

2024 Oregon Vesper Sparrow Working Group Meeting

MEETING MINUTES – DAY 1

Date:	4 March 2024
Location:	ODFW South Willamette Watershed District Office
Notetaking:	Stephanie Augustine (ESI); compiled by Anita Michalak (ESI)

Text in boxes was provided as a written update.

ATTENDEES

Avifauna Northwest: Bob Altman, Joel Geier

City of Portland: Jade U. Ashcroft

Ecostudies Institute (ESI): Stephanie Augustine, Gary Slater

Greenbelt Land Trust (GLT): Lisa Millbank, Matt Blakeley-Smith

Joint Base Lewis-McChord (JBLM): Jim Lynch, Tim Leque

Klamath Bird Observatory (KBO): Jaime Stephens, Sarah Rockwell

Natural Resources Conservation Service (NRCS): Adam Phelps

Oregon Department of Fish & Wildlife (ODFW): Anne Mary Myers, Martin Nugent

US Army Corps: Amy Zimmer

US Fish & Wildlife Service (USFWS): Kris Sclafani, Lily Calderon, Madison McGroarty, Nate Richardson, Zach Radmer

Washington Department of Fish & Wildlife (WDFW): Christa Rolls, Julia Smith

WELCOME | OBJECTIVES | INTRODUCTION

Purpose of the Working Group – Gary Slater (ESI)

- Day 1 of this working group meeting is focused on general updates about OVSP ongoing research and projects.
- Day 2 will focus on the development of the action plan for the next 3-5 years.

OVSP 101

Listing and Review Process Update – Kris Sclafani (USFWS)

- Expected actions for conservation will not change due to listing decision.
- The template was taken from streaked horned larks, but with the incorporation of new challenges (longer migratory pathways, California as an additional included state)
 - o Note: There will be three POC for CA USFWS that will be involved in consultations.
- Dear Interested Parties (DIP) letters have been sent – this data will inform the Species Status Assessment (SSA)
 - o Hope to complete a SSA internal draft by Thanksgiving 2024 and share for expert peer review in Dec/Jan
- Unknown likelihood of litigation to deal with (as with SHLA)

USFWS (Washington) Update – Zach Radmer (USFWS)

The USFWS in Washington State will be surveying Sanderson Airfield and San Juan Island for OVSP in 2024 and 2025. USFWS biologists will determine 1) occupancy status, 2) number of individuals/pairs, and 3) use areas/territories. We will use existing protocols where we can and share data with all working group partners.

WDFW Updates – Christa Rolls and Julia Smith (WDFW)

- The WDFW Oregon vesper sparrow species lead is Christa Rolls as of September 2023.
 - No OVSP incidental detections logged in 2023 on WDFW streaked horned lark surveys or WDFW incidental detection form. One OVSP detected incidentally on a 2022 lark occupancy survey (13 June) for WDFW's Violet Prairie; no follow up surveys for OVSP occupancy conducted. Six vesper sparrows (unconfirmed subspecies) detected at King County Airport on a 2022 lark occupancy survey (3 May); follow up visits yielded no other vesper sparrow detections.
 - WDFW is planning to conduct OVSP occupancy surveys in South Sound prairies spring/summer 2024 where dedicated surveys have either not been conducted previously or in the last five or so years. Hope to create an associated Survey123 form after protocols are finalized and approved by the WDFW Science team.
 - OVSP habitat metrics are included in habitat management planning for certain WDFW lands, including the Scatter Creek complex. For example, this summer, a restoration pathways project is slated to open the northern edge oaks at Scatter Creek North, and a grazing contract is currently being put together for Violet Prairie.
 - WDFW is considering development of a state recovery plan for OVSP.
- Planning to conduct OVSP surveys in the spring in coordination with USFWS, ESI, and JBLM.
 - o Protocol in process; needs approval through Science Division
 - o Included in Bio work plans for 2024, hoping to add for 2025
 - o Currently just with South Sound, potential to look beyond this district
 - WDFW to develop state recovery plan using info the USFWS SSA
 - o WA recovery plans are not regulatory documents
 - o Will want to wait until SSA is finalized (approx. end of 2024) and form a recovery team; hope to complete by winter 2025
 - Note new permanent WDFW position (Adrian Frediani, Prairie Protection Lead) to focus on strategic land acquisitions from public and private landowners. Members of this working group can provide useful criteria to focus on; potential for land swaps, compiling more conservation lands into one larger space.
 - OVSP are incorporated into management plans for Scatter Creek complex and Violet Prairie.

