

WISCONSIN ENDANGERED RESOURCES REPORT 14

STATUS AND MANAGEMENT OF BALD EAGLE IN 1984

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SUMMARY

The Wisconsin Department of Natural Resource 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 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 May located 239 active nest sites. Reproduction continued to be excellent. A 21% increase in occupied territories and a 13% increase in successful territories resulted in a 11% increase in total production of young, over 1983. Leg bands were placed on 254 nestlings. Four eaglets were furnished to reintroduction projects in other states.

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PERFORMANCE REPORT

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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 May located 239 active nest sites. Leg bands were placed on 254 nestlings. Four eaglets were furnished to reintroduction projects in other states.

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 Breeding Survey - 1984".

Findings

North Central District

New pairs of eagles occurred in Lincoln, Portage, Oneida and Vilas counties. The nest success in this district was 74%, 9% less than 1983, helping drop the statewide average to 71%.

	'73	'74	'75	'76	'77	'78	'79	'80	'81	'82	'83	'84
Active territory	43	58	59	75	77	74	72	82	83	85	86	86
Successful territory			40	44	59	53	49	62	61	61	71	65
% success			67%	58.6%	73%	72%	68%	77%	73%	72%	83%	74%
Total young	53		70	69	98	93	76	115	101	106	114	106.6
Young/active territory	1.2		1.2	.92	1.3	1.3	1.05	1.4	1.2	1.2	1.3	1.2
Young/successful territory			1.2	1.6	1.7	1.7	1.55	1.85	1.7	1.7	1.6	1.6

Northwest District Eagle Statistics

New pairs were found in Barron, Burnett, Rusk, Taylor and Sawyer counties. Those nesting on Wisconsin's mainland shore of Lake Superior were very successful this year.

	'73	'74	'75	'76	'77	'78	'79	'80	'81	'82	'83	'84
Active territory	40	25	47	64	67	58	70	84	93	106	95	120
Successful territory			25	42	46	39	52	62	68	73	53	90
% success			53%	65.6%	67%	67%	74%	73%	73%	69%	56%	75%
Total young	34		35	45	78	67	94	103	113	125	118	147.2
Young/active territory	.85		.74	.70	1.2	1.1	1.34	1.2	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	1.6

Lake Michigan District

New pairs were found in Door and Menominee counties.

	'73	'74	'75	'76	'77	'78	'79	'80	'81	'82	'83	'84
Active territory	6	6	5	6	6	6	5	6	7	10	10	10
Successful territory			4	1	2	4	4	5	6	7	6	7
% success			80%	2%	33%	67%	80%	83%	88%	70%	60%	70%
Total young	0		7	2	4	6	8	9	10	14	12	13
Young/active territory			1.4	.3	.67	1.0	1.6	1.5	1.4	1.4	1.2	1.3
Young/successful territory			1.75	2.0	2.0	1.5	2.0	1.8	1.7	2.0	2.0	1.85

West Central District

	'73	'74	'75	'76	'77	'78	'79	'80	'81	'82	'83	'84
Active territory						1	2	2	4	5	5	7
Successful territory						0	1	1	1	3	2	6
% success							50%	50%	25%	60%	40%	86%
Total young						0	1	2	1	3	3	10
Young/active territory							.5	1.0	.25	.6	.6	1.4
Young/successful territory							1.0	2.0	1.0	1.0	1.5	1.7

Southern District

The Southern District's only nest continued to be active in 1984.

	'73	'74	'75	'76	'77	'78	'79	'80	'81	'82	'83	'84
Active territory				1	1	1	1	1	1	1	1	1
Successful territory				1	1	1	1	1	1	1	1	1
% success				100%	100%	100%	0	100%	100%	100%	100%	100%
Total young				2	1	2	0	2	2	3	2	2
Young/active territory				2	1	2	-	2	2	3	2	2
Young/successful territory				2	1	2	-	2	2	3	2	2

Statewide

See the summary section of the attached report by Charles Sindelar, "Wisconsin Bald Eagle Breeding Survey - 1984".

Job 211.2 Search for Active Nests

Objective

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/April and one in May. Howard Sheldon checked the Chequamegon National Forest in April.

Complications and weather forced the first check to finish later than optimum time. Some territories which were judged as "inactive" or "S.D." (Some Degree of Activity) may in fact have been occupied and then failed prior to this check.

Seventeen new territories were numbered and 37 new nests were located within old territories.

Sindelar also searched the Apostle Islands, discovering no new nests, but existing sites were very successful in 1984 (3 out of 4 produced 2 young each).

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 1). 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 17 new territories and reviewed and updated with 1984 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 1978-1979 we put a nest base in La-3b, 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, active but unsuccessful in 1983, inactive in 1984. The platform at BU-14a, Grettum Flowage, maintained a new nest in 1984 which produced one young. The platform at IR-25a, Flambeau Flowage, was inactive in 1984, ON-34 produced 2 young; VI-7 was inactive.

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 Breeding Survey - 1984".

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 Breeding Survey - 1984".

The following table illustrates the cause of bald eagle injuries and mortality in Wisconsin in 1984:

<u>Cause</u>	<u>Injured</u>	<u>Dead</u>
traps	3	
gunshot	1	
flew into wire	1	
fell from nest		1
toxicity		2
dehydration		1
emaciation	1	1
unknown	<u>2</u>	<u>2</u>
Total (15)	8	7

Job 211.7 Winter Inventory

In 1984, approximately 82 people from around the state counted 166 bald eagles. More input from the general public was received than in previous years. This resulted in a larger number and wider distribution of eagle observations.

The following table breaks down the eagle count:

1984 Midwinter Bald Eagle Survey Reporting Form	
Number Adult Bald Eagles	115
Number Immature Bald Eagles	51
Number Unknown Bald Eagles	0
Total Bald Eagles Counted	<u>166</u>
Number Adult Golden Eagles	2
Number Immature Golden Eagles	1
Number Unknown Golden Eagles	0
Total Golden Eagles Counted	<u>3</u>
No. counties Surveyed	49
No. 10 min. Blocks Surveyed	0
No. Survey Participants	82

Final 1984 Midwinter Bald Eagle Survey Results
(From the Nation Wildlife Federation)

Region	1984	1983	1982	1981	1980	1979
	<u>Total</u>	<u>Total</u>	<u>Total</u>	<u>Total</u>	<u>Total</u>	<u>Total</u>
Wisconsin	166	109	43	88	70	53

Summary

Reproduction continued to be excellent. A 21% increase in occupied territories and a 13% increase in successful territories resulted in a 11% increase in total production of young.

Wisconsin's eagle population is increasing and is well on its way to returning to normal.

Those pairs associated with Lake Superior did very well this year.

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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WISCONSIN BALD EAGLE BREEDING SURVEY - 1984

GENERAL REPORT

Done under contract with the state of Wisconsin
(WI DNR Bureau of Endangered and NonGame Species)

by

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