

WISCONSIN ENDANGERED RESOURCES REPORT 6

STATUS AND MANAGEMENT OF BALD EAGLE IN 1983

by Charles Sindelar and Randle Jurewicz

SUMMARY

The Wisconsin Department of Natural Resources continued its bald eagle (*Haliaeetus leucocephalus*) management program, designed to monitor population trends and increase productivity by describing, protecting, supplementing and enhancing nest sites. Territory management plans that identify both immediate and long-range management needs are being developed for all territories in the state. A statewide nest activity survey in March and April located 197 active nest sites, of which 133 (68%) fledged at least one young. Leg bands were placed on 243 nestlings. Cooperators sighted 109 bald eagles in Wisconsin during the 1983 midwinter count. Four eaglets were furnished to reintroduction projects in Arkansas and North Carolina.

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PERFORMANCE REPORT

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Cooperators: States of Michigan, Illinois Threatened Species Investigation
Project No.: E-1-6 Study Title: Status and Management of Bald Eagle
Study No.: 211
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Abstract

The Wisconsin Department of Natural Resources continued its bald eagle (*Haliaeetus leucocephalus*) management program. It is designed to monitor population trends and increase productivity by describing, protecting, supplementing and enhancing nest sites. Territory management plans which identify both immediate and long-range management needs are being developed for all territories in the state. A statewide nest activity survey in March and April located 197 active nest sites. Leg bands were placed on 243 nestlings. Four eaglets were furnished to reintroduction projects in other states; two to Arkansas and two to North Carolina.

Job 211.1 Conduct Survey

Objective

Monitor known bald eagle territories through annual aerial surveys to determine population trends and nesting success.

Procedures

See the Methods section of the attached report by Charles Sindelar, "Wisconsin Bald Eagle Survey - 1983".

Findings

North Central District

New pairs of eagles occurred in Forest, Langlade, Marathon, Oneida, Vilas and Wood counties. The unprecedented 83% nest success in this district pulled up the statewide average to 76%, a level unachieved in the past.

	'73	'74	'75	'76	'77	'78	'79	'80	'81	'82	'83
Active territory	43	58	59	75	77	74	72	82	83	85	86
Successful territory			40	44	59	53	49	62	61	61	71
% success			67%	58.6%	73%	72%	68%	77%	73%	72%	83%
Total young	53		70	69	98	93	76	115	101	106	114
Young/active territory	1.2		1.2	.92	1.3	1.3	1.05	1.4	1.2	1.2	1.3
Young/successful territory			1.2	1.6	1.7	1.7	1.55	1.85	1.7	1.7	1.6

Northwest District Eagle Statistics

New pairs were found in Bayfield, Price and Sawyer counties. Those nesting on Wisconsin's mainland shore of Lake Superior took a turn for the better.

	'73	'74	'75	'76	'77	'78	'79	'80	'81	'82	'83
Active territory	40	25	47	64	67	58	70	84	93	106	95
Successful territory			25	42	46	39	52	62	68	73	53
% success			53%	65.6%	67%	67%	74%	73%	73%	69%	56%
Total young	34		35	45	78	67	94	103	113	125	118
Young/active territory	.85		.74	.70	1.2	1.1	1.34	1.2	1.2	1.2	1.2
Young/successful territory			1.4	1.07	1.6	1.7	1.8	1.7	1.7	1.7	2.2

Lake Michigan District

	'73	'74	'75	'76	'77	'78	'79	'80	'81	'82	'83
Active territory	6	6	5	6	6	6	5	6	7	10	10
Successful territory			4	1	2	4	4	5	6	7	6
% success			80%	2%	33%	67%	80%	83%	88%	70%	60%
Total young	0		7	2	4	6	8	9	10	14	12
Young/active territory			1.4	.3	.67	1.0	1.6	1.5	1.4	1.4	1.2
Young/successful territory			1.75	2.0	2.0	1.5	2.0	1.8	1.7	2.0	2.0

West Central District

	'73	'74	'75	'76	'77	'78	'79	'80	'81	'82	'83
Active territory						1	2	2	4	5	5
Successful territory						0	1	1	1	3	2
% success							50%	50%	25%	60%	40%
Total young						0	1	2	1	3	3
Young/active territory							.5	1.0	.25	.6	.6
Young/successful territory							1.0	2.0	1.0	1.0	1.5

Southern District

The Southern District's only nest continued to be active in 1983.

	'73	'74	'75	'76	'77	'78	'79	'80	'81	'82	'83
Active territory				1	1	1	1	1	1	1	1
Successful territory				1	1	1	1	1	1	1	1
% success				100%	100%	100%	0	100%	100%	100%	100%
Total young				2	1	2	0	2	2	3	2
Young/active territory				2	1	2	-	2	2	3	2
Young/successful territory				2	1	2	-	2	2	3	2

Statewide

See the Results and Discussion section of the attached report by Charles Sindelar, "Wisconsin Bald Eagle Survey - 1983".

For example, two adults were observed in 13 territories on at least one of the aerial surveys. These 13 territories were categorized as Some Degree of Activity and not as Occupied because:

1. No adults were observed in an incubation position;
2. Nests did not appear to be repaired;
3. No eggs or young were observed.

