Common Raven

Corvus corax

Class: Aves
Order: Passeriformes

Review Status: Peer-reviewed **Version Date:** 06 February 2019

Conservation Status

NatureServe:	*Agency:*		
G Rank: G5	ADF&G:	IUCN: Least Concern	Audubon AK:
S Rank: S5	USFWS:	BLM:	

Final Rank

Conservation category: **IX. Blue**

low status and low biological vulnerability and action need

Category	Range	Score
Status	-20 to 20	-11
Biological	-50 to 50	-36
Action	-40 to 40	-4

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

Both short-term and long-term trends indicate populations are stable in interior Alaska and increasing in southeast Alaska (Handel and Sauer 2017). Appears to have increased on the Arctic Coastal Plain in recent years (2003-2012; Stehn et al. 2013).

Distribution Trend in Alaska (-10 to 10) -5

Industrial activity on the North Slope led to the erection of tall structures in the 1970s, which created suitable nesting habitat and an increase in the northern distribution of the Common Raven (Powell and Backensto 2009). Trends elsewhere in the state are unknown, but likely stable or increasing in response to human activity.

Status Total: -11

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) -10

Uncertain, but >25,000. Partners in Flight estimates an Alaskan population size of 430,000 (95% CI: 320,000-570,000; PIF 2019).

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

>400,000 sq. km. Found across most of Alaska from the North Slope south to southeast Alaska, east

to the Canadian border and west to the Aleutian Islands (ACCS 2017a).

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

Does not concentrate.

Reproductive Potential in Alaska

Age of First Reproduction (-5 to 5) -3

Unknown, but likely between 2-4 years (Jollie 1976, qtd. in Boarman and Heinrich 1999).

Number of Young (-5 to 5) 1

Clutch size in Alaska averages 4 to 6 eggs and ranges from 0 to 7 eggs (Kessel 1989; Gibson and Byrd 2007; Backensto 2010). Common ravens typically lay a single clutch per year, though replacement clutches are possible (Boarman and Heinrich 1999; Backensto 2010).

Ecological Specialization in Alaska

Dietary (-5 to 5) -5

Generalist omnivore and scavenger (Kessel 1989). Common Ravens on the North Slope and in western Alaska consumed plant matter, small mammals (lemmings, voles), birds and eggs, fish, insects, and anthropogenic food items (Temple 1974; Kessel 1989; Powell and Backensto 2009). They also scavenge on carcasses left behind by predators and human hunters (Temple 1974; Kessel 1989; Lafferty et al. 2016). This varied diet is consistent with what has been documented elsewhere in the species' range (Boarman and Heinrich 1999).

Habitat (-5 to 5) 1

Found in a variety of habitats including coniferous and deciduous forests, shrubland, tundra, coastlines, cities, and mountains (Boarman and Heinrich 1999; Cotter and Andres 2000a; Ruthrauff et al. 2007). Requires tall structures for nesting. Nests in trees and cliffs, as well as on anthropogenic structures such as telephone poles, buildings, and bridges (Kessel 1989; Boarman and Heinrich 1999; Gibson and Byrd 2007; Backensto 2010). The availability of nest sites is believed to have limited the distribution of Common Ravens on the North Slope prior to industrial development (Powell and Backensto 2009).

Biological Total: -36

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) -10

Distribution is well-known in Alaska, with knowledge of habitat associations. The Common Raven is captured by multi-species surveys throughout most of its range in Alaska, often with descriptions of habitat associations (e.g. White and Cade 1975; Kessel 1989; Van Hemert et al. 2006; Gibson and Byrd 2007; Ruthrauff et al. 2007; Saracco et al. 2007; Booms et al. 2010b; Stehn et al. 2013; Handel and Sauer 2017). White and Cade (1971) and Backensto (2010) described nest site characteristics on the North Slope, while Baltensperger et al. (2013) built seasonal occupancy models to examine relationships between occurrence and human activities in Fairbanks.

Knowledge of Population Trends in Alaska (-10 to 10) 2

Captured by long-term, multi-species surveys such as Breeding Bird Survey (Handel and Sauer 2017), the Alaska Landbird Monitoring Survey (e.g. Savage and Johnson 2013), raptor surveys

(Booms et al. 2010b), and waterfowl surveys on the Arctic Coastal Plain (Stehn et al. 2013). Monitoring of raven nests was conducted on the North Slope from 2004-2011 (http://nssi-test.gina.alaska.edu/catalog/entries/1158-bpxa-long-term-monitoring-raven). However, given the raven's widespread distribution in Alaska, most of its range is not encompassed by these surveys.

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

On Alaska's North Slope, industrial development may have contributed to population increases by creating suitable nest sites (tall structures) and increasing food availability (Powell and Backensto 2009). Other researchers have noted similar increases in local abundance in response to increased food availability (e.g. landfills, roadkill) in human-occupied areas (White 2006; Baltensperger et al. 2013). The availability of human food may benefit populations by increasing juvenile (Webb et al. 2004; Kristan and Boarman 2007) or overwinter survival (Preston 2005; Peebles and Conover 2017). At the same time, these "food bonanzas" can be detrimental to a population if they are monopolized by non-breeding individuals (Heinrich 1988; Bijlsma and ten Seldam 2013 and references therein). Little is known about factors that limit raven populations in remote areas with little human influence.

Action Total: -4

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:	Year-round
Taxonomic Significance:	Monotypic species
% Global Range in Alaska:	<10%
% Global Population in Alaska:	<25%
Peripheral:	No

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