

# Pacific Wren, Kodiak

Class: Aves  
Order: Passeriformes

*Troglodytes pacificus helleri*

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: G5T3      ADF&G: Species of Greatest Conservation Need      IUCN:      Audubon AK: Yellow

S Rank: S3      USFWS:      BLM:

Final Rank		
Conservation category: <b>IV. Orange</b>		
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	-14
Action	-40 to 40	24
<b>Higher numerical scores denote greater concern</b>		

**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> Population size for subspecies T. p. helleri is unknown; it is suspected that numbers fluctuate widely from year to year due to environmental factors such as extremely cold winters (Heath 1920). According to B. Pyle (USFWS, pers. comm.), the current population is between 10,001 and 25,000. This estimate is based on field observations since 2001 on the Kodiak Road System and in Kodiak NWR.	-6
<i>Range Size in Alaska (-10 to 10)</i> Historically known only from Kodiak, Afognak and Raspberry Islands in the Gulf of Alaska, south	-2

of the Kenai Peninsula (Gabrielson and Lincoln 1959). More recent observations suggest this species inhabits the entire Kodiak archipelago (D. Zwiefelhofer pers. comm, qtd. in Gotthardt et al. 2006). Estimated range size is ~12,610 sq. km. calculated in GIS.

*Population Concentration in Alaska (-10 to 10)* -6

Does not concentrate, but only occurs on >25 islands.

*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

Little is known about the habitat requirements of this subspecies. According to B. Pyle (USFWS, pers. comm.), occurs mostly in closed canopy spruce, but also in deciduous forests near the coast. Habitat use on Kodiak Island likely changes altitudinally according to seasonal habitat conditions. Brush piles might serve as important winter habitat on Kodiak Island (D. Zwiefelhofer pers. comm, qtd. in Gotthardt et al. 2006).

Biological Total: -14

**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

Extent of range for this subspecies is not entirely known. Habitat requirements specific to the Kodiak subspecies have not been identified.

*Knowledge of Population Trends in Alaska (-10 to 10)* 10

Not currently monitored.

*Knowledge of Factors Limiting Populations in Alaska (-10 to 10)* 2

According to B. Pyle (USFWS, personal communication), severe winters are the primary factor influencing survival and abundance. Large inter-annual fluctuations in population numbers have been documented locally by the Christmas Bird Count and Breeding Bird Surveys data, and other island populations are known to reach low numbers after severely cold and snowy winters (Heath 1920; Paine 1985; Toews and Irwin 2012). Logging of old growth forests on the Kodiak Archipelago may reduce available habitat. Restricted distribution may put subspecies at risk from factors such as environmental stochasticity and low genetic diversity (Paine 1985; Pruett et al. 2017).

Action Total: 24

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

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<b>Harvest:</b>	None or Prohibited
<b>Seasonal Occurrence:</b>	Year-round
<b>Taxonomic Significance:</b>	Subspecies
<b>% Global Range in Alaska:</b>	>10%
<b>% Global Population in Alaska:</b>	Endemic
<b>Peripheral:</b>	No

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**References**

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- Gabrielson, I. N., and F. C. Lincoln. 1959. *The Birds of Alaska*. The Stackpole Company, Harrisburg, PA, USA.
- Heath, H. 1920. The nesting habits of the Alaska wren. *The Condor* 22(2):49-55. DOI: 10.2307/1362421
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- 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>

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Alaska Center for Conservation Science  
Alaska Natural Heritage Program  
University of Alaska Anchorage  
Anchorage, AK