ODFW Updates – Martin Nugent (ODFW)

- OVSP in OR are not on the state endangered species list, but are a strategy/sensitive species. State ESA requires petition process and only applies to state agency actions on state-owned and leased land. Therefore, no additional legal protections currently exist in OR.
 - o OVSP not currently known to breed on state land, but likely occur as migrants.
- Goes through SSA process to establish strategy – currently in draft, revisions ongoing, expected completion in 2025
- Most on-the-ground work is not done by ODFW but by other partners (e.g., Avifauna Northwest, KBO).

OVSP Natural History Primer – Bob Altman (Avifauna Northwest)

- Occurrence on Christmas tree farms – potentially 30-50% of the Willamette Valley population is found there
 - o Management impacts: aerial and/or spot spraying with pesticides during breeding season (likely minimal impacts)
 - o Corvallis area has the most OVSP on Christmas tree farms, other regions are dominated by pasturelands
- Patch size note: 100 acres of continuously suitable habitat is difficult, more often on edge vs interior of prairie or other open habitat types due to need for structural heterogeneity.
- Non-breeding season: range overlap with Great Basin subspecies, but there are regional distinctions (museum specimen determine ranges)
 - o Likely overlap in migration as well, probably Great Basin subspecies migrate up coast then cross North Cascades, birds appear in NE WA before Columbia River
 - o Songs unable to be distinguished by human ear, but potentially by sonograms – graduate student project that is now inactive
 - o See Tim Leque's thesis on bird responses to other subspecies song

Q&A | Discussion about OVSP Occurrence

- Columbia River: Scott and Ecostudies staff have recorded OVSP – need to find details
- Airports in OR: unknown but unlikely because airports are on the valley floor, and OVSP are found in the upland/edges
 - o Potential to have conflict with 4d rule like larks
 - o Can check BASH records, particularly for May-July to restrict to breeding OVSP
- Christmas tree farms: potentially set up conservation benefit agreements; can happen before listing and allows easements to be in place
- Other crops where they occur: vineyards, but only under certain circumstances (e.g., mature, with roads throughout, or adjacent to pasturelands with existing OVSP populations)
 - o Management impacts: depends on grass levels between roads. OVSP only found at roads/edges because stature of vineyards/grasses between is too tall
 - Could be a population sink due to pruning throughout the season, intense insecticide use relative to Christmas tree farms
 - May need to consider if OVSP become federally listed
- In WA, WDFW is looking at previous Scientific Collecting Permits to investigate occurrences from wind turbines or other salvage records (can CA folks also do this?)

HABITAT & MANAGEMENT

Willamette Valley Updates – Bob Altman (Avifauna Northwest)

[See PowerPoint](#)

Bald Hill Updates – Matt Blakeley-Smith (GLT)

- Competing priorities: part of the great Butterflyway, corridor for Fender's Blue, benefit to Taylor's Checkerspots, three endangered plants. Can't graze in areas with butterflies, but grazing would likely be beneficial.
- Economic intersection at grazing – how to make it attractive to cattle and ranchers? Need for incentives, given limited people who are able to/want to graze.
- Converting agricultural lands to native prairie, working to create "ideal" seed mix; info from nest vegetation analysis can help guide needs for structural diversity, but how to vary seed composition across different pieces of land and achieve heterogeneity.
- Managing for butterflies is compatible due to nectar-rich forbs providing appropriate structure.
- Will be some compromises – poor soils on dry southern slopes that don't provide forage, lots of bromes and other invasive annual grasses that cattle don't graze.
- Hoping cattle can eat down annual ryegrass, let FESROE fill the gaps, create needed patchiness
- Challenge of cattle: bring in other seeds in their guts, and it's unrealistic to expect use of seed-free hay or putting cattle in barns to let seeds digest through, when they could be out grazing as per rancher needs
- Possibility of prescribed fire: hasn't worked in the past, but would need to happen March/April. Some spring burning investigated in South Sound showing promising outcomes
- Mowing: does not encourage needed structural diversity
- Can approach as a combination: burn, then graze, and mow areas that are not currently being used by OVSP
- Difficult to apply grazing to refuges, currently using strategic mowing, per Nate Richardson
- Compensations for grazing partner: USFWS covered fencing costs, rancher did the labor of installing. Special case at Bald Hill (not full-time ranching; benefits from conservation easement); this is similar to landowner at Creswell Oaks who grazes property with a CE on it (held by CNLM).

