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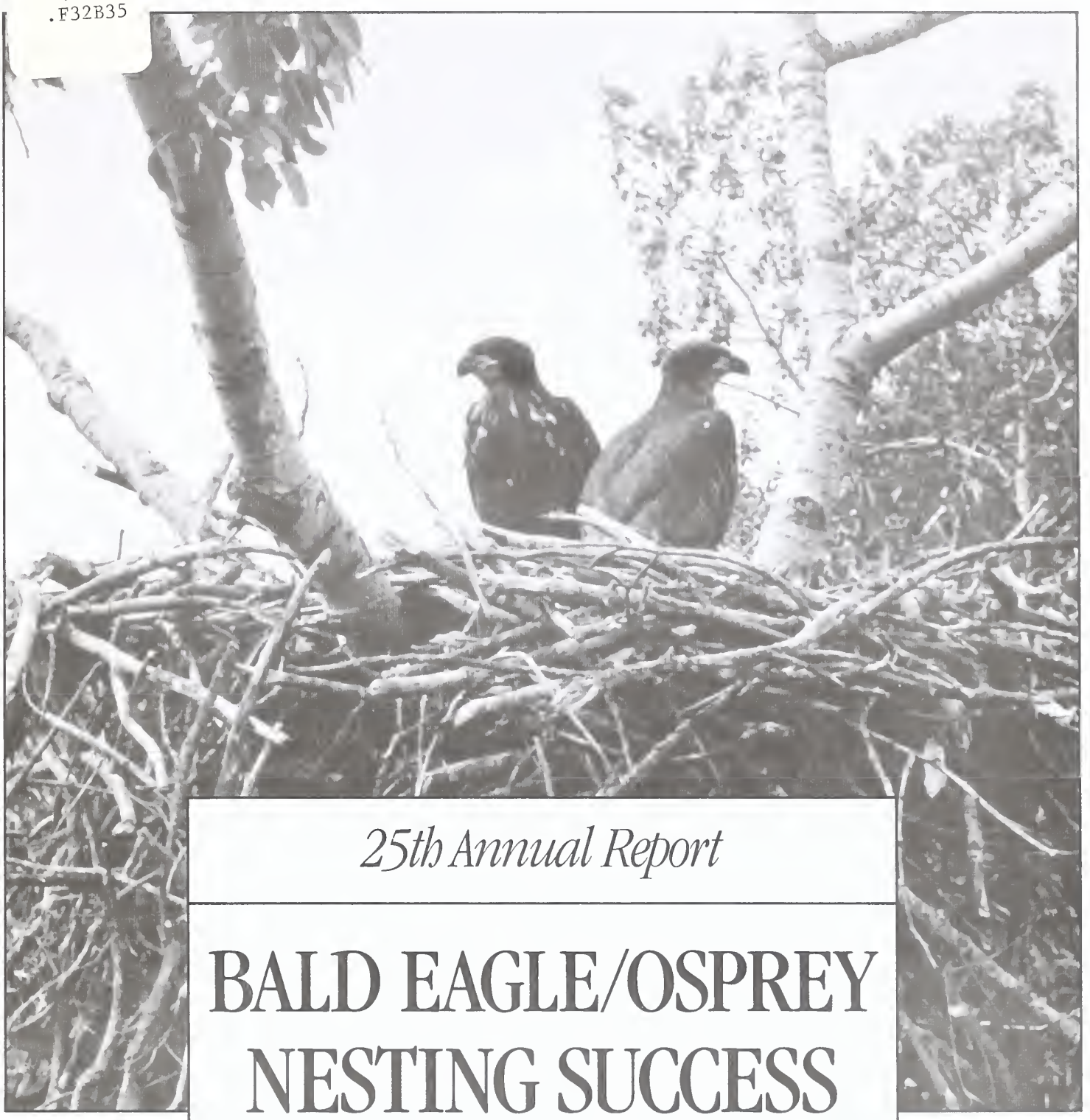


25th Annual Report

BALD EAGLE/OSPREY NESTING SUCCESS

in the National Forests of the Eastern Region

1987

United States
Department
of Agriculture
Forest Service
Eastern Region
Milwaukee, WI

FEB 5 '92

FORWARD

This 25th Annual Report on the status of the Eastern Region's Bald Eagles and Opsreys is a significant step in the long-term monitoring of population and success trends of these species on the National Forests. We are pleased to report that populations of both species continue to increase.

This survey is part of a continuing multi-agency effort to follow and better understand relationships between wildlife habitat and other environmental influences. These surveys are expected to continue not only to provide consistent trend information, but also to demonstrate that this kind of monitoring is practicable. We are confident that these efforts will improve communication, strengthen our information base and clarify options for integrating the management of eagle and osprey habitat with other Forest uses.

for Floyd J. Marita
Regional Forester, Eastern Region
USDA Forest Service

Caring for the Land and Serving People!

FOREST SERVICE
US
DEPARTMENT OF AGRICULTURE

BALD EAGLE-OSPREY NESTING SEASON REPORT

USDA-FOREST SERVICE - EASTERN REGION

1987

This is the 25th consecutive year that the National Forests of the Eastern Region have monitored the breeding activities of the bald eagle and the osprey. Aerial surveys to determine breeding activity at nest sites, called occupancy surveys, were conducted in April and May. Nests where breeding activity was observed, called productivity surveys, were visited again close to fledging time in July to count the number of young eagles and ospreys.

