

826 C04
DIV. OF FISH & WILDLIFE
(old 4-C-2)
COPY 1 of 2

Library
U.S. Fish & Wildlife Service
1011 E. Tudor Road
Anchorage, Alaska



1980 Raptor Survey
The Breeding Peregrine Falcon
(Falco Peregrinus) Population
of Amchitka Island, Alaska

Submitted by

Patricia Heglund and Barry Reiswig

ARLIS
ALASKA RESOURCES
LIBRARY & INFORMATION SERVICES
3150 C STREET, SUITE 100
ANCHORAGE, ALASKA 99503

Aleutian Islands National Wildlife Refuge

10 November 1980

3 3755 000 14370 1

INTRODUCTION

A survey of the breeding peregrine falcon (*Falco peregrinus*) population was made on Amchitka Island, Alaska, during the 1980 summer field season. The survey was completed at the same time data was being collected on the breeding bald eagle (*Haliaeetus leucocephalus*) population on the island. The purpose of the raptor survey was to locate and map eyries and to collect information on nest productivity. The following is a summary of those data as compared to information collected by White *et. al.*, (1977).

METHODS

All observations were made on foot. Falcon territorial units were delineated by the presence of one or two defending adults as described by White, (1977). Eyries were extremely difficult to locate. Often many nests were hidden by the slope and ocean exposure of the eyrie cliff. Once an individual or pair was located, the cliff was carefully searched using binoculars and a spotting scope, where possible.

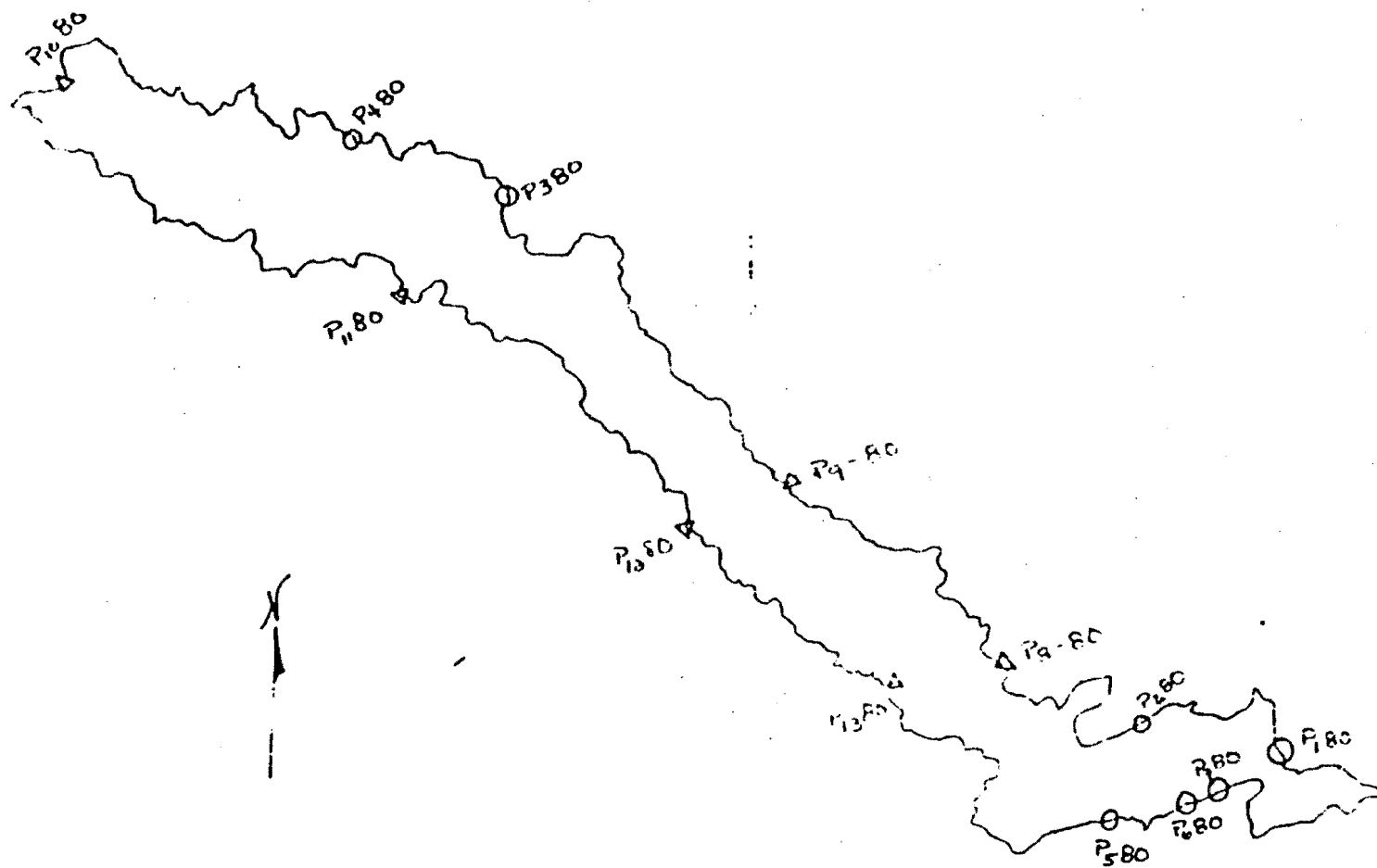
Once a nest was discovered, information on location, number of eggs, nest elevation from sea level and nest margin from high tide was recorded. Data were collected between April 23, and June 30, 1980.

