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Status of the Bald Eagle and Osprey on the Minesite  $\Lambda$ rea and in the Superior National Forest

## Introduction

Data for our study on the distribution and status of the Haliaeetus

leucocephalus (bald eagle) and Pandion haliaetus (osprey) were obtained

principally from three sources: (1) all eagle and osprey observed by

members of the terrestrial team and other group working for the Copper
Nickel Study were recorded on the standard observation form; (2) active

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nesting sites of these two species from the MDNR; and (3) summary of data

of the reproduction for eagles and ospreys on the Superior National Forest

from the USFS. The terrestrial team will not conduct special field research

concerning these species, but will provide observation data and rely on

information from the secondary sources listed above.

### METHODS

Bald eagles and ospreys observed during normal field activities were Fourm recorded on the standard data wheets (Table , P ).

#### RESULTS

Only positive observations of bald eagles and ospreys from knowledgeable persons were recorded. The five eagles and two osprey recorded during the 1976 season are presented in table R-1 as to date and number seen, and locations are shown on Figure R-1. Nesting areas were obtained from Fred Thurnhorst of the MDNR (Figure R-2). Exact nesting sites have not been shown on Figure R-2 to prevent disturbance of these areas.

Although observations of these two species were uncommon in 1976, their THC

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distribution (Figure R-1) were in the immediate nesting areas (Figure R-2). Apparently, eagles nesting in the Seven Beaver Lake area (Figure R-2, far south location) do not venture to the west far enough to be seen along Forest Road No. 113 or 120. However, with these few observations, conclusions about eagle and osprey distribution away from nesting sites would be little more than guesses.

The remainder of this section is a direct quote from information provided by Karl Sider its (Superior Forest Biologist, USFS) on the number and breeding success of bald eagles and osprey from 1973-1976 on the entire Superior National Forest. Table numbers have been changed to follow in sequence with this paper. Bald Eagle-Osprey Status Report, 1976 Superior National Forest, Duluth, Minnesota 55801.

"This report is a summary of the 1976 bald eagle and osprey census on the Superior National Forest. Records of census flights date back to 1961 although the intensive checking and recordkeeping began in 1973. Data from 1961-1975 has been summarized by James Mattson and Al Grewe, North Central Forest Experiment Station, Research Note NC-198, 1976. To date, nesting information is available on 194 eagle and osprey nests. The bald eagle census flights are made between April 10-25 and the fledgling census from June 23-July 3. Osprey census flights are May 18-25 and July 26-August 6. A majority of the eagle and osprey nests are in the Boundary Waters Canoe Area. A helicopter was used on several of the flights.

Accuracy of the census is much better with this slow flying aircraft. Considerable information was obtained on the nest tree size, shape, etc.

We observed less disturbance to the birds than when using fixed winged

aircraft. As soon as the necessary observation on the birds was completed, we were able to leave the area quickly. With fixed-wing aircraft, a complete pass fairly close to the nest must be made, and usually at 70 mph. We collected information on the reaction of the birds to the helicopter to use in analyzing the effect of this aircraft to nesting activity in subsequent years."

#### BALD EAGLE

"Twelve eagle nests were found and six nests were lost through blowdown this year. Two new territories were added to increase the census to 52 territories. A total of 67 known nests are on the Superior. This was a stable year for eagle nesting and nest success although nesting activity has decreased greatly on the eastern one-third of the Forest. Of 8 eagle territories on the Tofte and Gunflint Ranger Districts, only 1 territory was active and no young were produced. This decrease has been evident since 1973." (See Table R-1)

Two active nests, where incubating eagles were present, in spring were lost through a blowdown and a possible black bear predation of the young in the other. A conservation officer observed a bear in the nest in mid-June.

#### **OSPREY**

"Evidently, the "early" spring in northern Minnesota did not change the nesting dates of the eagles or osprey.

One hundred percent of the active osprey territories were successful in raising young this year. This is an extremely encouraging census on the

Superior. Normally, 40 to 50 percent of the active territories are successful in raising young. On the Chippewa National Forest, located 100 miles west of the Superior National Forest, nest success was 48 percent. Six more osprey territories (9 nests) were found this year and six were lost through blowdowns. There are 34 known territories (38 nests) included in the osprey census." (See Table R-2)

# Data on Raptor Other than Bald Eagles and Ospreys

The distribution and relative abundance of raptor<sup>5</sup> on the Minesite area will be based mainly on observations of these species while carrying on normal field activities. These observations have not yet been compiled, but will probably show that the most commonly seen species is <u>Buted platypterus</u> (broad-winged hawk), followed by <u>Falco sparverius</u> (sparrow hawk, Kestrel hawk). This observation data will be presented in future papers.

#### OWLS

Adequate and inexpensive censusing techniques have not been developed for most raptors. However, several species of owls, especially the barred owl and great horned owl, do respond to call-back tape recordings during the breeding season in February and March. The technique can be used to census a strip up to 3.2 KM (1.6 KM on each side of the road) along any road system. Literature is still being searched, but we feel that a census route for barred and great horned owls should be established during the nesting season in 1977.

Bold eagle and osprey observation by
Copper-Nickel staff members during 1976;
(See Figure R- ) for map location).

*Location Nur	mbers Date	Species	Numbers Seen
1	7-19	bald eagle	. 1
2	7-21	bald eagle	1
3	9-1	bald eagle	1
4	9-22	bald eagle	1
5	11-7	bald eagle	1
6	6-21	osprey	1
7	4-25	osprey	. 1

Table R-2.

Bald eagle and osprey nesting data.