Survey methods for the years 1974 through 1984 were consistent from one year to the next. This provided monitoring information that was consistent between each of those 11 years. In 1985, the survey performance was interrupted when the Superior National Forest suspended most survey activities in the Boundary Waters Canoe Area Wilderness (BWCAW). During 1986 and 1987, the Superior NF conducted the occupancy survey for eagles in the BWCAW as before, but attempted the productivity survey by ground reconnaissance only. Not all occupied areas could be checked for productivity. Survey performance on the other six Forests that have populations of these birds remained uniform for the past 14 years.

Monitoring nests and finding new ones in the BWCAW continues to be a problem. It is time-consuming and labor intensive. The Superior plans to initiate a college course in conjunction with Northwoods Audubon in 1988 that would provide additional help in monitoring the nests within the wilderness. A reward system was also initiated by the Superior in 1986 to encourage individuals to report new nests. A bald eagle print and a letter of appreciation from the Forest Supervisor is given each person that reports a new eagle or osprey nest. Thirty new nests have been added to that Forest's inventory by the reward system.

BALD EAGLE

The number of nests examined on the National Forests has increased from 451 in 1986 to 516 in 1987. The number of breeding areas on the Forests' inventories has increased steadily from 166 in 1969 to 391 in 1987.

The productivity surveys in 1987 found 281 nests occupied by adult eagles. This is an increase of 37 eagle pairs over last year's total of 244 pairs. This year the Region is within 66% of its objective to have 427 breeding eagle pairs by the year 2020. The number of young produced was 315 this year which is an increase of 52 from last year's total of 263 young. The Ottawa NF was the only forest that reported a reduction in occupied nests. All of the other reporting forests showed an increase, with the Chippewa NF having the most significant increase.

The Chippewa NF reported 135 pairs of breeding adults. This is significant because that Forest's objective is to have 150 breeding pairs by the year 2020.
In some areas of the Chippewa Forest, the eagle breeding population may be approaching a "saturation" point. Eagle pairs for the first time have established nest sites in unusual areas, such as along roads and near dwellings. Several eagles also successfully utilized osprey nests. These unusual activities may be an indication that young breeding adults may be experiencing difficulty in finding optimum habitat for nesting.

Bald eagles are now being reported during the breeding season on other National Forests in the Eastern Region. The Mark Twain NF in Missouri reported a successful eagle nest near their boundary that produced at least one young and possibly a second. Two pairs continue to nest within the proclamation boundary of the Shawnee NF in Illinois. The two nests are located within the Crab Orchard National Wildlife Refuge in southern Illinois. One of the two nests produced two eaglets. A new nest was discovered on the Monogahela NF this year. An adult eagle was observed constructing this nest, however, there was no breeding attempt made. The Allegheny NF in Pennsylvania has had sightings of two adults accompanied by an immature bird on various occasions on the Allegheny Reservior during the nesting season.

