

Hermit Thrush

Catharus guttatus

Class: Aves
Order: Passeriformes

Review Status: Peer-reviewed

Version Date: 15 December 2017

Conservation Status

NatureServe: Agency:

G Rank: G5 ADF&G: Species of Greatest Conservation Need IUCN: Least Concern Audubon AK:

S Rank: S5B USFWS: BLM:

Final Rank		
Conservation category: IX. Blue		
low status and low biological vulnerability and action need		
<u>Category</u>	<u>Range</u>	<u>Score</u>
Status	-20 to 20	-11
Biological	-50 to 50	-39
Action	-40 to 40	0
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> Stable. Data from 2003 to 2015 reveal a stable trend in Northwest Interior and a stable to slightly increasing trend in Southeast Alaska (Handel and Sauer 2017). Long-term data (1993-2015) indicate stable trends for both regions (Handel and Sauer 2017).	-6
<i>Distribution Trend in Alaska (-10 to 10)</i> Potentially increasing at the northern edge of its range (Mizel et al. 2016). Given population trends, likely stable elsewhere.	-5
Status Total: -11	

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> Uncertain, but >25,000 (PIF 2019).	-10
<i>Range Size in Alaska (-10 to 10)</i> Summer resident only. Breeds throughout large parts of southern and central Alaska, from southeast Alaska north past Fairbanks (Dellinger et al. 2012). In western Alaska, breeds from the Seward Peninsula to the Alaska Peninsula, the Shumagin Islands, and the eastern Aleutian Islands (Dellinger et al. 2012; ACCS 2017a). Estimated size of breeding range is >400,000 sq. km, estimated from	-10

range map by ACCS (2017a).	
<i>Population Concentration in Alaska (-10 to 10)</i>	-10
Does not concentrate.	
<i>Reproductive Potential in Alaska</i>	
<u>Age of First Reproduction (-5 to 5)</u>	0
Unknown. Assumed to breed at 1 year, but data are lacking for the Hermit Thrush and closely related species (Mack and Yong 2000; Dellinger et al. 2012).	
<u>Number of Young (-5 to 5)</u>	1
Few data available. Average clutch size is 4, with a range from 3 to 6 (Dellinger et al. 2012). Very rarely has more than one brood per season (DeSante 1990).	
<i>Ecological Specialization in Alaska</i>	
<u>Dietary (-5 to 5)</u>	-5
On breeding grounds, eats mostly ground-dwelling invertebrates including ants, beetles, spiders, caterpillars, and worms (Dellinger et al. 2012). Fruits may be consumed opportunistically. There is some evidence to suggest that diet varies with seasonal and spatial availability (Dellinger et al. 2012).	
<u>Habitat (-5 to 5)</u>	-5
Common in a range of forested habitats and stand ages (Quinlan 1978; Kessler 1979; Kessler and Kogut 1985; Dellasala et al. 1996; Cotter and Andres 2000a). In southeast Alaska, detected in all forested habitat types including coastal and upland coniferous forests, mixedwood and deciduous forests, and shrub thickets (Gibson and MacDonald 1975; Cotter and Andres 2000a; Andres et al. 2004; Johnson et al. 2008). In central Alaska, appears to prefer deciduous forests (Spindler and Kessel 1980; Cotter and Andres 2000a), but also occurs in mixedwood and coniferous forests (Spindler and Kessel 1980). Fewer information is available for habitat preferences in western Alaska, but seems to be associated with tall shrubs and deciduous forests (Ruthrauff et al. 2007; Amundson et al. 2018).	
Biological Total:	-39

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

<i>Management Plans and Regulations in Alaska (-10 to 10)</i>	2
Protected under the Migratory Bird Treaty Act (MBTA 1918).	
<i>Knowledge of Distribution and Habitat in Alaska (-10 to 10)</i>	-10
Often one of the most common species detected in forested habitats (e.g. Spindler and Kessel 1980; Cotter and Andres 2000a; Johnson et al. 2008b). As such, its distribution and habitat associations have been captured during multi-species bird surveys throughout most of its Alaskan range (see references in Habitat Specialization section). Additional research is needed to understand migration patterns.	
<i>Knowledge of Population Trends in Alaska (-10 to 10)</i>	-2
Monitored by the Breeding Bird Survey and the Alaska Landbird Monitoring Survey in northwestern interior and southeast Alaska. Data are adequate for assessing population trends (Handel and Sauer 2017) and surveys capture a large portion of this species' range.	
<i>Knowledge of Factors Limiting Populations in Alaska (-10 to 10)</i>	10

Little is known about the factors that regulate this species in Alaska. Limited knowledge of nest survival rates (Willson and Gende 2000; Sperry et al. 2008), adult survival rates, and productivity (Corcoran et al. 2014). Some authors have proposed that nest predation may be important, but this assertion remains speculative (Matsuoka et al. 2001; Sperry et al. 2008). On Kodiak Island from 2010 to 2014, hermit thrushes had the highest levels of productivity compared to other North American sites and to previous monitoring efforts (Corcoran et al. 2014). The reasons for this extremely high productivity are unknown. In general, this species seems resilient to habitat disturbances, provided that these disturbances create or maintain an understory cover (Dellasala et al. 1996; Lance and Howell 2000; Matsuoka et al. 2001).