Klamath Mountains Updates – Sarah Rockwell and Jaime Stephens (KBO)

Please contact Sarah Rockwell at KBO (smr@klamathbird.org) for presentation slides.

There are 40-50 OVSP pairs at the Lily Glen site, which is a BLM campground. Experiences mowing for large equestrian event that occurs in June.

South Puget Sound Updates – Tim Leque (JBLM)

- OVSP management and protections have been possible on JBLM due to presence of Mazama pocket gophers (MPG) at OVSP occupied site, Weirs Prairie
- Actions include: burning, seeding FESROE and forbs, managing for perch density by retaining some burned CYTSCO structure and keeping some small trees as high-use perches
- In Artillery Impact Area, there has been more conifer establishment around edges; have maintained selective girdling to maintain sparse density, balanced with no management in the center which receives annual wildlife from artillery.
- Known overlap between MPG and OVSP needs – OVSP seen dust bathing in MPG mounds
- OVSP were extirpated from one site on JBLM – 13th Division Prairie, likely due to loss of structural heterogeneity when management was aimed solely at SHLA.

POPULATION TRENDS

South Puget Sound Updates – Gary Slater (ESI)

[See PowerPoint](#)

Population Monitoring: Joint Base Lewis-McChord

Since 2015, Ecostudies staff has coordinated standardized line transect surveys for breeding birds across prairie habitat on Joint Base Lewis-McChord as part of the requirements for streaked horned lark conservation and monitoring. In the last eight years we completed 2,632 surveys of 115 unique transects. We used the 434 detections of Oregon vesper sparrows on these surveys in a distance sampling modeling framework to estimate annual population size on occupied sites. Within our sampling area, which doesn't include the center of the Artillery Impact Area, we estimated there were 80 (95% confidence interval: 42 – 157) Oregon vesper sparrows on base in the 2023 breeding season. We observed evidence of a potential overall decline on the Artillery Impact Area, the site which hosts the largest population in the South Puget Sound; the population trend for the Weir Prairie population appeared stable.

Population Monitoring: Off-base surveys

Ecostudies staff has surveyed South Puget Sound prairie sites for Oregon vesper sparrows through several projects since 2015. Surveys in 2018-2019 were the most intensive, and used conspecific playback along transects at sites that were historically occupied or were the recipient of prairie enhancement activities. Sites were managed by a variety of public and private entities and included: Cavness, Deschutes Prairie, Glacial Heritage Preserve, Scatter Creek Wildlife Management Area, Tenalquot Preserve and adjacent pastureland, Violet Prairie-Scatter Creek Preserve, West Rocky Prairie Wildlife Management Area, Wolf Haven, Sanderson Airfield, and Olympia Airfield. Of these sites, we detected one pair at Sanderson airfield in both years, and 1-5 pairs at Tenalquot and adjacent pasturelands. Tenalquot is adjacent to the Weirs Prairies on Joint Base Lewis-McChord, which supports the second largest known population of Oregon vesper sparrows in the South Puget Sound and has continued to host a handful of pairs up to 2023. Additional bird monitoring of grassland sites in the South Puget Sound has continued in concert with other projects (e.g., see conspecific attraction), including 2023 surveys at Mima Mounds and Glacial Heritage Preserve; none of these surveys have encountered new Oregon vesper sparrows in the region. Most work was funded by Competitive State Wildlife Grants.

Klamath Mountains Updates – Sarah Rockwell and Jaime Stephens (KBO)

Believe that 40-50 OVSP pairs at Lily Glen have been stable; conducted nest-searching in 2018, and more intensively in 2019 and 2021, plus resighting in 2023—should revisit and see if data are robust enough to estimate number of territories for individual years.

Willamette Valley Updates – Bob Altman (Avifauna Northwest), Stephanie Augustine and Gary Slater (ESI), others

[See PowerPoint](#)

Last spring, noticed a shortage of males, potentially due to cold, wet storms in late spring as adult males would have been migrating/arriving. At least one polygamous male Bald Hill. Likely unusual pattern due to weather; more likely that females are the population limiting factor.