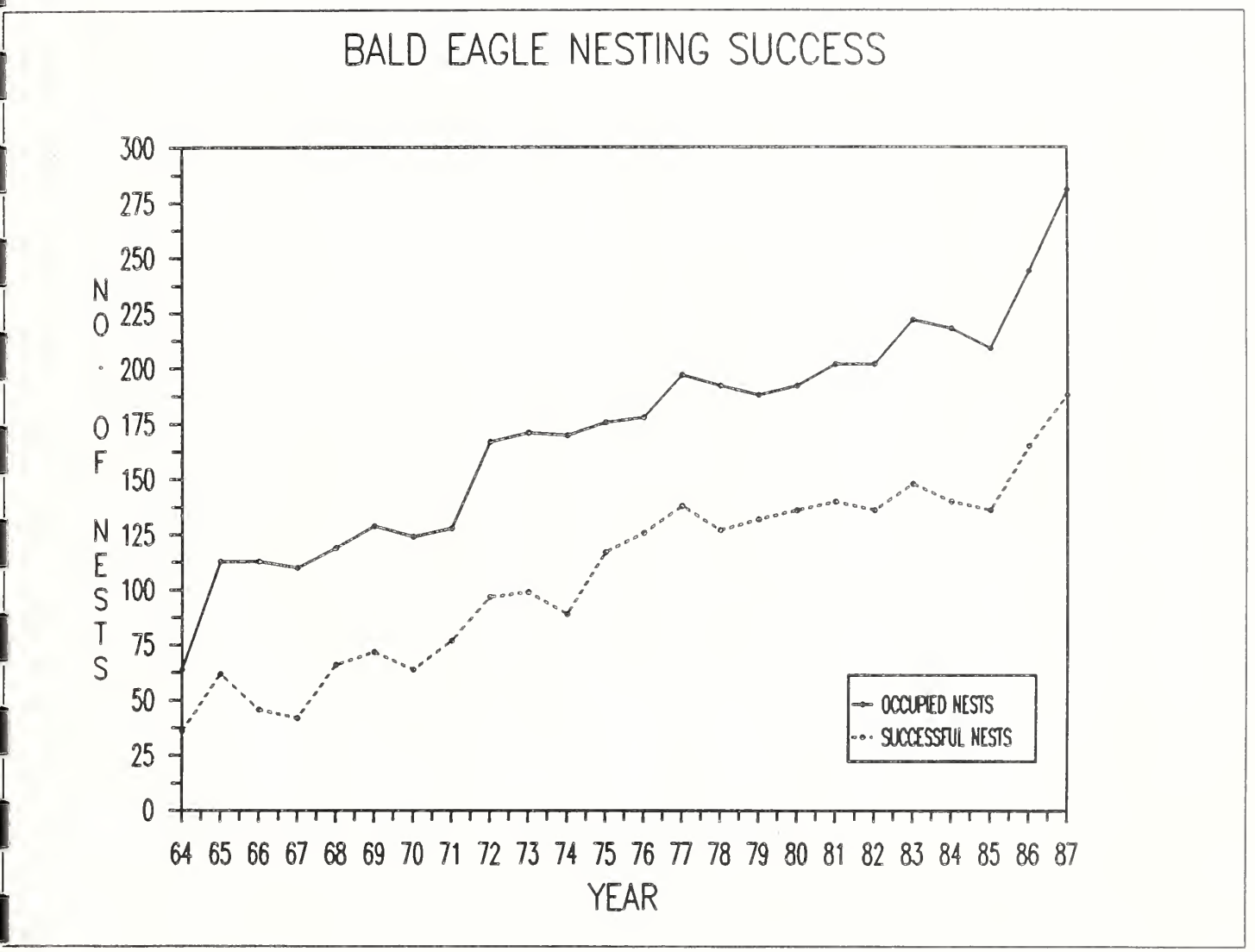
The Indiana Department of Natural Resources hacked 20 young eagles on the Hoosier NF in 1987. The hacking project was initiated in 1985 as a cooperative effort between the Forest Service and the Indiana DNR. The hacking site is located on the Monroe Reservoir where three young eagles were released in 1985 and seven young in 1986.

OSPREY

The number of occupied osprey nests within the Region continues to increase each year since the survey was initiated in 1965. In 1987, 252 occupied nests were observed of which 157 nests were successful in producing 222 young.

The productivity surveys in 1987 found 252 nests occupied by breeding ospreys. This is an increase of 20 osprey breeding pairs from 1986's total of 232 pairs. The 222 young produced is an increase of 37 from last year's total.

Three Forests, the Chippewa, Hiawatha, and Superior, reported an increase in young produced this year. A slight decrease was noted on the Nicolet and Ottawa NFs. The Chequamegon NF had no osprey young produced in 1987 and the Huron-Manistee NFs continue not to have a known breeding population of ospreys.