(This table includes data from USFS tables 1 and 2)

# BALD EAGLE NESTING DATA

Year	Known Territories	Observed Territories	Active Te	rritories %	Successful No.	Territories %	Number of Young	Average Brood Size at Fledging	Young/ Active Territory
1973	51	48	31	64	18	58	23	1.3	0.7
1974	61	47	28	65	14	50	18	1.3	0.6
1975	75	55	32	58	23	72	35	1.5	1.1
1976	52	52	26	50	20	76	29	1.5	1.1
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# OSPREY NESTING DATA

Known Territories	Observed Territories	Active Te	rritories %	Successful No.	Territories %	Number of Young	Average Brood Size at Fledging	Young/ Active Territory
47	29	15	52	6	40	9	1.5	0.6
49	36	24	67	12	50	22	1.8	0.9
40	34	25	73	10	40	15	1.5	0.6
34	34	21	62	21	100	32	1.5	1.5
	Territories 47 49 40	Territories         Territories           47         29           49         36           40         34	Territories         Territories         No.           47         29         15           49         36         24           40         34         25	Territories         Territories         No.         %           47         29         15         52           49         36         24         67           40         34         25         73	Territories         No.         %         No.           47         29         15         52         6           49         36         24         67         12           40         34         25         73         10	Territories         Territories         No.         %         No.         %           47         29         15         52         6         40           49         36         24         67         12         50           40         34         25         73         10         40	Territories         Territories         No.         %         No.         %         of Young           47         29         15         52         6         40         9           49         36         24         67         12         50         22           40         34         25         73         10         40         15	Known         Observed Territories         Active Territories         Successful Territories         Number of Young at Fledging           47         29         15         52         6         40         9         1.5           49         36         24         67         12         50         22         1.8           40         34         25         73         10         40         15         1.5

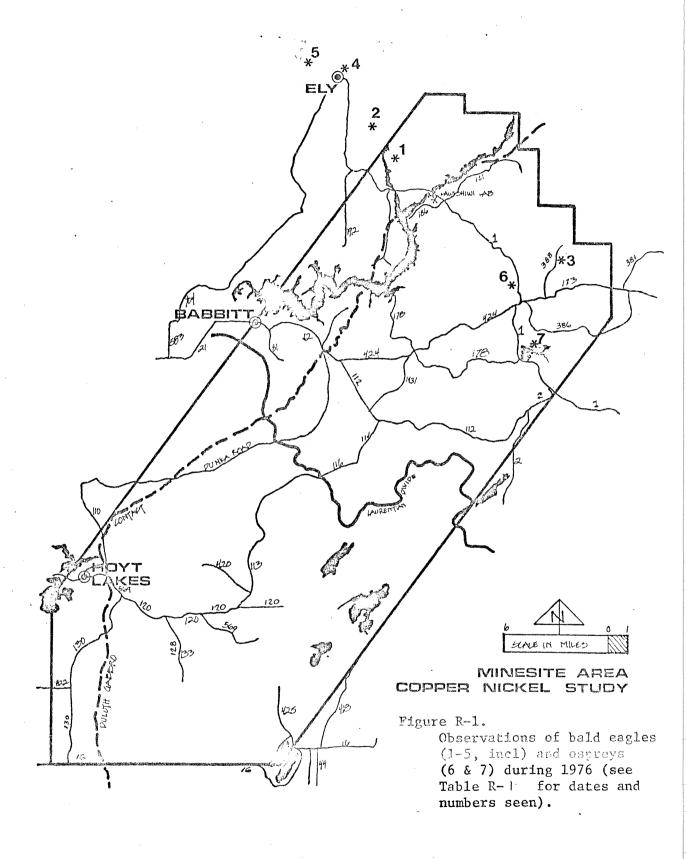
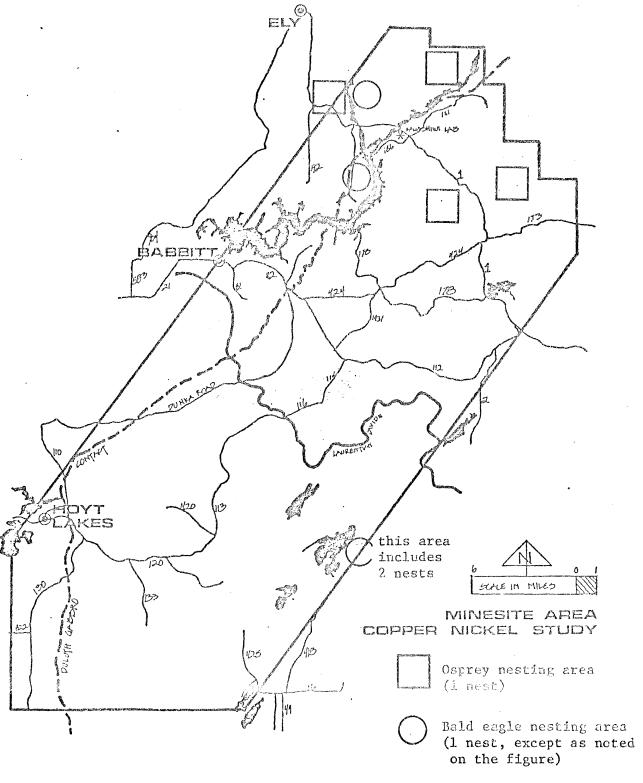


Figure R-2.

Known nest locations for <u>Haliaeetus leucocephalus</u> (bald eagle) and <u>Pandion Haliaetus</u> (osprey).



(Information from Fred Thunhorst, Ely-Winton Game Manager, MDNR).