

# Meadow jumping mouse

Class: Mammalia  
Order: Rodentia

*Zapus hudsonius*

**Review Status:** Reviewed (general)

**Version Date:** 04 February 2020

## Conservation Status

NatureServe:

Agency:

G Rank: G5

ADF&G: Species of Greatest Conservation Need

IUCN: Least Concern

Audubon AK:

S Rank: S5

USFWS:

BLM:

Final Rank		
Conservation category: <b>V. Orange</b>		
unknown status and either high biological vulnerability or high action need		
<u>Category</u>	<u>Range</u>	<u>Score</u>
Status	-20 to 20	0
Biological	-50 to 50	-26
Action	-40 to 40	32
<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**

*Population Trend in Alaska (-10 to 10)*

0

Unknown.

*Distribution Trend in Alaska (-10 to 10)*

0

Trends over the last 50 years are unknown. Modeling by Baltensperger and Huettmann (2015a) predicts that the distribution of meadow jumping mice in Alaska will increase as the climate warms.

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**

*Population Size in Alaska (-10 to 10)*

0

Unknown.

*Range Size in Alaska (-10 to 10)*

-8

Occurs year-round in western and central Alaska from the Alaska Peninsula and the Alaska Range north to the Yukon River (MacDonald and Cook 2009; ARCTOS 2016). Specimens have also been collected in southeast Alaska (ARCTOS 2016). Its distribution in southcoastal and eastern interior Alaska is unclear (MacDonald and Cook 2009). Based on this description, estimated range size is ~270,000 sq. km.

<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>	-5
No data for Alaska. Elsewhere in the United States, breeds in their first year (Quimby 1951).	
<u>Number of Young (-5 to 5)</u>	1
Females can produce 1 to 2 litters per year (Quimby 1951; Whitaker 1963; Whitney 1973). Whitney (1973) recorded a litter size of six in Alaska (Whitney 1973). Elsewhere in the United States, litter sizes ranges from 2 to 8 throughout the rest of the United States (Quimby 1951; Whitaker 1963; Whitney 1973).	
<i>Ecological Specialization in Alaska</i>	
<u>Dietary (-5 to 5)</u>	-5
Unknown in Alaska. Elsewhere in the United States range consumes insects, grass seeds, and various fruits (Quimby 1951; Whitaker 1963).	
<u>Habitat (-5 to 5)</u>	1
Occurs mainly in thick vegetation near bodies of water such as marshes, ponds, and streams. Also found in herbaceous meadows and shrubby habitats. In the winter they hibernate in well-drained soils (MacDonald and Cook 2009).	
<b>Biological Total:</b>	-26

**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>	10
Considered unclassified game in Alaska with no closed season or bag limits (ADFG 2018c).	
<i>Knowledge of Distribution and Habitat in Alaska (-10 to 10)</i>	2
Range and habitat associations are somewhat known (MacDonald and Cook 2009; ARCTOS 2016). Occasionally captured in small mammal surveys (Nolan and Peirce 1996; Savage 2003; Cook and MacDonald 2005). Additional surveys are required to document their distribution in southcoastal and eastern interior Alaska (Cook and MacDonald 2003; ARCTOS 2016).	
<i>Knowledge of Population Trends in Alaska (-10 to 10)</i>	10
Not currently monitored.	
<i>Knowledge of Factors Limiting Populations in Alaska (-10 to 10)</i>	10
Little is known about the population ecology of this species. Interspecific competition with other small mammals may affect the abundance of <i>Z. hudsonius</i> (Boonstra and Hoyle 1986), but this idea requires further research. To our knowledge, the contribution of other potentially limiting factors (e.g. predation, food and habitat availability, weather) has not been studied.	
<b>Action Total:</b>	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

<b>Seasonal Occurrence:</b>	Year-round
<b>Taxonomic Significance:</b>	Monotypic species
<b>% Global Range in Alaska:</b>	<10%
<b>% Global Population in Alaska:</b>	<25%
<b>Peripheral:</b>	No

## References

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