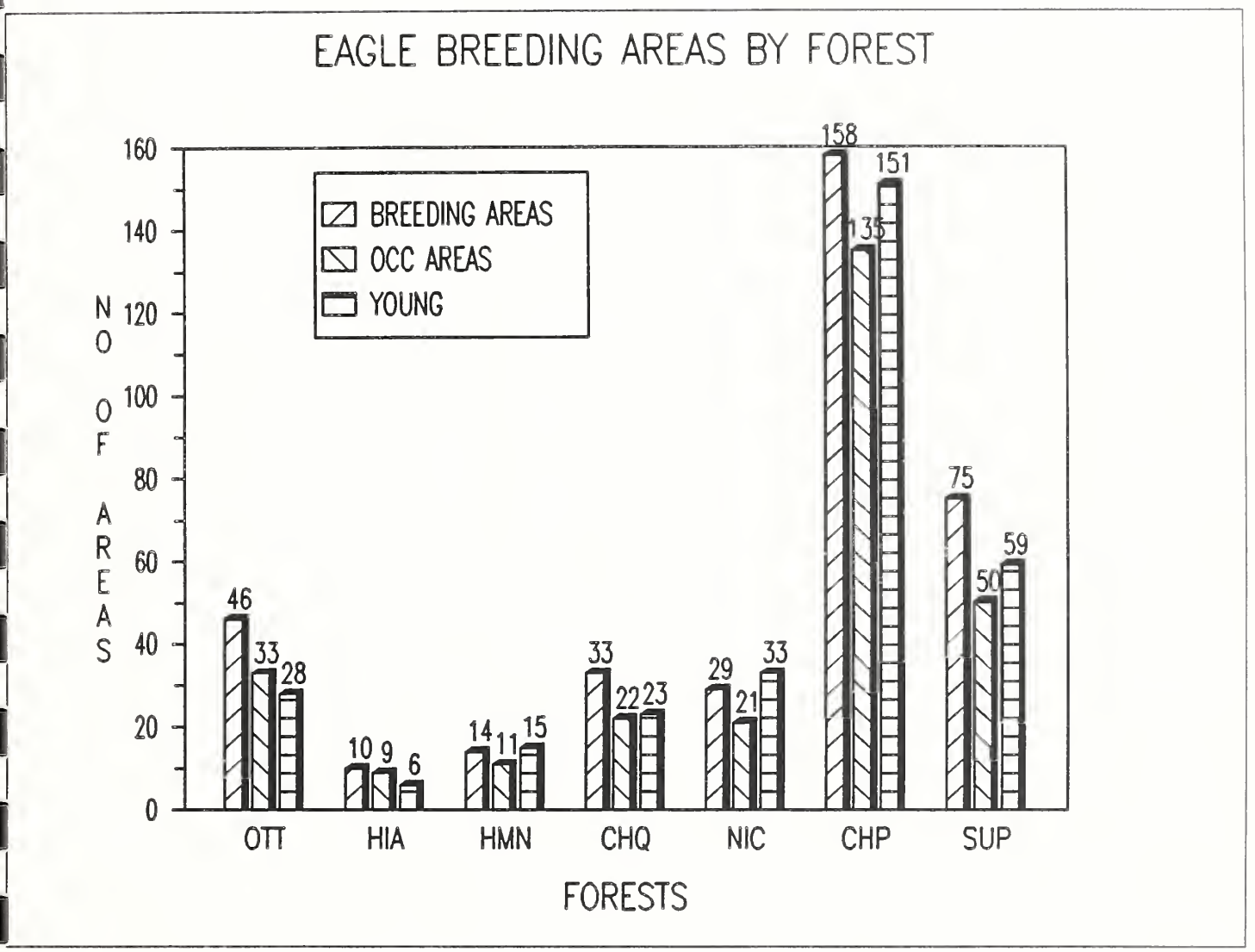

BALD EAGLE NESTING SUCCESS
NO. OF NESTS
300
275
250
225
200
175
150
125
100
75
50
25
0
64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87
YEAR
OCCUPIED NESTS
SUCCESSFUL NESTS

BALD EAGLE NESTING TRENDS

USDA-FOREST SERVICE, EASTERN REGION

YEAR	VERIFIED NESTS	BREEDING AREAS	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG		
			No.	%	No.	%	No.	Per Successful Nest	Per Occupied Nest
1964	156		64	50	36	56	51	1.4	.80
1965	204		113	63	62	55	88	1.4	.78
1966	265		113	57	46	40	67	1.7	.59
1967	304		110	53	42	38	63	1.5	.57
1968	323		119		66	55	98	1.9	.82
1969	344	166	129	78	72	56	109	1.5	.85
1970	294	189	124	66	64	52	107	1.7	.86
1971	327	188	128	68	77	56	115	1.5	.83
1972	356	238	167	70	97	58	155	1.6	.93
1973	382	264	171	65	99	58	163	1.6	.95
1974	381	257	170	66	89	52	119	1.3	.70
1975	398	285	176	62	117	67	192	1.6	1.09
1976	414	260	178	68	126	71	187	1.5	1.05
1977	421	265	197	75	138	70	212	1.5	1.08
1978	435	264	192	73	127	66	202	1.6	1.05
1979	432	269	188	70	132	70	222	1.7	1.18
1980	456	282	192	68	136	71	235	1.7	1.22
1981	458	277	202	73	140	69	223	1.6	1.10
1982	446	288	202	70	136	67	220	1.6	1.09
1983	459	296	222	75	148	67	257	1.7	1.16
1984	458	294	218	74	140	64	231	1.7	1.06
1985	453	314	209*	67	136*	65	216*	1.6	1.03
1986	451	321	244	76	165	68	263	1.6	1.08
1987	516	366	281	77	188	67	315	1.7	1.12

* Eagle nests in the BWCA were not surveyed for success.


EAGLE BREEDING AREAS BY FOREST
BREEDING AREAS
OCC AREAS
YOUNG
NO OF AREAS
0
20
40
60
80
100
120
140
160
46
33
28
10
9
6
14
11
15
33
22
23
29
21
33
158
135
151
75
50
59
OTT
HIA
HMN
CHQ
NIC
CHP
SUP
FORESTS

Year 1987

BALD EAGLE NESTING STATUS
USDA-FOREST SERVICE, EASTERN REGION

Forest and STATE	VERIFIED NESTS 1986	1987	AREAS OBSERVED	OCCUPIED NESTS	SUCCESSFUL NESTS	YOUNG PRODUCED
Hiawatha	9	11	10	9	6	6
Huron-Manistee	17	18	14	11	7	15
Ottawa	65	71	46	33	15	28
MICHIGAN	91	100	70	53	28	49
Chippewa	209	237	158	135	89	151
Superior	84	105	75	50	38	59
MINNESOTA	293	342	233	185	127	210
Chequamegon	37	42	33	22	15	23
Nicolet	30	32	29	21	18	33
WISCONSIN	67	74	62	43	33	56
REGION TOTALS	451	516	365	281	188	315

