

California myotis

Myotis californicus

Class: Mammalia

Order: Chiroptera

Conservation Status

Heritage

Agency

G Rank: G3G4

USFWS/NOAA:

BLM:

AA:

S Rank: S2

SOA: Species of Greatest Conservation Need

USFS:

IUCN: Least Concern

Final Rank		
Conservation category: I. Red		
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	7.4
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 (-10 to 10)</i>	0
No data (Boland, OSU, personal communication).	
<i>Distribution Trend (-10 to 10)</i>	6
Deforestation in Southeast AK has most likely resulted in some habitat loss. Activity in second-growth forests rare.	
Status Total:	6

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 (-10 to 10)</i>	6
Unknown but suspected rare. Only twelve known occurrences based on 23 records in the state.	
<i>Range Size (-10 to 10)</i>	4
Occurs in SE AK ; most observations from Prince of Wales Island (southernmost observation at Beaver Creek). Recently captured at Windfall Lakes Pond (Boland 2005) in northern SE AK. According to Boland et al. (2007), the range size is between 1000 and 10000 km ² .	
<i>Population Concentration (-10 to 10)</i>	2
Maternity colonies; day roosts, night roosts, and hibernaculums. 12 known unique occurrences in the state.	
<i>Reproductive Potential</i>	
<u>Age of First Reproduction (-5 to 5)</u>	-3.6
In more southern parts of their range, they may first reproduce at 1 year, but in colder climates reproduction at 2 years is more likely.	
<u>Number of Young (-5 to 5)</u>	3
One young per year.	

Ecological Specialization

Dietary (-5 to 5) -5

Insectivore; mainly lepidopteran and dipteran prey.

Habitat (-5 to 5) 1

Often uses man-made structures for night roosts. Uses crevices of various kinds, including those in buildings, for summer day roosts. May also roost on the ground (Simpson 1993). Hibernates in caves, mines, tunnels, or buildings. May form small maternity colonies in rock crevices, under bark, or under eaves of buildings. The extensive karst formations in Southeast Alaska also provide numerous caves where hibernating bats have been observed and collected.

Biological Total: 7.4

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).

Management Needs (-10 to 10) 10

Monitoring Needs (-10 to 10) 10

Species is not currently monitored but there have been recent efforts in 2005 and 2006 to document the distribution of this species.

Research Needs (-10 to 10) 10

Little is known of species biology and ecology in southeastern Alaska. Research is needed to assess reproductive success, foraging strategies, prey availability, habitat preferences, migration, and hibernation ecology. Measure and quantify bat use in forest types to identify important habitats (e.g. roosting, breeding, foraging). Anthropogenic affects need study.

Survey Needs (-10 to 10) 2

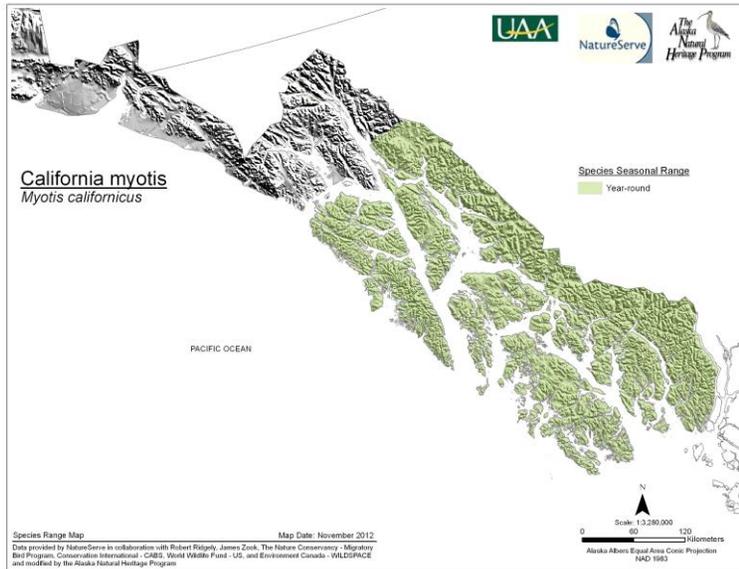
Only 23 documented observations for this species. Targeted surveys in preferred habitats have yielded few results.

Action Total: 32

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

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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Report authors: K. Walton, T. Gotthardt, and T. Fields

Alaska Natural Heritage Program
University of Alaska Anchorage
Anchorage, AK 99501

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.