

Cliff Swallow*Petrochelidon pyrrhonota*

Class: Aves

Order: Passeriformes

Conservation Status*Heritage**Agency*

G Rank: G5

USFWS/NOAA:

BLM:

AA:

S Rank: S5B

SOA: Species of Greatest Conservation Need

USFS:

IUCN: Least Concern

Final Rank		
Conservation category: VIII. Yellow		
VIII = low status and either high biological vulnerability or high action need		
<u>Category</u>	<u>Range</u>	<u>Score</u>
Status:	-20 to 20	-11
Biological:	-50 to 50	-44
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 (-10 to 10)*

-6

BBS data shows an insignificant increase of 0.6% annually between 1980 and 2007 in Alaska (P=0.86, n=30, c=3). BBS data in the Continental US and Canada demonstrated an insignificant increase of 0.3% annually between 1980 and 2007 (p=0.53, n=2019, c=2; Matsuoka and Pardieck 2009).

Distribution Trend (-10 to 10)

-5

Their range has expanded due to construction of highway culverts, bridges, and buildings, which all provide alternative nesting sites (Brown and Brown 1995). However, development in Alaska is relatively limited and Kessel and Gibson (1994) state that the range of this species in Alaska has not likely changed.

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 (-10 to 10)*

-10

State population 1.8 million (ADFG 2005a).

Range Size (-10 to 10)

-10

Extends from west and central Alaska south to southcoastal Alaska and the western edge of Southeast Alaska (AOU 1983, Godfrey 1986, Phillips 1986). Cliff Swallows have been sighted, including nests in the Brooks Range and north of the Brooks Range (Sage 1972).

Population Concentration (-10 to 10)

-10

Colonies can contain up to 3500 active nests (Brown and Brown 1995). Greater than 250 locations in Alaska.

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

-5

1 year (Brown and Brown 1995).

Number of Young (-5 to 5)

1

Mean ~3 eggs (Brown and Brown 1995).

Ecological Specialization

Dietary (-5 to 5)

-5

Flying insects (Brown and Brown 1995).

Habitat (-5 to 5)

-5

Found in a wide variety of habitats owing to the increase in availability of alternative nest sites. Inhabits grasslands, towns, broken forests, riparian edges. Nest sites are typically located near an open area for foraging, near water, and relatively near a mud source for nest building. Builds bottle shaped mud nest in colonies on cliffs, eaves of buildings, under bridges, etc. Prefers sites with overhang (Brown and Brown 1995, Coffey 1980).

Biological Total: -44

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 Needs (-10 to 10)

2

Managed and protected under the Migratory Bird Treaty Act.

Monitoring Needs (-10 to 10)

2

BBS data inadequate to detect a statewide trend.

Research Needs (-10 to 10)

2

Nestling mortality from swallow bug infestations may be considerable in some large colonies, especially for late-starting nests or colonies (Brown and Brown 1995, 1996). Infestations of swallow bugs and mites reduce nestling growth rates and can cause up to half of all nestling death (Gorenzel and Salmon 1994). Weather related starvation is likely the most important cause of adult mortality during the breeding season (Bent 1942, Brown and Brown 1995). Species is sensitive to cold and dependent on active flying insects for food; when late spring cold snaps last at least four days, mortality due to starvation may be substantial.

Survey Needs (-10 to 10)

2

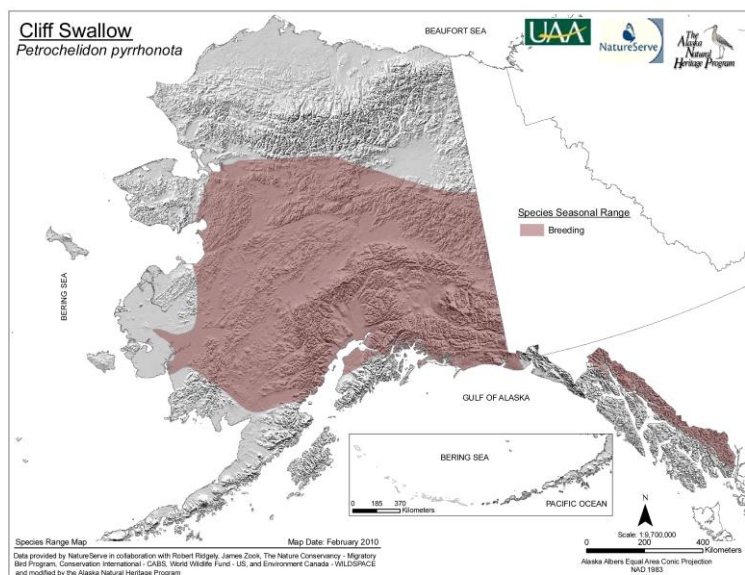
There is a need for developing map of known breeding areas and identify important habitats. Detected by BBS (USGS 2006). Also detected by ALMS, but sample size very small (USGS 2008a). Habitat associations studied during general bird research in the interior (Spindler and Kessel 1980)

Action Total: 8

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

Harvest:	None or Prohibited
Seasonal Occurrence:	Breeding
Taxonomic Significance:	Monotypic species
% Global Range in Alaska:	>10%
% Global Population in Alaska:	<25%
Peripheral:	No

Range Map



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For details on the development of the ASRS and criteria, please see: Gotthardt, T. A., K. M. Walton, and T. L. Fields. 2012. Setting Conservation Priorities for Alaska's Wildlife Action Plan. Alaska Natural Heritage Program, University of Alaska Anchorage, AK.