OSPREY NESTING TRENDS

USDA-FOREST SERVICE, EASTERN REGION

YEAR	VERIFIED NESTS	TERRITORIES OBSERVED	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG		
			No.	%	No.	%	No.	Per Successful Nest	Per Occupied Nest
1965	79		37	59	10	27	11	1.1	.30
1966	94		28	45			5	1.3	
1967	137		43	61	12	28	23	1.9	.53
1968	152		73		21	29	27	1.3	.37
1969	183		72		28	39	55	2.0	.76
1970	157	93	84	90	42	50	74	1.8	.88
1971	140		66		34	52	55	1.6	.83
1972	205	130	111	85	59	53	97	1.6	.87
1973	226	154	127	82	21	38@	36	1.7	.65@
1974	252	140	140	100	73	52	118	1.6	.84
1975	238	157	115	73	59	51	102	1.7	.97
1976	249	154	117	76	70	60	120	1.7	1.03
1977	254	197	159	81	89	56	147	1.7	.92
1978	316	193	144	75	63	44	84	1.3	.58
1979	303	304	194	64	104	54	176	1.7	.91
1980	305	308	224	73	136	61	262	1.9	1.17
1981	307	314	220	70	112	51	192	1,7	.87
1982	320	294	217	70	141	65	229	1.6	1.06
1983	357	321	208	65	126	61	207	1.6	1.00
1984	343	327	248	76	125	50	222	1.8	.90
1985	309*	355*	228*	64	107*	47	181*	1.7	.79
1986	327*		232*		118*	51	185*	1.6	.80
1987	384		252*	64	157*	62	222*	1.4	.88

@ Chippewa NF incomplete data excluded from calculations.
* Osprey nesting surveys were not made in the BWCA

Year 1987

OSPREY NESTING STATUS
USDA-FOREST SERVICE, EASTERN REGION

Forest and STATE	VERIFIED NESTS 1986	1987	AREAS OBSERVED	OCCUPIED NESTS	SUCCESSFUL NESTS	YOUNG PRODUCED
Ottawa	13	19	20	10	5	5
Hiawatha	30	32	34	30	20	40
Huron-Manistee	0	0	0	0	0	0
MICHIGAN	43	51	54	40	25	45
Chippewa	171	212	212	138	87	116
Superior	73	89	98	55	33	47
MINNESOTA	244	301	310	193	120	163
Chequamegon	4	1	1	1	0	0
Nicolet	36	31	26	18	12	14
WISCONSIN	40	32	27	19	12	14
REGION TOTAL	327	384	391	252	157	222

BALD EAGLE AND OSPREY NESTING TRENDS BY NATIONAL FOREST

BALD EAGLE NESTING TRENDS

CHEQUAMEGON NATIONAL FOREST

YEAR	VERIFIED NESTS	TOTAL BREEDING AREAS	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG		
			No.	%	No.	%	No.	Per Successful Nest	Per Occupied Nest
1963									
1964	3		1						
1965	4		3						
1966	7		1		0				
1967	6		2		0				
1968	15		7		4	57	6	1.5	.9
1969	12	7	6		6	100	10	1.7	1.7
1970	16	10	8		3	38	4	1.3	.6
1971	15	9	9		7	78	10	1.4	1.1
1972	14	10	10		9	90	13	1.4	1.3
1973	16	12	11		6	55	8	1.3	.7
1974	16	13	10		4	40	6	1.5	.6
1975	17	15	12		7	58	11	1.6	.9
1976	21	15	13		10	77	16	1.6	1.2
1977	22	16	15		11	73	17	1.5	1.1
1978	19	17	13		8	62	11	1.4	.9
1979	23	19	16		13	81	21	1.6	1.3
1980	29	21	17		11	65	20	1.8	1.2
1981	29	21	19	90	13	68	19	1.2	1.0
1982	33	23	17	74	10	59	17	1.7	1.0
1983	32	21	15	71	9	60	14	1.6	.9
1984	33	22	16	73	14	88	22	1.6	1.4
1985	34	25	17	68	11	65	16	1.5	.9
1986	37	28	21	75	13	62	19	1.5	.9
1987	42	33	22	67	15	68	23	1.5	1.0

OSPREY NESTING SUCCESS TREND

CHEQUAMEGON NATIONAL FOREST

YEAR	VERIFIED NESTS	TERRITORIES OBSERVED	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG		
			No.	%	No.	%	No.	Per Successful Nest	Per Occupied Nest
1964									
1965	1	1	1						
1966	1	1	1						
1967	2	2	2		NOT CHECKED				
1968	1	0							
1969	1	1	1		1		1		
1970	1	1	1		1		1		
1971	1	1	1		?		?		
1972	1	1	1		0		0		
1973	1	1	1		NOT CHECKED				
1974	4	4	3		0		0		
1975	3	3	2		1		1		
1976	3	3	1		0		0		
1977	4	4	1		1		3		
1978	2	3	0		0		0		
1979	4	4	2		2		4		
1980	3	5	3		3		6		
1981	4	4	4		3		6		
1982	4	4	4		1		3		
1983	5	5	2		0		0		
1984	4	4	4		1		2		
1985	4	4	2		2		4		
1986	4	4	3		1		2		
1987	1	1	1		0		0		

