

Natural Heritage Ranking Form - Oregon State Rank

Oregon Ranking Form Oregon vesper sparrow (*Pooecetes gramineus affinis*)

Oregon Biodiversity Information Center

SPECIES ASSESSED

Scientific Name *Pooecetes gramineus affinis*

ELCODE ABPBX95011

Common Name Oregon vesper sparrow

Element ID 6721

Species Concept Reference Citation

American Ornithologists' Union (AOU). 1957. The A.O.U. Check-list of North American Birds, 5th ed. Port City Press, Inc., Baltimore, MD. 691 pp.

Assigned Rank

S1B

Rank Assignment Author E. Gaines Rank Review Date 12/12/2003

Rank Factors Author E Gaines Rank Factors Date 02/19/2020

Calculated Rank S1 Rank Change Date 02/19/2020

Rank Methodology Used Rank calculator v.3.1x - 2011-2015 rank factors

Assigned Rank Reasons

Small, declining, and isolated populations, significant threats due to habitat loss or degradation.

Rating 20,000-200,000 square km (about 8000-80,000 square miles)

Estimate Approximately 30,000 sq km

Unit Used for Estimate

Comments Found in the Willamette Valley and Klamath Mountains ecoregions, and at scattered sites along the coast.

Area of Occupancy

Grid Cell Size 4 km² Grid Cells

Rating (as Number of 4 km² Grid Cells) F = 126-500

Comments Restricted to grassland and savannah habitats in lowland valleys, and montane meadows in the Klamath Mountains ecoregion (Altman 2017). Currently nearly extirpated from the Willamette Valley floor and northern Willamette Valley. Small populations along the coast.

ABUNDANCE AND CONDITION

Rating 1 - 20

Estimate 3

Comments

Only 3 known extant EOs.

Rating 1000 - 2500 individuals

Estimate 2000

Comments

2020 statewide population estimate of 2000, Klamath Bird Observatory.

Number of Occurrences with Good Viability/Ecological Integrity

Rating

Number of Protected and Managed Occurrences

B = Few (1-3) occurrences appropriately protected and managed

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<https://inr.oregonstate.edu/orbic>

Number of Protected and Managed Occurrences Comments

Many remaining populations are on private lands.

<u>Threat Category</u>						
<u>Code</u>	<u>Threat Category</u>	<u>Calculated Impact</u>	<u>Scope</u>	<u>Severity</u>	<u>Timing</u>	<u>Comments</u>
2	Agriculture & aquaculture	D = Low	Restricted: Affects some (11-30%) of the total population or occurrences or extent	Moderate: Likely to moderately degrade/reduce affected occurrences or habitat, or reduce population 11-30%		
2.1	Annual & perennial non-timber crops	D = Low	Restricted: Affects some (11-30%) of the total population or occurrences or extent	Moderate: Likely to moderately degrade/reduce affected occurrences or habitat, or reduce population 11-30%		Conversion of grassland habitat to agriculture
8	Invasive & other problematic species, genes & diseases	C = Medium	Large: Affects most (31-70%) of the total population or occurrences or extent	Moderate: Likely to moderately degrade/reduce affected occurrences or habitat, or reduce population 11-30%		
8.1	Invasive non-native/alien species/diseases	C = Medium	Large: Affects most (31-70%) of the total population or occurrences or extent	Moderate: Likely to moderately degrade/reduce affected occurrences or habitat, or reduce population 11-30%		degradation of habitat to invasive vegetation
11	Climate change & severe weather	B = High	Large: Affects most (31-70%) of the total population or occurrences or extent	Serious: Likely to seriously degrade/reduce affected occurrences or habitat, or reduce population 11-30%		
11.1	Habitat shifting & alteration	B = High	Large: Affects most (31-70%) of the total population or occurrences or extent	Serious: Likely to seriously degrade/reduce affected occurrences or habitat, or reduce population 31-70%		Continued loss/degradation of savannah and grassland habitats (conversion to agriculture, succession to woody veg; Altman 2017)
7	Natural system modifications	C = Medium	Large: Affects most (31-70%) of the total population or occurrences or extent	Moderate: Likely to moderately degrade/reduce affected occurrences or habitat, or reduce population 11-30%		

7.1	Fire & fire suppression	C = Medium	Large: Affects most (31-70%) of the total population or occurrences or extent	Moderate: Likely to moderately degrade/reduce affected occurrences or habitat, or reduce population 11-30%	
7.1.2	Suppression in fire frequency/intensity	C = Medium	Large: Affects most (31-70%) of the total population or occurrences or extent	Moderate: Likely to moderately degrade/reduce affected occurrences or habitat, or reduce population 11-30%	Succession/incroachment of woody vegetation into meadow habitat (Altman 2017).

Calculated Overall Threat Impact A = Very high

Assigned Overall Threat Impact A = Very high

Overall Threat Impact Comments

Primary threats include habitat loss to agricultural conversion, encroachment of woody vegetation, and invasive vegetation (Altman 2017). This subspecies is also threatend by small, disjunct populations and is vulnerable to stochastic events and loss of ge

Rating EF = Decline of 10-50%

Estimate 30%

Comments

30% decline between 2010 and 2020 per Klamath Bird Observatory Oregon Vesper Sparrow Project.

Rating CD = Decline of 50-80%

Comments

Large long term declines, approximately 4% annually since 1968 (Sauer et al. 2014, Altman 2017).

Intrinsic Vulnerability Rating Moderately vulnerable

Comments

Remaining populations are often small and fragmented, vuilnerable to extirpation.

Other Rank Considerations

Remaining populations are often small and fragmented.

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Additional ORBIC species ranking forms posted at
<https://inr.oregonstate.edu/orbic/rare-species/ranking-documentation>

Information on Natural Heritage ranking methodology is available at
<http://www.natureserve.org/biodiversity-science/publications/natureserve-conservation-status-assessments-methodology-assigning>

The Conservation Rank Calculator is developed and maintained by NatureServe and is available from <http://www.natureserve.org/conservation-tools/conservation-rank-calculator>

Oregon Biodiversity Information Center. 2003. Oregon state rank assessment for Oregon vesper sparrow (*Pooecetes gramineus affinis*). Institute for Natural Resources, Portland State University, Portland, OR.