



Alaska Natural Heritage Program

Conservation Status Report

Papilio machaon - Linnaeus, 1758

Common Name: Old World Swallowtail

ELCODE: IILEP94080

Taxonomic Serial No.: 777696

Synonyms:

Taxonomy Notes: Many subspecies have been described. The majority of butterfly records were determined only to species. We therefore only treat this butterfly at the species level for conservation assessment while recognizing that currently Alaskan specimens are considered to fall under (name of subspecies) - as treated by Ferris 2016. However, specimens from Alaska correspond to *Papilio machaon aliaska* (Scudder, 1869), see Philip & Ferris (2016). NatureServe concept reference: Opler & Warren (2002).

Report last updated – 16 May 2017

Conservation Status

G5 S5

ASRS: not yet ranked

Occurrences, Range

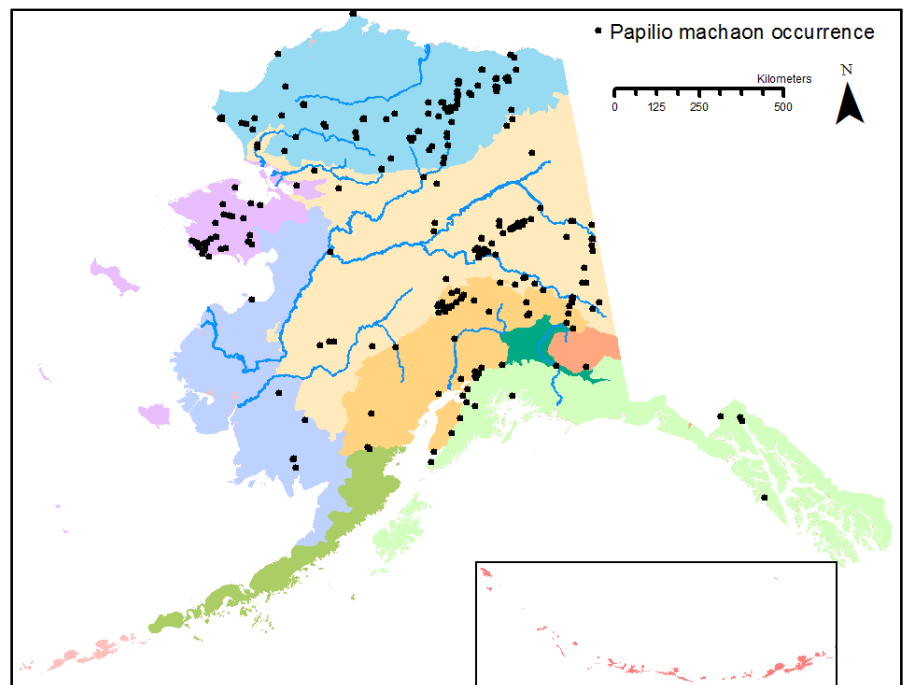
Number of Occurrences:

number of museum records:
988 (KWP 2017, UAM 2017),
number of EOs: 256

AK Range Extent: 1,254,048
km²

Occupancy 4 km² grid cells:
272

Nowacki Ecoregions: From extreme northern Alaska, through the Brooks Range and Seward Peninsula; Yukon, Kuskokwim, Tanana, Matanuska, Susitna, and Copper River valleys; southeastern Alaska; encompassing Arctic Tundra, Bering Tundra, Bering Taiga, Intermontane



