

American Redstart*Setophaga ruticilla*

Class: Aves

Order: Passeriformes

Review Status: Peer-reviewed**Version Date:** 30 November 2018**Conservation Status***NatureServe:**Agency:*

G Rank: G5

ADF&G: Species of Greatest Conservation Need

IUCN: Least Concern

Audubon AK:

S Rank: S3B

USFWS:

BLM:

Final RankConservation category: **IV. Orange**

unknown status and high biological vulnerability and action need

<u>Category</u>	<u>Range</u>	<u>Score</u>
Status	-20 to 20	0
Biological	-50 to 50	-14
Action	-40 to 40	8

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

0

Unknown.

Distribution Trend in Alaska (-10 to 10)

0

Unknown.

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)*

6

Unknown. Given small range size and specific habitat requirements, the population in Alaska is suspected small.

Range Size in Alaska (-10 to 10)

-2

Breeds along river systems on the mainland of southeast Alaska (Webster 1950; Johnson et al. 2008b; Gibson and Withrow 2015; Sherry et al. 2016) and occasionally observed on nearby islands (e.g. Mitkof Island; Walsh 1993). Estimated range size is ~25,000 sq. km, calculated in GIS and based on range map from ACCS (2017a).

Population Concentration in Alaska (-10 to 10)

-10

Does not concentrate.

*Reproductive Potential in Alaska*Age of First Reproduction (-5 to 5)

-5

Females breed in their first year (Ficken and Ficken 1967; Sherry et al. 2016).

Number of Young (-5 to 5)

1

Unknown for Alaska. Elsewhere in North America, average clutch size is 4 eggs annually (Sherry et al. 2016).

*Ecological Specialization in Alaska*Dietary (-5 to 5)

-5

Unknown for Alaska. Elsewhere in North America, this species consumes a wide variety of flying and tree-dwelling invertebrates including leafhoppers, flies, beetles, wasps, and caterpillars (Sherry et al. 2016 and references therein). Occasionally consumes berries and other fruits (Sherry et al. 2016).

Habitat (-5 to 5)

1

Largely restricted to mainland southeast Alaska. Found in shrubland and deciduous forests near major rivers (Cotter and Andres 2000a; Johnson et al. 2008b) or recently deglaciated areas (G. Baluss, USFWS, pers. comm.). Often associated with willow and cottonwood, rather than blueberry- or alder-dominated sites (G. Baluss, pers. comm.). Nests are constructed on trunks of shrubs and deciduous trees (Willson and Gende 2000; Johnson et al. 2008b; Sherry et al. 2016).

Biological Total: -14

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)*

2

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

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

2

Little information available for this species in Alaska, which marks the northern limit of its breeding range. Distribution captured during multi-species surveys (e.g. Johnson et al. 2008b; BPIF 2018; Surdyk and Evans 2018), though redstarts are rarely encountered on Breeding Bird Survey routes. Habitat associations described by Johnson et al. (2008b).

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

2

Captured on some BBS and ALMS survey routes but data are inadequate for estimating population trend (BPIF 2018).

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

2

Very little is known about the ecology of this species in Alaska, but a significant amount of research has been conducted elsewhere in its range. Nest predation and habitat quality are major drivers of population dynamics. In New Hampshire, the abundance of nest predators (i.e. squirrels and chipmunks) was the main factor influencing nest success (Sherry et al. 2015). In turn, nest success accounted for 1/3 of the annual variability in population size (Sherry et al. 2015). Additionally, intraspecific competition limits access to high-quality habitat on both wintering (Sherry and Holmes 1996; Marra et al. 1998; Norris et al. 2004) and breeding (Hunt 1996; Smith and Moore 2005) grounds, and habitat quality affects both individual fitness (Hunt 1996; Marra et al. 1998; Norris et al. 2004; Smith and Moore 2005) and population densities (Sherry and Holmes 1996; Holmes and Sherry 2001). Lastly, population densities may be affected by large-scale processes: populations at

four different sites in New Hampshire responded similarly to annual variation in the abundance of insect larvae, which is itself influenced by global climate processes (Jones et al. 2003). Although much is known about the American Redstart in New England and on its wintering grounds, the factors that influence population dynamics in Alaska, at the extreme northern limit of its breeding range, may be considerably different. We therefore rank this question as "B" to indicate a lack of local knowledge on the ecology of this species.

Action Total: 8

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
Seasonal Occurrence:	Breeding
Taxonomic Significance:	Monotypic genus
% Global Range in Alaska:	<10%
% Global Population in Alaska:	<25%
Peripheral:	No

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