

Bushy-tailed woodrat

Neotoma cinerea

Class: Mammalia
Order: Rodentia

Review Status: Reviewed (general)

Version Date: 21 September 2020

Conservation Status

NatureServe: *Agency:*
 G Rank: G5 ADF&G: IUCN: Least Concern Audubon AK:
 S Rank: S4 USFWS: BLM:

Final Rank		
Conservation category: V. Orange		
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	-19
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 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> Unknown.	0
<i>Range Size in Alaska (-10 to 10)</i> Occurs year-round on the mainland of southeast Alaska (MacDonald and Cook 2009). Estimated range size is ~30,000 sq. km, based on range map from ACCS (2017a).	-2
<i>Population Concentration in Alaska (-10 to 10)</i> Does not concentrate.	-10

Reproductive Potential in Alaska

Age of First Reproduction (-5 to 5) -5

No data for Alaska. Elsewhere in North American, females can breed as yearlings (Hickling 1987; Moses and Millar 1994; Smith 1997).

Number of Young (-5 to 5) 2

Unknown for Alaska. Elsewhere in its North American range, females produce one to two litters per year (Smith 1997). Litter sizes can range from 1 to 5 with a mean of 1 to 3 young (Hickling 1987; Moses and Millar 1994; Smith 1997). Because this range spans two categories, we rank this question as $0.5 * B + 0.5 * C$.

Ecological Specialization in Alaska

Dietary (-5 to 5) -5

Appears to have a flexible diet (Smith 1997). Consumes leaves, fruit, seeds, and bark in proportion to their availability (Smith 1997; Morton and Pereyra 2008).

Habitat (-5 to 5) 1

Occurs in rocky habitats including boulder outcrops, caves, and crevices on cliffs and talus slopes. Sometimes found in abandoned buildings and mine shafts (Smith 1997; Morton and Pereyra 2008; MacDonald and Cook 2009).

Biological Total: -19

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) 10

Considered unclassified game in Alaska with no closed season or bag limits (ADFG 2018c).

Knowledge of Distribution and Habitat in Alaska (-10 to 10) 10

Distribution and habitat associations are poorly known. Only a handful of records exist for this species in the state (Shaw 1962; MacDonald and Cook 2009).

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

Not currently monitored.

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

Experimental studies in southern Alberta, Canada have revealed the importance of sexual competition and food limitation (Hickling 1987; Moses 1992). In this study system, sexual competition between non-kin females negatively impacted number of offspring, post-weaning growth rate, and annual survival of offspring and mothers (Moses 1992). Meanwhile, food addition experiments led to more litters per season, greater litter size at weaning, higher growth rates, and higher overwintering body weight (Hickling 1987). It is unknown whether these findings can be extrapolated to populations in Alaska. Other potentially limiting factors include: availability of rock crevices for denning sites, extreme heat, ectoparasites, and disease (Smith 1997).

Action Total: 32

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

Harvest:

Not substantial

Seasonal Occurrence:	Year-round
Taxonomic Significance:	Monotypic species
% Global Range in Alaska:	<10%
% Global Population in Alaska:	<25%
Peripheral:	Yes

References

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