Action Total: 0

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:	Breeding
Taxonomic Significance:	Monotypic species
% Global Range in Alaska:	>10%
% Global Population in Alaska:	<25%
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>
- Amundson, C. L., C. M. Handel, D. R. Ruthrauff, T. L. Tibbitts, and R. E. Gill. 2018. Montane-breeding bird distribution and abundance across national parks of southwestern Alaska. *Journal of Fish and Wildlife Management* 9(1):180–207. DOI: 10.3996/062017-JFWM-050
- Andres, B. A., M. J. Stotts, and J. M. Stotts. 2004. Breeding birds of Research Natural Areas in southeastern Alaska. *Northwestern Naturalist* 85(3):95–103. DOI: 10.1898/1051-1733(2005)085[0095:BBORNA]2.0.CO;2
- Corcoran, R., C. Trussell, and R. MacIntosh. 2014. Monitoring Avian Productivity and Survivorship on Kodiak Island, Alaska, 2010-2014. Refuge report 2014.7, Kodiak National Wildlife Refuge, U.S. Fish and Wildlife Service, Kodiak, AK, USA.
- Cotter, P. A., and B. A. Andres. 2000a. Breeding bird habitat associations on the Alaska breeding bird survey. Information and Technology Report USGS/BRD/ITR- 2000-0010, Biological Resource Division, U.S. Geological Survey, Springfield, VA, USA.
- Dellasala, D. A., J. C. Hagar, K. A. Engel, W. C. McComb, R. L. Fairbanks, and E. G. Campbell. 1996. Effects of silvicultural modifications of temperate rainforest on breeding and wintering bird communities, Prince of Wales Island, Southeast Alaska. *The Condor* 98(4):706–721. DOI: 10.2307/1369853
- Dellinger, R., P. B. Wood, P. W. Jones, and T. M. Donovan. 2012. Hermit Thrush (*Catharus guttatus*), version 2.0. In Rodewald, P. G., ed. *The Birds of North America*. Cornell Lab of Ornithology, Ithaca, NY, USA. DOI:10.2173/bna.261
- DeSante, D. F. 1990. The role of recruitment in the dynamics of a Sierran subalpine bird community. *The American Naturalist* 136(4):429-445.
- Gibson, D. D., and S. O. MacDonald. 1975. Bird species and habitat inventory, mainland Southeast Alaska, summer 1974. Contract Report 01-248 prepared for the U.S. Forest Service. University of Alaska Museum, Fairbanks, AK, USA.
- Handel, C. M. and Sauer, J. R. 2017. Combined analysis of roadside and off-road breeding bird survey data to assess population change in Alaska. *The Condor* 119(3):557-575. DOI: 10.1650/CONDOR-17-67.1
- Johnson, J. A., B. A. Andres, and J. A. Bissonette. 2008b. Birds of the major mainland rivers of Southeast Alaska. General

- Technical Report PNW-GTR-739. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, Portland, OR, USA.
- Kessler, W. B. 1979. Bird population responses to clearcutting in the Tongass National Forest of Southeast Alaska. Alaska Region report No. 71. U.S. Department of Agriculture Forest Service, Tongass National Forest, Ketchikan, AK, USA.
- Kessler, W. B., and T. E. Kogut. 1985. Habitat orientations of forest birds in southeastern Alaska. *Northwest Science* 59(1):58-65.
- Lance, E. W., and S. Howell. 2000. Survey of songbirds during a spruce beetle (*Dendroctonus rufipennis*) outbreak on the Kenai Peninsula, Alaska. *Northwestern Naturalist* 81(1):1-10. DOI: 10.2307/3536893.
- Mack, D. E., and W. Yong. 2000. Swainson's Thrush (*Catharus ustulatus*), version 2.0. In Rodewald, P. G. ed. *The Birds of North America*. Cornell Lab of Ornithology, Ithaca, NY, USA. DOI:10.2173/bna.540
- Matsuoka, S. M., C. M. Handel, and D. R. Ruthrauff. 2001. Densities of breeding birds and changes in vegetation in an Alaskan boreal forest following a massive disturbance by spruce beetles. *Canadian Journal of Zoology* 79(9):1678–1690. DOI: 10.1139/cjz-79-9-1678
- Migratory Bird Treaty Act (MBTA). 1918. U.S. Code Title 16 §§ 703-712 Migratory Bird Treaty Act.
- Mizel, J. D., J. H. Schmidt, C. L. McIntyre, and C. A. Roland. 2016. Rapidly shifting elevational distributions of passerine species parallel vegetation change in the subarctic. *Ecosphere* 7(3):e01264. DOI: 10.1002/ecs2.1264
- Partners in Flight (PIF). 2019. Population Estimates Database, version 3.0. Available online: <http://pif.birdconservancy.org/PopEstimates>. Accessed 09-April-2019.
- Quinlan, S. E. 1978. Bird communities and white spruce succession on the Kenai Peninsula, Alaska. Unpublished report. U.S. Department of Agriculture Forest Service, Chugach National Forest, Seward, AK, USA.
- Ruthrauff, D. R., T. L. Tibbitts, R. E. Gill, and C. M. Handel. 2007. Inventory of montane-nesting birds in Katmai and Lake Clark National Parks and Preserves. Report NPS/AKRSWAN/NRTR-2007/02, U.S. Geological Survey Alaska Science Center, Anchorage, AK, USA.
- Sperry, D. M., M. Kissling, and T. L. George. 2008. Avian nest survival in coastal forested buffer strips on Prince of Wales Island, Alaska. *The Condor* 110(4):740-746. DOI: 10.1525/cond.2008.8601
- Spindler, M. A., and B. Kessel. 1980. Avian populations and habitat use in interior Alaska taiga. Final report, University of Alaska Museum, Fairbanks, AK, USA.
- Willson, M. F., and S. M. Gende. 2000. Nesting success of forest birds in Southeast Alaska and adjacent Canada. *The Condor* 102:314–325.