BALD EAGLE NESTING TRENDS

CHIPPEWA NATIONAL FOREST

YEAR	VERIFIED NESTS	BREEDING AREAS	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG		
			No.	%	No.	%	No.	Per Successful Nest	Per Occupied Nest
1963	48		20		6	30	10	1.7	
1964	55		30		12	40	14	1.2	
1965	76		39		22	56	29	1.3	
1966	107		52		19	61	28	1.5	
1967	135		49		21	43	30	1.4	
1968	142	71	52		33	63	50	1.5	
1969	139	75	60		29	48	44	1.5	
1970	141	93	65		35	54	62	1.8	
1971	143	99	65		40	62	61	1.5	
1972	142	107	73		40	55	70	1.8	
1973	147	108	70		42	60	72	1.7	1.0
1974	156	106	68		40	59	54	1.4	.8
1975	163	94	70		47	67	79	1.7	1.1
1976	176	94	67		48	72	78	1.8	1.2
1977	194	105	77		57	74	86	1.5	1.1
1978	200	107	80	75	56	70	92	1.6	1.2
1979	201	106	78	74	53	68	95	1.8	1.2
1980	209	112	77	69	62	81	112	1.8	1.5
1981	199	112	84	75	60	71	103	1.7	1.2
1982	193	116	90	78	66	73	108	1.6	1.2
1983	214	120	101	84	69	68	131	1.9	1.30
1984	203	118	92	78	64	70	110	1.7	1.20
1985	201	127	100	79	73	73	118	1.6	1.18
1986	209	136	112	82	85	76	136	1.6	1.21
1987	237	158	135	85	89	66	151	1.7	1.12

OSPREY NESTING SUCCESS TREND

CHIPPEWA NATIONAL FOREST

YEAR	VERIFIED NESTS	TERRITORIES OBSERVED	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG		
			No.	%	No.	%	No.	Per Successful Nest	Per Occupied Nest
1964	18								
1965	23		5						
1966	31								
1967	60		17		7		14		
1968	73		40		13		19		
1969	89		49		23		50		
1970	99	52	52		28	54	48		
1971	90	49	49		22		39		
1972	104	59	59		34		60		
1973	124	72	72		NOT CHECKED				
1974	139	83	67		35	52	59		
1975	131	56	56		29	52	46		
1976	138	50	50		24	48	43		
1977	146	87	87	80	37	42	66	1.8	.76
1978	214	96	78	81	19	24	30	1.6	.38
1979	201	201	122	61	59	48	97	1.6	.80
1980	188	188	142	76	87	61	175	2.0	1.23
1981	161	161	118	73	63	53	102	1.6	.86
1982	157	145	111	77	73	66	111	1.5	1.00
1983	176	161	93	58	49	53	83	1.7	.89
1984	164	160	125	78	53	42	94	1.8	.75
1985	175	187	129	69	58	45	94	1.6	.73
1986	171	--	124	--	51	41	82	1.6	.66
1987	212	--	138	65	87	63	116	1.3	.84

BALD EAGLE NESTING TRENDS

HIAWATHA NATIONAL FOREST

YEAR	VERIFIED NESTS	BREEDING AREAS	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG		
			No.	%	No.	%	No.	Per Successful Nest	Per Occupied Nest
1964	21								
1965	23		17	74	6	35	7	1.2	
1966	34		7	27	2	29	4	2.0	
1967	35	17	11		2	18	3		
1968	39		1		4	57	4		
1969	45	20	10		1		2		
1970	39	24	9		2	44	4		
1971	40	14	6		2	33	3		
1972	36	22	5		0		0		
1973	37	24	7		2		3		
1974	29	20	6		1		1		
1975	25	26	8		2		2		
1976	19	23	7		1		1		
1977	16	16	6		2		3		
1978	14	11	4		1		1		
1979	19	14	2		0		0		
1980	17	14	4		3	75	4	1.3	
1981	12	9	4		2	50	4	2.0	
1982	13	9	5	56	3	60	4	1.3	
1983	12	9	6	67	2	33	2	1.0	.33
1984	11	9	5	56	2	40	4	2.0	.80
1985	11	8	6	75	3	50	3	1.0	.50
1986	9	8	6	75	3	50	5	1.7	.83
1987	11	10	9	90	6	67	6	1.0	.67

OSPREY NESTING SUCCESS TREND

HIAWATHA NATIONAL FOREST

YEAR	VERIFIED NESTS	TERRITORIES OBSERVED	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG		
			No.	%	No.	%	No.	Per Successful Nest	Per Occupied Nest
1964	13								
1965	11		3		1		2		
1966	12		9		1		2		
1967	18	14	8		3		5		
1968	20		9		5		5		
1969	24	14	9		2		2		
1970	26	16	10		3		7		
1971	NO SURVEY								
1972	24	15	11		6		8		
1973	19	15	11		7		13		
1974	16	15	10		6	60	13		
1975	17	13	12		1		1		
1976	26	23	15		9	60	16		
1977	23	21	16		8	50	13		
1978	20	18	16		14		14		
1979	23	21	16		10	63	21	2.1	1.31
1980	24	20	11		6	55	10	1.7	.91
1981	22	21	16		9	56	18	2.0	1.13
1982	22	24	19		10	53	21	2.1	1.12
1983	26	24	22		12	55	26	2.2	1.18
1984	25	25	20	80	12	60	25	2.1	1.25
1985	26	26	26		20		39	1.9	1.50
1986	30	33	29	88	20	69	32	1.6	1.10
1987	32	34	30	88	20	67	40	2.0	1.33