Creswell Oaks Preserve

The Creswell Oaks property supports the largest known Oregon vesper sparrow population in the Willamette Valley Ecoregion and has been monitored since 2021 with the goal of maintaining or increasing the population within five years. We completed 189 surveys of 21 transects over three years and used 118 Oregon vesper sparrow detections (visual and aural) in a distance sampling framework to estimate annual population density and abundance. Model estimates indicate a potential population decline from 34 male Oregon vesper sparrows in 2021 to only 15 in 2023. Further monitoring will be critical to distinguish interannual variation from long-term demographic declines.

DEMOGRAPHICS

South Puget Sound Updates – Stephanie Augustine (ESI)

[See PowerPoint](#)

Demographic Monitoring: Joint Base Lewis-McChord

Since 2016, Ecostudies staff has been conducting demographic monitoring of Oregon vesper sparrow populations to understand limiting factors and help inform recovery actions. Most work occurred on Joint Base Lewis-McChord, focusing on the Weirs Prairie (and adjacent Tenalquot Prairie) due to access limitations to the other JBLM population in the Artillery Impact Area. During 2023, we located and monitored 16 breeding territories at the Weirs Prairie, of which 11 were confirmed pairs, and located 12 nests. Modeled nest success probability was 0.401 (95% credible interval: 0.154 – 0.681). Nest survival and productivity models incorporating multiple years and additional factors such as nest vegetation will be part of a forthcoming analysis. We used 2016-2023 color-banding and resight data to model annual apparent survival; adults at 0.607 (0.514 – 0.698) were more than double juveniles at 0.215 (0.144 – 0.302) but is confounded by lack of data regarding dispersal to other sites. While we have too few confirmed female records to estimate sex-specific survival at this time, in 2023 we began collecting feather samples from banded nestlings, which will enable us to estimate sex and age-specific survival probabilities in the future. This work has been supported with funds from American Bird Conservancy, DoD-JBLM, USFWS, WDFW, and Wildlife Forever Fund.

Conspecific Attraction

Conspecific attraction is a process wherein individuals use social cues such as song and calls from other individuals of the same species to assess suitability and quality of habitat. Capitalizing on this natural process using artificial means, e.g., speaker playback of auditory cues, can lead individuals dispersing from existing populations to colonize currently unoccupied sites. During the 2022 and 2023 breeding seasons, Ecostudies established conspecific attraction playback sites on conservation lands in the South Puget Sound with apparently suitable habitat that are unoccupied by breeding Oregon vesper sparrows. Sites were selected within 20 miles of existing populations, with some sites having historical detections of birds during the breeding or migration seasons. We established playback at Mazama Meadows Conservation Bank and Deschutes Prairie in 2022 and Glacial Heritage Preserve and Scatter Creek Wildlife Management Area in 2023. Playback stations were deployed in early April to coincide with arrival of territorial males and were visited weekly or biweekly throughout the duration of the breeding season and intensively searched for birds. This work is funded by the American Bird Conservancy and the Wildlife Forever Fund; this work will continue in 2024 and 2025 with existing funds and secured funding from a Competitive State Wildlife Grant.

Klamath Mountains Updates – Sarah Rockwell and Jaime Stephens (KBO)

Please contact Sarah Rockwell at KBO (smr@klamathbird.org) for presentation slides.

[See PowerPoint](#)

MOVEMENT PATTERNS

Klamath Mountains Updates – Sarah Rockwell and Jaime Stephens (KBO)

Please contact Sarah Rockwell at KBO (smr@klamathbird.org) for presentation slides.

Contact CDFW to see if there is overlap in management/restoration actions of ongoing work for tiger salamanders or other species in CA.

Additional Materials

[Altman, B. 2024](#). An assessment of population status, limiting factors, and conservation actions for an Oregon Vesper Sparrow metapopulation in the Willamette Valley, Oregon, 2016-2023. Avifauna Northwest unpublished report to American Bird Conservancy. January 2024.

Stephens, J. L., and S. M. Rockwell. 2021. Limiting factors for the Oregon Vesper Sparrow population in the Rogue Basin, Oregon: 2018-2021 summary report. Rep. No. KBO-2021-0018. Klamath Bird Observatory, Ashland, OR.