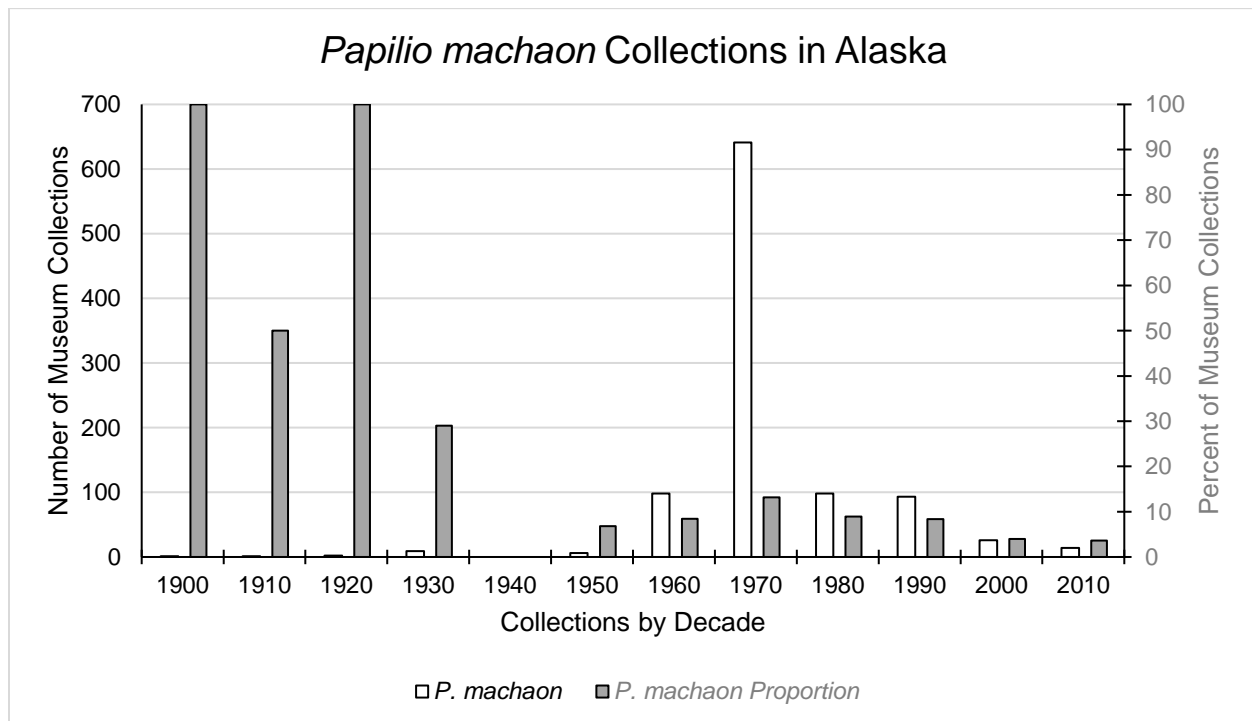
Boreal, Alaska Range Transition, Copper River Basin, and Coast Mountain Transition, and Coastal Rainforest Ecoregions.

North American Distribution: Holarctic. In North America it ranges from Alaska east to Quebec, south through the western North American mountains to New Mexico.

Trends

Short-term: Proportion collected has remained stable (<10% change).

Long-term: Proportion collected appears to have declined significantly (>10% change) since the 1930's, however, butterfly collection numbers were relatively low during the early 1900's (1 to 12 collections per decade) and may not be a good representation of population trends. During the latter 1900's, butterfly collection numbers of all families increased drastically (approx. 500 to 5000 collections per decade) and may better represent population diversity and numbers. Additionally, this species is large, charismatic, and common and is likely to be over-represented in the early 1900 small numbers of collections.



Threats

Scope and Severity: Most threats (including development, pollution, biological resource use, etc.) are anticipated to be negligible in scope and unknown in severity. Climate change and severe weather has the potential to affect populations; however we cannot anticipate the scope or severity of such impacts.

Ecology

Habitat: Mountain meadows and ridges, tundra, and open hilltops (Philip & Ferris 2016, BAMONA 2017).

Host Plants: *Artemisia* species, including *Artemisia arctica* and occasionally this species will feed on members of the Apiceae and other Asteraceae (Philip & Ferris 2016, BAMONA 2017).

Life History: Flight period is from June to early July. Males intercept females on ridges. Females lay single on host plants. Overwinter as chrysalids.

Intrinsic Vulnerability: Unknown.

Literature

BAMONA. 2017. Butterflies and Moths of North America. Attributes of *Papilio machaon*.

<http://www.butterfliesandmoths.org/species/Papilio-machaon>. Accessed 16 May 2017.

KWP, Kenelm W. Philip Lepidoptera Collection. 2017. Date Accessed 24 April 2017.

Opler, P. A., and A. D. Warren. 2002. Butterflies of North America. 2. Scientific Names List for Butterfly Species of North America, north of Mexico. C.P. Gillette Museum of Arthropod Diversity, Department of Bioagricultural Sciences and Pest Management, Colorado State University, Fort Collins, Colorado. 79 pp.

Philip, K. W. and C. D. Ferris. 2016. Butterflies of Alaska: A Field Guide. Second Edition. Alaska Entomological Society. Clifford D. Ferris. Laramie, Wyoming. 110 pp.

UAM Arctos Museum of the North 2017. Date Accessed 24 April 2017.