RESULTS

Thirteen territorial units were sighted and mapped (see illustration 1). Six of these territories were defended by a single adult. Approximately 10 miles of coastline were not surveyed where eyries may have been missed. In subsequent years the number of territorial units located are as seen in Table 1.

Given an estimated 120 miles of shoreline (White, 1977), the average density of territorial units for the years 1969-1973 is one pair per 6.30 shoreline miles. The average density for 1980 is one pair per 9.20 shoreline miles, a figure higher than in previous years. The small number of pairs per shoreline mile recorded for 1980 probably is a reflection of the census method and the 10 miles of shoreline not surveyed.

Illustration 1. Perigrine falcon nest locations,
Spring 1980.



▲ = Territories defended by a single adult.

○ = Territories defended by two adults.

Table 1. Number of defended territories for the years 1969-1973, 1980

<u>YEAR</u>	<u>NUMBER OF TERRITORIAL UNITS</u>
1969	17
1970	19
1971	22
1972	19
1973	16
1980	13
<hr/>	
Average number of pairs per year	17.67

Of the 13 territorial units, we verified two eyries and suspected 11 more. Both verified nests were visited twice. The results of the production data for those two nests are shown in Table 2.

Table 2. 1980 Nest Productivity

<u>NEST</u>	<u>NO. EGGS</u>	<u>NO. YOUNG</u>	<u>NO. YOUNG FLEDGED</u>
P ₁ -80	3	3	?
P ₆ -80	3	2	2

Productivity for the two nests appears equivalent to figures determined by White *et. al.*, (1977). Hatching success for 1980 was 2.50 young per nest known hatching young and hatching success for 1971 was also 2.50 young per nest known hatching young. However, the sample size for 1980 was extremely small and therefore can be expected to generate higher statistics.

Following the breeding season, beginning approximately mid July, a number of adults and subadults were sighted inland. One to three birds consistently hunted over the Bridge Creek Goose Pen. They were seen feeding on passerines that became entangled in the ceiling of chickenwire. Several others frequented the area around North Hanger. One peregrine was observed feeding on an immature red-breasted merganser (Mergus serrator) near Jones Lake.

SUMMARY

In summary, the number of territorial units surveyed and the small number of nests that were verified suggest that the 1980 census did not represent the true size of the peregrine population. The lower shoreline density determined for 1980 may reflect the 10 miles of shoreline not surveyed. However, the productivity for two nests was par with productivity levels determined by White (1977).

LITERATURE CITED

White, C. M., F.S.L. Williamson and W. B. Emison, 1977; Avifaunal Investigations. In The Environment of Amchitka Island, Alaska. Ed. M. L. Merritt, and R. G. Fuller, Publ. by Technical Information Center, Energy Research and Development Administration.

ALASKA RESOURCES
LIBRARY & INFORMATION SERVICES
3150 C STREET, SUITE 100
ANCHORAGE, ALASKA 99503

Library
U.S. Fish & Wildlife Service
1011 E. Tudor Road
Anchorage, Alaska
ANCHORAGE, ALASKA
Est. 1997