees. Concerns among the subcommittee involved receiving approvals in a timely manner and understanding what bar to meet for certain approvals, especially for those newer technologies where there is little precedence.

The subcommittee summarized Pacific Flyway migratory game bird banding activity in 2024, compared to 2023. Approximately 54,000 migratory game birds, classified as normal, wild birds, were banded in Pacific Flyway in 2024, compared to 55,000 in 2023. This included 14,416 pre-season mallards and 8,564 pre-season mourning doves. States anticipated similar levels of banding effort in 2025, with an emphasis on attaining mourning dove banding quotas in states where effort has been minimal during the past several years. Additionally, Arizona noted they planned to stand up a small effort to band waterfowl. Finally, the subcommittee generally agreed that presenting a similar summary of nongame banding efforts would be beneficial for future years.

Lastly, the subcommittee entertained sending a letter of support for the BBL and Breeding Bird Survey to the Department of Interior and USGS leadership. This was a coordinated effort among all 4 flyways, with the Mississippi Flyway approving a letter in recent weeks. The subcommittee had several volunteers from both the technical committees volunteer to work with the Mississippi Flyway letter to develop a Pacific Flyway letter for possible consideration during the business session.

<u>Recommendations</u>

The subcommittee did not adopt any recommendations.

OFF-CYCLE PRODUCTS

PACIFIC FLYWAY COUNCIL

Alaska ▪ Arizona ▪ California ▪ Colorado ▪ Idaho ▪ Montana
Nevada ▪ New Mexico ▪ Oregon ▪ Utah ▪ Washington ▪ Wyoming

February 14, 2025 Federal Register Comments for the Proposed Rule on New Federal Rulemaking Process

Recommendation

The Pacific Flyway Council (Council) recommends providing comments by February 20, 2025 via the Federal Register.

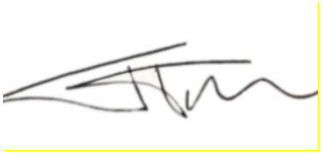
Justification

Council has repeatedly expressed concern to the US Fish and Wildlife Service (Service) about the need for timely publishing of the federal rulemaking process. Since 2021, Council has worked with the Service through the National Hunting Regulations Working Group to develop a more efficient process that meets the needs of both the State and Federal rulemaking. Council has endorsed the proposed process in 2024 and would like to reiterate the need to publish the proposed rule in a timely manner.
Comments for the Federal Register:

The Flyway Councils have expressed concern to the US Department of the Interior and the Service about the timing of the federal rulemaking in the current administrative process. Council has worked with the Service through the National Hunting Regulations Working Group to develop a more efficient process that meets the constraints of both State and Federal rulemaking. We encourage the Service to publish the proposed rule for the new administrative process as soon as possible in 2025 given the expected benefits for all stakeholders including the needs of State regulatory processes.

Adoption
Pacific Flyway Study Committee

Contact: Melanie Weaver



Jason Jones, Chair

Pacific Flyway Council
February 18, 2025

Right-click and select "Change picture" to insert your signature

Blair Stringham, Chair