BALD EAGLE NESTING TRENDS

NICOLET NATIONAL FOREST

YEAR	VERIFIED NESTS	BREEDING AREAS	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG		
			No.	%	No.	%	No.	Per Successful Nest	Per Occupied Nest
1963	5								
1964	11								
1965	10		4		1		2		
1966	13		9						
1967	15		9						
1968	18		11		4	36	7	1.8	
1969	17	12	9		6	67	12	2.0	
1970	19	11	7		7	100	14	2.0	
1971	NO SURVEY								
1972	19	16	9		5	56	6	1.2	.7
1973	27	18	14		8	57	13	1.6	.9
1974	32	22	19		12	63	18	1.5	.9
1975	30	21	16		11	69	17	1.5	1.2
1976	30	20	18		10	56	16	1.6	.9
1977	32	22	18		12	67	19	1.6	1.1
1978	39	24	22		12	55	20	1.7	.9
1979	37	24	17		16	94	23	1.4	1.4
1980	40	24	20		10	50	20	2.0	1.0
1981	44	24	18		14	78	23	1.6	1.3
1982	44	23	17		12	71	22	1.8	1.3
1983	38	25	17	68	12	71	22	1.8	1.3
1984	44	25	16	70	11	69	17	1.5	1.1
1985	41	26	15	58	12	80	21	1.8	1.4
1986	30	26	16	62	11	69	22	2.0	1.38
1987	32	29	21	72	18	86	33	1.8	1.57

OSPREY NESTING SUCCESS TREND

NICOLET NATIONAL FOREST

YEAR	VERIFIED NESTS	TERRITORIES OBSERVED	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG		
			No.	%	No.	%	No.	Per Successful Nest	Per Occupied Nest
1964	10								
1965	10		7		4		3		
1966	10		7						
1967	16		9						
1968	16		11						
1969	26	17	6		1		1		
1970	19	14	15		8		15		
1971	NO SURVEY								
1972	30	25	17		4		6		
1973	31	29	19		7		12		
1974	37	37	25		10	40	15		
1975	36	35	15		12	80	26		
1976	32	32	20		11	55	22	2.0	1.10
1977	27	35	19		13	68	22	1.7	1.16
1978	29	30	20		7	35	11	1.6	.55
1979	24	30	20		11	50	21	1.9	1.05
1980	26	27	22		8	36	14	1.8	.64
1981	32	26	20		6	30	11	1.8	.55
1982	31	26	21		15	71	26	1.7	1.24
1983	33	28	20		12	60	18	1.5	.90
1984	28	26	14	54	8	57	18	2.3	1.29
1985	28	28	19	68	7	37	10	1.4	.53
1986	36	28	19	68	13	68	20	1.5	1.05
1987	31	26	18	69	12	67	14	1.1	.77

BALD EAGLE NESTING TRENDS

OTTAWA NATIONAL FOREST

YEAR	VERIFIED NESTS	BREEDING AREAS	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG		
			No.	%	No.	%	No.	Per Successful Nest	Per Occupied Nest
1964	26								
1965	32		20	80	13	65	18	1.4	.9
1966	43		21	53	15	71	21	1.4	1.0
1967	47	31	22	47	12	55	19	1.6	.9
1968	46	32	22		11	50	16	1.5	.7
1969	53	36	24		15	62	20	1.3	.8
1970	54	36	26		13	50	20	1.5	.8
1971	61	42	30		14	47	22	1.6	.7
1972	60	45	30		19	61	30	1.6	.9
1973	66	41	33		25	76	37	1.5	1.1
1974	60	35	27		11	41	18	1.6	.7
1975	67	41	33		21	64	39	1.9	1.2
1976	76	44	30		25	33	39	1.6	1.3
1977	76	42	31		22	71	36	1.6	1.2
1978	76	43	31		21	68	33	1.6	1.1
1979	71	43	30		23	77	37	1.6	1.2
1980	72	44	30		21	70	32	1.5	1.1
1981	78	45	32	73	24	75	37	1.5	1.2
1982	73	46	31	67	16	52	27	1.7	.9
1983	74	46	33	78	17	52	26	1.5	.79
1984	75	46	29	63	15	52	22	1.5	.76
1985	67	45	37	82	21	57	32	1.5	.86
1986	65	42	38	90	16	42	26	1.6	.68
1987	71	46	33	72	15	45	28	1.9	.85

OSPREY NESTING SUCCESS TREND

OTTAWA NATIONAL FOREST

YEAR	VERIFIED NESTS	TERRITORIES OBSERVED	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG		
			No.	%	No.	%	No.	Per Successful Nest	Per Occupied Nest
1964	6								
1965	6								
1966	5		3		1		1		
1967	8	9	6		1		2		
1968	9	8	7		2		2		
1969	8	7	0						
1970	12	10	6		3		7		
1971	10	11	8		5		8		
1972	10	8	8		3		7		
1973	13	10	9		1		2		
1974	14	11	8		4	50	8	2.0	1.00
1975	11	10	10		5	50	13	2.6	1.30
1976	12	12	10		5	50	7	1.4	.70
1977	15	14	13		8	62	12	1.5	.92
1978	16	14	11		7	64	9	1.3	1.82
1979	13	14	9		6	66	9	1.5	1.00
1980	14	13	10		8	80	15	1.9	1.50
1981	17	14	11		4	36	8	2.0	.73
1982	17	13	9		5	56	10	2.0	1.11
1983	17	13	9		2	22	5	2.5	.56
1984	13	12	11	92	4	36	5	1.3	.45
1985	13	13	9	69	2	22	5	2.5	.56
1986	13	16	9	56	6	67	9	1.5	1.00
1987	19	20	10	50	5	50	5	1.0	.50

