

Rufous Hummingbird

Selasphorus rufus

Class: Aves
Order: Apodiformes

Conservation Status

NatureServe: Agency:

G Rank: G5 BLM: Watch IUCN: Least Concern Audubon AK: Red

S Rank: S4B USFWS: Bird of Conservation Concern ADF&G: Species of Greatest Conservation Need

Final Rank		
Conservation category: II. Red		
II = high status and either high biological vulnerability or high action need		
<u>Category</u>	<u>Range</u>	<u>Score</u>
Status:	-20 to 20	10
Biological:	-50 to 50	-24
Action:	-40 to 40	16
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>	10
Declining throughout their range in Canada and the U.S. (Sauer et al. 2013; Warnock 2017a). In Alaska, data from the Breeding Bird Survey (BBS) found a non-significant trend for both short-term (2003-2015) and long-term (1993-2015) analyses (Handel and Sauer 2017). However, sample sizes are small and the BBS may not be appropriate for monitoring this species because of its affinity for artificial feeders (Cotter and Andres 2000a). Short-term data from off-road surveys suggest a declining trend in Alaska (Handel and Sauer 2017).	
<i>Distribution Trend (-10 to 10)</i>	0
Unknown.	
Status Total:	10

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>	-10
Unknown, but >25,000. PIF (2019) estimates an Alaskan population size of 4.5 million birds (95% CI: 1.5 to 11 million).	
<i>Range Size (-10 to 10)</i>	-8
Breeds in southcentral and southeast Alaska from Cook Inlet through Prince William Sound and south to British Columbia (Healy and Calder 2006; MacIntosh 2009; ACCS 2017a). Accidental in western Alaska (Petersen et al. 1991; see Yukon Delta National Wildlife Refuge bird list: https://www.fws.gov/uploadedFiles/birdlist(10).pdf). Individuals in Alaska overwinter at least as far south as Texas and Florida (McLaughlin 2013) and perhaps to Mexico (Healy and Calder 2006). Estimated range size in Alaska is ~103,000 sq. km, based on range map from ACCS (2017a) and not accounting for accidental observations.	
<i>Population Concentration (-10 to 10)</i>	-6
During spring migration, high concentrations have been observed along the shores of the Stikine River in spots where blueberry and fireweed are blooming (G. Baluss, USFS, pers. comm.). In late summer, groups of hundreds	

have been observed at feeders near the delta (G. Baluss, USFS, pers. comm.). These concentration sites have not been formally quantified, but number of sites when hummingbirds are aggregating is likely less than 250 (G. Baluss, USFS, pers. comm.).

Reproductive Potential

Age of First Reproduction (-5 to 5)

-5

Unknown, but assumed to breed in their first year (Healy and Calder 2006).

Number of Young (-5 to 5)

3

Females typically lay a single, two-egg clutch (Calder 1976; Andres 1999b; Healy and Calder 2006).

Ecological Specialization

Dietary (-5 to 5)

1

Feeds on nectar from a variety of flowers including blueberries, fireweed, salmonberry, and false azaleas (Calder 1976; Healy and Calder 2006; Johnson et al. 2008b; Baluss and Carrothers 2014). When nectar is available, feeds on insects and sap from woodpecker wells (Healy and Calder 2006; Sutherland et al. 1982; Miller and Nero 1983).

Habitat (-5 to 5)

1

Occur in coniferous and mixedwood forests, along forest edges, and in shrublands (Isleib and Kessel 1973; Kessler and Kogut 1985; Andres et al. 2004; Van Hemert et al. 2006; Johnson et al. 2008b). They tend to avoid closed-canopy forests where there are few shrubs and forbs available for foraging (G. Baluss, USFS, pers. comm.) and seem to prefer areas very close to the coast (Van Hemert et al. 2006; G. Baluss, pers. comm.). In southeast Alaska, they are rarely seen at elevations over 250 meters (G. Baluss, pers. comm.); similar patterns have been observed in nearby British Columbia (Moran and Fraser 2015). Nests are constructed on shrubs and low-lying tree branches (Bailey 1927; Healy and Calder 2006). Although our understanding remains incomplete, rufous hummingbirds do appear to have relatively specialized habitat requirements and we therefore rank this question as B- Moderately adaptable.

Biological Total:

 -24

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 (-10 to 10)

2

Protected under the Migratory Bird Treaty Act (MBTA 1918).

Knowledge of Distribution and Habitat (-10 to 10)

2

Habitat associations and distribution are generally well-understood in southeast Alaska through multi-species bird surveys (e.g. Calder 1976; Kessler and Kogut 1985; Andres et al. 2004; Johnson et al. 2008b; Baluss and Carrothers 2014). However, distribution is not as well-studied in southcoastal and southcentral Alaska (but see Isleib and Kessel 1973; Calder 1976; Van Hemert et al. 2006). Surveys in 2006 were the first to document evidence of breeding in Kenai Fjords National Park; these surveys also suggest that habitat requirements may be more specialized in this part of its range (Van Hemert et al. 2006).

Knowledge of Population Trends (-10 to 10)

2

Monitored in southeast Alaska through the Breeding Bird Survey (BBS) and the Alaska Landbird Monitoring Survey (ALMS) (Handel and Sauer 2017), and at sites near Juneau through a mark-recapture program (Baluss and Carrothers 2014). Monitoring routes in southcoastal and southcentral Alaska are scarce and roadside surveys are likely not representative of the population (Cotter and Andres 2000a; Handel and Sauer 2017).

Knowledge of Factors Limiting Populations (-10 to 10)

10

Although this species is declining across its range (Sauer et al. 2013; Warnock 2017a), the reasons for this decline are unknown and little research has been conducted in Alaska. Competition for food resources (Calder 1976) and climate change (Courter 2017; Baluss 2017) have been proposed, but have not been formally investigated. In southeast Alaska, Baluss (2017) noted annual changes in capture rates and wondered whether

these changes might be linked to variations in temperatures or plant phenology. However, additional years of data are required to test this idea (Baluss 2017). In BC, OR, and WA, changes in the hummingbird's arrival on breeding grounds has been linked to warmer spring temperatures (Courter 2017).

Action Total: 16

Supplemental Information - variables do not receive numerical scores. Instead, they that 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

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