

**Silver-haired bat**  
*Lasionycteris noctivagans*

Class: Mammalia  
Order: Chiroptera

**Conservation Status**

<i>Heritage</i>	<i>Agency</i>		
G Rank: G5	USFWS/NOAA:	BLM:	AA:
S Rank: S2	SOA: Species of Greatest Conservation Need	USFS:	IUCN: Least Concern

<b>Final Rank</b>		
Conservation category: <b>I. Red</b>		
I = high status, biological vulnerability, and action need		
<u>Category</u>	<u>Range</u>	<u>Score</u>
Status:	-20 to 20	6
Biological:	-50 to 50	-2
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).

	<b>Score</b>
<i>Population Trend (-10 to 10)</i>	0
No data (Boland, OSU, personal communication).	
<i>Distribution Trend (-10 to 10)</i>	6
Deforestation in Southeast has most likely reduced forested habitats in Alaska. Activity in second-growth forests rare.	
<b>Status Total:</b>	<b>6</b>

**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).

	<b>Score</b>
<i>Population Size (-10 to 10)</i>	10
Unknown, but suspected rare.	
<i>Range Size (-10 to 10)</i>	-2
Although only 4 known occurrences for this species in AK, it is considered widely distributed throughout SE from the Taku River near Juneau in the north to Revillagigedo Island in the south. Specimens have been collected as far north as Wrangell. Echolocations have been recorded from Juneau to Prince of Wales Island (Boland, OSU, personal communication).	
<i>Population Concentration (-10 to 10)</i>	2
Does not concentrate. Only 4 known occurrences in the state. Densities probably low. Species roosts alone or in small groups of two to six. Even when roosting in groups, individuals are rarely found in close contact. Only two maternity colonies have been documented in Canada - both of those were small with 3-8 females.	
<i>Reproductive Potential</i>	
<u>Age of First Reproduction (-5 to 5)</u>	-5
Sexually mature in first summer. Breeds in late September. Fertilization is delayed until spring. Gestation lasts 50-60 days.	
<u>Number of Young (-5 to 5)</u>	3
Litter of 1-2 young, with twins more common, is born in June-July, sometimes later in north.	

*Ecological Specialization*

Dietary (-5 to 5) -5

Invertivore. Often considered a moth specialist, but their diet is extremely flexible and is able to exploit whatever insect prey is available.

Habitat (-5 to 5) -5

Prefers forested (frequently coniferous) areas adjacent to lakes, ponds, and streams, but often occurs in areas distant from water as well. During migration sometimes occurs in xeric areas. Summer roosts and nursery sites are in tree foliage, cavities, or under loose bark, sometimes in buildings.

Biological Total: -2

**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).

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*Management Needs (-10 to 10)* 10

*Monitoring Needs (-10 to 10)* 10

Not monitored.

*Research Needs (-10 to 10)* 2

Habitat loss and fragmentation as a result of clearcutting and other causes of deforestation constitute one of the greatest concerns to these "tree bats" (Parker 1996, Parker et al. 1996).

Little is known about this species' biology and ecology. Research is needed on various life history parameters such as foraging strategies, prey availability, and reproduction. Roost site selection, habitat preferences, and hibernation ecology require study. Further research is needed to determine if females migrate to Southeast Alaska in winter, as specimen records suggest, or whether both sexes occur there throughout the year, as in southwestern B.C. (Parker 1996, Parker et al. 1996). Although, there is little data on habitat associations in Alaska, research elsewhere suggests that this species is closely associated with roosts in forests with large diameter trees and snags (Boland, OSU, personal communication, Nagorsen and Brigham 2003). Timber harvest in Southeast Alaska is a specific concern. Forty-two percent of the most productive forests in Southeast Alaska were clearcut harvested by 1990 (U.S. Department of Agriculture 1991, 1993 in Parker 1996) and extensive logging has continued since then (Parker 1996, Parker et al. 1996). Clearcutting eliminates potential roosting and foraging habitat of these tree bats (Parker et al. 1996).

*Survey Needs (-10 to 10)* 2

Only 4 documented occurrences for this species. Targeted surveys in preferred habitats have yielded few results.

Action Total: 24

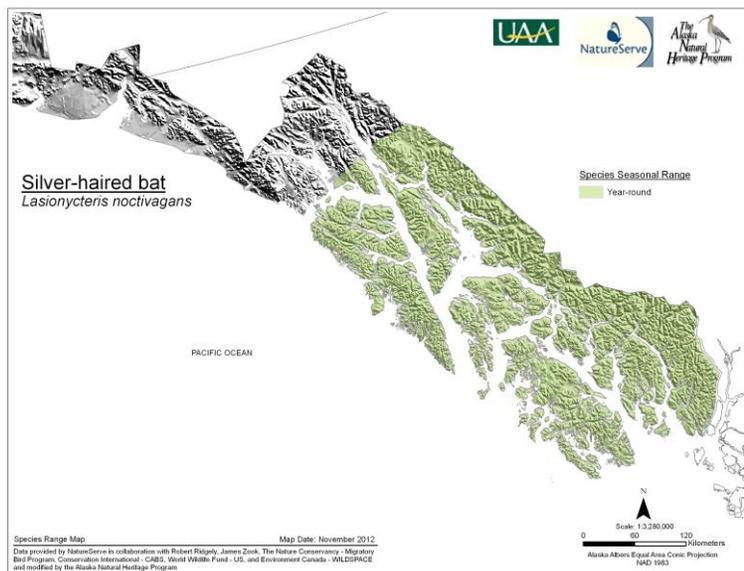
**Supplemental Information** - variables do not receive numerical scores. Instead, they that are used to sort taxa to answer specific biological or managerial questions.

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**Harvest:** None or Prohibited  
**Seasonal Occurrence:** Year-round  
**Taxonomic Significance:** Monotypic species  
**% Global Range in Alaska:** <10%  
**% Global Population in Alaska:** <25%  
**Peripheral:** Yes

**Range Map**

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## References

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- Parsons, H. J., D. A. Smith, and R. F. Whittam. 1986. Maternity colonies of silver-haired bats, *Lasionycteris noctivagans*, in Ontario and Saskatchewan. *J. Mamm.* 67: 598- 600.

Version date: 1/2/2013

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For details on the development of the ASRS and criteria, please see: Gotthardt, T. A., K. M. Walton, and T. L. Fields. 2012. Setting Conservation Priorities for Alaska's Wildlife Action Plan. Alaska Natural Heritage Program, University of Alaska Anchorage, AK.