BALD EAGLE NESTING TRENDS

SUPERIOR NATIONAL FOREST

YEAR	VERIFIED NESTS	BREEDING AREAS	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG		
			No.	%	No.	%	No.	Per Successful Nest	Per Occupied Nest
1963									
1964	8								
1965	32		20		14		24	1.7	
1966	36		12		5		6	1.2	
1967	37		5		4		7		
1968	36		9		6		9		
1969	53		12		11		16		
1970	NO SURVEY								
1971	49	10	10		10		14	1.4	
1972	65	30	26		20	67	29	1.5	.9
1973	67	48	26		19	73	24	1.3	.9
1974	66	47	30		11	63	17		
1975	75	75	26		23	89	35	1.5	1.4
1976	73	52	32		26	81	29	1.1	.9
1977	65	52	39		29	74	43	1.5	1.1
1978	70	50	34		26	76	38	1.5	1.1
1979	68	51	36		23	64	40	1.7	1.1
1980	74	57	34		24	71	39	1.6	1.2
1981	76	53	34	64	23	68	32	1.4	.9
1982	68	57	30	53	24	80	36	1.5	1.2
1983	73	61	40	66	32	80	50	1.6	1.25
1984	82	64	50	78	29	58	47	1.6	.9
1985	84	70	24*		11*	46	18*	1.6	.75
1986	84	68	42	67	31	74	46	1.5	1.10
1987	105	75	50	67	38	76	59	1.6	1.18

* BWCA Success not surveyed.

OSPREY NESTING SUCCESS TREND

SUPERIOR NATIONAL FOREST

YEAR	VERIFIED NESTS	TERRITORIES OBSERVED	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG		
			No.	%	No.	%	No.	Per Successful Nest	Per Occupied Nest
1964	7								
1965	28		21		5		6		
1966	31		8		2		2		
1967	33		1		1		2		
1968	33		6		1		1		
1969	35		7		1		1		
1970	NO SURVEY								
1971	39	8	8		7		8		
1972	36	22	15		12	80	16		
1973	38	27	15		6	40	9		
1974	42	49	27		18	67	23		
1975	40	40	19		11	58	15		
1976	38	34	21		21	100	32	1.5	1.04
1977	39	36	23	64	18	78	24	1.3	.95
1978	35	32	21	66	16	76	20	1.3	.96
1979	38	34	25	74	16	64	24	1.5	1.44
1980	50	55	36	65	30	83	52	1.7	.92
1981	71	60	51	85	32	63	47	1.5	.92
1982	89	82	53	65	37	70	58	1.6	1.09
1983	100	90	62	69	51	82	75	1.5	1.21
1984	109	100	74	74	47	64	78	1.7	1.05
1985	63*	97*	43*		18*	42	29*	1.6	.67
1986	73*	71*	48*	68	27*	56	40*	1.5	.83
1987	89*	98*	55*	56	33*	60	47*	1.4	.85

* BWCA not surveyed

BALD EAGLE NESTING TRENDS

HURON-MANISTEE NATIONAL FOREST

YEAR	VERIFIED NESTS	TOTAL BREEDING AREAS	OCCUPIED NESTS		SUCCESSFUL NESTS		YOUNG		
			No.	%	No.	%	No.	Per Successful Nest	Per Occupied Nest
1963									
1964	32								
1965	27		10		6		8	1.3	.8
1966	28		11		5		8	1.6	.7
1967	29	16	16		3	19	4	1.3	.3
1968	27		11		4	36	6	1.5	.6
1969	25	16	8		4	50	5	1.3	.6
1970	25	15	9		4	44	4	1.0	.5
1971	19	15	8		4	50	5	1.3	.6
1972	20	12	9		4	44	7	1.8	.8
1973	22	13	10		5	50	6	1.2	.6
1974	22	14	10		4	40	6	1.5	.6
1975	21	13	11		6	55	9	1.5	.8
1976	19	12	11		6	55	10	1.7	.9
1977	16	12	11		5	45	8	1.6	.7
1978	17	12	8		3	38	7	2.3	.9
1979	13	12	9		4	44	6	1.5	.7
1980	15	10	10		5	50	8	1.6	.8
1981	20	13	11		4	36	5	1.3	.5
1982	22	14	12	86	5	42	6	1.2	.5
1983	16	14	10	71	7	70	12	1.7	1.2
1984	15	12	10	83	5	50	9	1.8	.9
1985	15	13	10	77	5	50	8	1.6	.8
1986	17	13	9	69	6	67	9	1.5	1.0
1987	18	14	11	79	7	64	15	2.1	1.3