Rockwell, S. M., and J. L. Stephens. 2024. Limiting factors for the Oregon Vesper Sparrow population in the Rogue Basin, Oregon: 2022-2023 summary report. Rep. No. KBO-2024-0001. Klamath Bird Observatory, Ashland, OR.

2024 Oregon Vesper Sparrow Working Group Meeting

MEETING MINUTES – DAY 2

Date: 5 March 2024

Location: ODFW South Willamette Watershed District Office

Notetaking: Stephanie Augustine (ESI); compiled by Anita Michalak (ESI)

ATTENDEES

Avifauna Northwest: Bob Altman, Joel Geier
Ecostudies Institute (ESI): Stephanie Augustine, Gary Slater
Greenbelt Land Trust (GLT): Lisa Millbank
Joint Base Lewis-McChord (JBLM): Jim Lynch
Klamath Bird Observatory (KBO): Jaime Stephens, Sarah Rockwell
Natural Resources Conservation Service (NRCS): Adam Phelps
Oregon Department of Fish & Wildlife (ODFW): Anne Mary Myers
US Army Corps: Amy Zimmer
US Fish & Wildlife Service (USFWS): Kris Sclafani, Lily Calderon, Madison McGroarty, Nate Richardson, Zach Radmer
Washington Department of Fish & Wildlife (WDFW): Christa Rolls, Julia Smith

DISCUSSION

Road 2 Recovery Overview – Jaime Stephens (KBO)

[See PowerPoint](#)

Action Plan Review | Action Plan Ranking

OVSP Ecoregional Research Summary

Parameter	Method	Region	Years	Sample Size
Productivity, Fecundity, Nest Success	Nest Monitoring	Puget	2017-2023	101 nests
		Willamette	2016-2023	237 nests
		Klamath	2018-2019, 2021, 2023	142 nests
Survival, Dispersal, Recruitment	Color-Banding	Puget	2016-2023	202 banded birds Adult (n=58), HY (n=14), Nestling (n=130)
		Willamette	2016-2023	791 banded birds Adult (n=341), Nestling (n=450)
		Klamath	2018-2023	458 banded birds Adult (n=191), Nestling (n=267)
Habitat Assessment, Nest Site Selection	Nest Vegetation Monitoring	Puget	2016-2022 (10 m point-intercept transects)	86 (with paired random)
		Willamette	2017-2019, 2021-2023 (10 m point-intercept transects and 1 m nest plots)	39 nests (10 m) 92 nests (1 m)
		Klamath	2018-2019, 2021, 2023 (10 m point-intercept transects and 1 m nest plots)	142 nests (116 with paired random)
Migration Routes, Wintering Sites	GPS-Tagging Adults	Willamette	2022-2023 (including return year)	Data retrieved from 2 males
		Klamath	2020-2023 (including return year)	Data retrieved from 6 males
Population Establishment	Conspecific Attraction	Puget	2022-2023	4 sites
		Willamette	2020-2021	5 sites
Fledgling Habitat Use, Survival, Natal Dispersal	Motus-Tagging Fledglings	Klamath	2021-2023	36 late-stage nestlings or fledglings tagged

Vital Rates	Nest Success	Predation Rate	Egg Hatch Rate	Fledgling per Nest	Adult Return Rate	First-Year Return Rate	Site Fidelity
Puget	Apparent = 51.4% (n=101)	93.0% (n=43)	77% (n=39 nests)	3.1/success (n=52) 1.6/active (n = 101)	A = 56.5% (n=69)	17.4% (n=144)	N/A
Willamette	Apparent = 47.7% (n=113) Mayfield = 25.6% (n=113)	71.0% (n=88)	86.1% (n=316 eggs)	3.3/success (n=113) 1.6/active (n=237)	M = 64.3% (n=480) F = 56.1% (n=87)	33.7% (n=125)	M = 94.4% (n=453) F = 90.8% (n=79) FY = 85.6% (n=107)
Klamath	Please contact Sarah Rockwell at KBO (smr@klamathbird.org) for Klamath Mountain site data.						

Puget Lowlands: One primary study site (Weirs Prairie) located on Joint Base Lewis-McChord, and the adjacent Tenalquot Prairie, together supporting 15-20 pairs on average.

Willamette Valley: 12 sites within a mostly 12-mile radius of Corvallis. Six primary sites with larger populations (10-30 pairs) and six sites with smaller populations (1-7 pairs). Two of the six larger sites with intensive effort on all parameters.