American Kestrel

Falco sparverius

Class: Aves
Order: Falconiformes

Review Status: Peer-reviewed **Version Date:** 15 December 2017

Conservation Status

NatureServe:	*Agency:*		
G Rank: G5	ADF&G: Species of Greatest Conservation Need	IUCN: Least Concern	Audubon AK: Watch
S Rank: S4B	USFWS:	BLM:	

Final Rank

Conservation category: **II. Red**

high status and either high biological vulnerability or high action need

Category	Range	Score
Status	-20 to 20	6
Biological	-50 to 50	-28
Action	-40 to 40	24

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) 6

Long-term data (1993-2015) from the Breeding Bird Survey indicate a non-significant, but declining trend for interior Alaska (Handel and Sauer 2017). However, data are very limited. Evidence from elsewhere in its North American range indicate long-term declines (Smallwood et al. 2009; Sauer et al. 2017; Ely et al. 2018b).

Distribution Trend in Alaska (-10 to 10) 0

Unknown.

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**

Population Size in Alaska (-10 to 10) 0

PIF (2019) estimates a mean of 17,000 individuals, with very high uncertainty (95% CI: 2,600-43,000). Because these estimates span 3+ ranking categories, we rank this question as Unknown.

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

Summer resident only. Breeds throughout much of central Alaska, from the Alaska Range north to the Brooks range (Smallwood and Bird 2002). Estimated breeding range is ~407,000 sq. km, calculated in GIS and based on range map from ACCS (2017a).

Population Concentration in Alaska (-10 to 10) -10

Does not aggregate (Smallwood and Bird 2002).

Reproductive Potential in Alaska

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

Females breed within their first year (Smallwood and Bird 2002; Steenhof and Heath 2009).

Number of Young (-5 to 5) 1

Mean clutch size is between 4 to 5 eggs (Smallwood and Bird 2002). Northern populations likely lay only one clutch per year (Smallwood and Bird 2002).

Ecological Specialization in Alaska

Dietary (-5 to 5) -5

Feeds on a variety of prey items including aerial and terrestrial invertebrates, songbirds, and small mammals (Sherrod 1978; Collopy and Koplin 1989; Smallwood and Bird 2002; Johnson et al. 2008b). Diet appears flexible and likely reflects prey availability (Sherrod 1978; Smallwood and Bird 2002).

Habitat (-5 to 5) 1

Inhabits a variety of open and semi-open habitats, including grasslands, marshes, agricultural fields, urban areas, and early successional forests (Smallwood and Bird 2002; Hutto and Gallo 2006; Johnson et al. 2008b). Obligate cavity nester. Nests in natural cavities, abandoned woodpecker cavities, buildings, and nest boxes (Smallwood and Bird 2002; Hutto and Gallo 2006).

Biological Total: -28

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). Individuals may be taken from the wild for falconry purposes (ADFG 2018a).

Knowledge of Distribution and Habitat in Alaska (-10 to 10) 2

Distribution and broad habitat associations are known from multi-species surveys conducted throughout its range (Aumiller 1986; McIntyre and Ambrose 1999; Johnson et al. 2008b; Heinl and Piston 2009; MacIntosh 2009; Handel and Sauer 2017; Phillips et al. 2017). Habitat suitability models have been built (Marcot et al. 2015 Supplement). Additional research is required to determine specific habitat requirements, including nest site selection, and migratory and overwintering range.

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

This species is detected on Breeding Bird Survey routes (Handel and Sauer 2017); however, surveys only encompass a small part of its range and sample sizes are insufficient for determining short-term (10-year) trends or trends beyond major changes to the population. Given these important limitations, we rank this question as A- Not currently monitored.

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

Little information about factors influencing populations in Alaska or elsewhere in its range. Possible limiting factors include availability of nest or perching sites, prey availability (Dawson and Bortolotti 2000; Ely et al. 2018; Wiebe and Bortolotti 1995), human disturbance on breeding grounds (Strasser and Heath 2013; Touihri et al. 2019), environmental contaminants (Guigueno and

Fernie 2017; Whitney and Cristol 2017), and factors on migratory routes or overwintering grounds (e.g. habitat loss, mortality) (Smallwood and Bird 2002; Smallwood et al. 2009). Reasons for ongoing and widespread population declines remain speculative (Smallwood and Bird 2002; Smallwood et al. 2009; Ely et al. 2018b).

Action Total: 24

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 species
% Global Range in Alaska:	<10%
% Global Population in Alaska:	<25%
Peripheral:	No

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