

Pacific Wren, Semidi

Class: Aves
Order: Passeriformes

Troglodytes pacificus semidiensis

Note: This assessment refers to this subspecies only. A species level report, which refers to all associated subspecies, is also available.

Review Status: Peer-reviewed

Version Date: 15 December 2017

Conservation Status

NatureServe: Agency:

G Rank: G5T2T3 ADF&G: Species of Greatest Conservation Need IUCN: Audubon AK: Yellow

S Rank: S2S3 USFWS: BLM:

Final Rank		
Conservation category: IV. Orange		
unknown status and high biological vulnerability and action need		
<u>Category</u>	<u>Range</u>	<u>Score</u>
Status	-20 to 20	0
Biological	-50 to 50	12
Action	-40 to 40	32
Higher numerical scores denote greater concern		

Status - variables measure the trend in a taxon's population status or distribution. Higher status scores denote taxa with known declining trends. Status scores range from -20 (increasing) to 20 (decreasing).

	Score
<i>Population Trend in Alaska (-10 to 10)</i> Unknown.	0
<i>Distribution Trend in Alaska (-10 to 10)</i> Unknown.	0
Status Total:	0

Biological - variables measure aspects of a taxon's distribution, abundance and life history. Higher biological scores suggest greater vulnerability to extirpation. Biological scores range from -50 (least vulnerable) to 50 (most vulnerable).

	Score
<i>Population Size in Alaska (-10 to 10)</i> Unknown.	0
<i>Range Size in Alaska (-10 to 10)</i> Resides on the Semidi Islands (ADFG 2006a). Range is ~29 sq. km calculated from ACCS range map (ACCS 2017a).	10
<i>Population Concentration in Alaska (-10 to 10)</i> Does not concentrate, but only occurs on Semidi Islands.	2

Reproductive Potential in Alaska

Age of First Reproduction (-5 to 5) -3
 Presumably during their second year (Toews and Irwin 2012).

Number of Young (-5 to 5) 1
 Unknown for this subspecies, but probably 6-7 eggs per clutch (Heath 1920). On St. George Island, some females laid two clutches in one season (Heath 1920).

Ecological Specialization in Alaska

Dietary (-5 to 5) 1
 Invertebrates, especially insects, spiders, and amphipods (Toews and Irwin 2012).

Habitat (-5 to 5) 1
 Habitat requirements specific to the Semidi subspecies are unknown. In the Aleutians, found along the coast and on beaches (Gibson and Byrd 2007; Withrow 2015). Nests on sea cliffs and boulder fields in dense vegetation within grass meadows and tall forb meadows (Gibson and Byrd 2007). May also nest in the roots of upturned trees, in old stumps, brush piles or abandoned buildings (Kessler and Kogut 1985; Armstrong 2008).

Biological Total: 12

Action - variables measure current state of knowledge or extent of conservation efforts directed toward a given taxon. Higher action scores denote greater information needs due of lack of knowledge or conservation action. Action scores range from -40 (lower needs) to 40 (greater needs).

Score

Management Plans and Regulations in Alaska (-10 to 10) 2
 Protected under the Migratory Bird Treaty Act (MBTA 1918).

Knowledge of Distribution and Habitat in Alaska (-10 to 10) 10
 Habitat associations are poorly known at the subspecies level.

Knowledge of Population Trends in Alaska (-10 to 10) 10
 Not currently monitored.

Knowledge of Factors Limiting Populations in Alaska (-10 to 10) 10
 The factors that regulate the dynamics of this subspecies are unknown. They have not responded dramatically to the eradication of foxes, presumably because of continued predation from rats (ADFG 2006a). Even still, the abundance of Pacific Wren on Hawadax Island (subspecies *kiskensis*) did not increase significantly five years after rats were eradicated (Croll et al. 2016). Restricted distribution may put the subspecies at risk from factors such as inclement weather and low genetic diversity (Paine 1985; Pruett et al. 2017). Other Pacific Wren island populations are known to reach low numbers after severely cold and snowy winters (Heath 1920; Paine 1985; Toews and Irwin 2012).

Action Total: 32

Supplemental Information - variables do not receive numerical scores. Instead, they are used to sort taxa to answer specific biological or management questions.

Harvest: None or Prohibited
Seasonal Occurrence: Year-round
Taxonomic Significance: Subspecies
% Global Range in Alaska: >10%

% Global Population in Alaska: Endemic

Peripheral: No

References

- Alaska Center for Conservation Science (ACCS). 2017a. Wildlife Data Portal. University of Alaska Anchorage. Available online: <http://aknhp.uaa.alaska.edu/apps/wildlife>
- Alaska Department of Fish and Game (ADFG). 2006a. Our wealth maintained: a strategy for conserving Alaska's diverse wildlife and fish resources. Alaska Department of Fish and Game, Juneau, AK, USA.
- Croll, D. A., K. M. Newton, M. McKown, N. Holmes, J. C. Williams, ..., and B. R. Tershy. 2016. Passive recovery of an island bird community after rodent eradication. *Biological Invasions* 18(3):703-715. DOI: 10.1007/s10530-015-1042-9
- Gibson, D. D., and G. V. Byrd. 2007. *Birds of the Aleutian Islands, Alaska*. Nuttall Ornithological Club, Cambridge, MA, USA.
- Heath, H. 1920. The nesting habits of the Alaska wren. *The Condor* 22(2):49-55. DOI: 10.2307/1362421
- Kessler, W. B., and T. E. Kogut. 1985. Habitat orientations of forest birds in southeastern Alaska. *Northwest Science* 59(1):58-65.
- Migratory Bird Treaty Act (MBTA). 1918. U.S. Code Title 16 §§ 703-712 Migratory Bird Treaty Act.
- Paine, R. T. 1985. Reestablishment of an insular winter wren population following a severe freeze. *Condor* 87:558-559.
- Pruett, C. L., A. Ricono, C. Sporn, and K. Winker. 2017. Island life and isolation: The population genetics of Pacific wrens on the North Pacific Rim. *The Condor* 119(1):131-142. DOI: 10.1650/CONDOR-16-183.1
- Toews, D. P. L., and D. E. Irwin. 2012. Pacific Wren (*Troglodytes pacificus*), version 2.0. In Rodewald, P. G., ed. *The Birds of North America*. Cornell Lab of Ornithology, Ithaca, NY, USA. Available online: <https://birdsna.org/Species-Account/bna/species/pacwre1>
- Withrow, J. J. 2015. Notes on the birds of Chirikof Island, Alaska. *Western Birds* 46(1):28-48.

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