Job 211.2 Search for Active Nests

Objectives

Search for new and previously undiscovered nests in areas of the northern lakes breeding range that may contain active territories.

Procedures and Findings

Sindelar and John Winship conducted two aerial nest checks, one in March and one in April and Winship checked the Mississippi River territories in March.

Sixteen new territories were numbered and 35 new nests were located within old territories.

Sindelar also searched the Apostle Islands, discovering seven new nests.

Job 211.3 Development and Implementation of Management Plans

Objective

Develop and implement management plans for all active territories.

Procedures and Findings

Concise information sheets were developed by Area Wildlife managers for territories using a standardized format (Appendix I). These information sheets facilitate identification of future Management needs on an individual territory basis. Ground checks of each territory were required and the following information recorded:

1. Nest tree and habitat characteristics.
2. A green-line map, or a copy of an aerial photo showing the exact location of the nest and all alternate nests.
3. Identification of all roads, trails and dwellings.
4. Recommendations to reduce disturbance factor such as closing or rerouting of trails, limiting timber harvest or limiting recreational development on public lands.
5. Reproductive histories.

Information sheets and management recommendations were compiled for 16 new territories and reviewed and updated with 1983 data for all known territories.

Job 211.4 Erection of Artificial Nesting Platforms

Objective

Increase bald eagle productivity by constructing artificial nesting platforms to replace defective nest trees, blown-down nests and other deteriorated nesting habitat.

Procedures

Bald eagle productivity can be increased by improving existing nests, providing nesting structures and by protecting alternate nest sites. The platform design used was developed by the WDNR, and has proven to be very durable and successful.

During the last several years, the WDNR have erected nest bases. These structures are intended to simulate an eagle nest and to keep eagles nesting in protected locations. The nest bases are used to replace eagle nests which have blown out. Once a nest blows out, the eagles may not build a new nest for several years, or may move to a new location.

The nest base consists of a cone-shaped, heavy-duty wire mesh which is securely attached to one side of a white pine. The cone is approximately two feet high and filled with sticks like a nest. The cone is placed just below the location of the old nest. Eagles then build on this base and tie their nest into the support branches.

Findings:

In 1975-1979 we put a nest base in La-30, Rolling Stone Lake. The property had just been purchased by Fish Management when the nest blew out and we wanted to keep the eagles at this protected location. The nest base worked and two young were raised in 1979 and again in 1980. The territory had "some degree of activity" in 1981, it was not used in 1982 and active but unsuccessful in 1983.

Job 211.5 Nest Visits and Banding of Young

Objective

Monitor migratory movements, population dynamics and other ecological parameters of bald eagles through nest visits and banding of nestlings.

Procedures and Findings

See attached report by Charles Sindelar, "Wisconsin Bald Eagle Survey - 1983".

Job 211.6 Salvage of Specimens

Objective

Salvage sick, injured or dead birds and addled eggs encountered during banding and other activities.

Procedures and Findings

See attached report by Charles Sindelar, "Wisconsin Bald Eagle Survey - 1983".

The following table illustrates the cause of bald eagle injuries and mortality in Wisconsin in 1983:

<u>Cause</u>	<u>Injured</u>	<u>Dead</u>
traps	7	3
gunshot	4	1
electrocution	1	
trauma-car	4	2
contagious disease		2
Intraspecific strife	1	
orphaned		1
toxicity	2	
nonpathological disease	1	
bumblefoot	2	
unknown	9	3
Total (43)	31	12

Job 211.7 Winter Inventory

In 1983, approximately 60 people from around the state counted 109 bald eagles. More input from the general public was received than in previous years. This, plus unusually warm, snowfree weather, resulted in a larger number and wider distribution of eagle observations.

The following table breaks down the eagle count:

1983 Midwinter Bald Eagle Survey Reporting Form

Number Adult Bald Eagles	85
Number Immature Bald Eagles	20
Number Unknown Bald Eagles	4
Total Bald Eagles Counted	109
Number Adult Golden Eagles	1
Number Immature Golden Eagles	0
Number Unknown Golden Eagles	0
Total Golden Eagles Counted	1
No. counties Surveyed	30
No. 10 min. Blocks Surveyed	50
No. Survey Participants	60

Final 1982 Midwinter Bald Eagle Survey Results
(From the Nation Wildlife Federation)

<u>Region</u>	<u>1982</u> <u>TOTAL</u>	<u>1981</u> <u>TOTAL</u>	<u>1980</u> <u>TOTAL</u>	<u>1979</u> <u>TOTAL</u>
Wisconsin	43	88	70	53

Summary

Wisconsin bald eagles continue to reproduce at a very acceptable level, and expansion of the breeding range is evident. A real increase in occupied territories was not apparent, but likely did occur and was merely masked by survey technique and definitions. Those pairs associated with Lake Superior did somewhat better this year, although reproductive rates there remain "below normal".

Recommendations

Aerial surveys are necessary to assess management efforts, monitor population trends and identify active territories. If possible, the same individual should fly the surveys next year, which would facilitate the location of active nests, alternative nest and old nest sites.

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