

APPENDIX IV

POPULATION DISTRIBUTION OF BREEDING AND WINTERING BALD EAGLES ON THE MISSOURI RIVER MAIN STEM

Population distribution of breeding and wintering bald eagles on the Missouri River main stem.^{1/}

Location of Population	Year ^{2/}	Wintering Population	Nesting Population Pairs	Fledgings Per Pair
Missouri River Main Stem				
Above Fort Peck Reservoir, MT	2000	+	+	+
	1999	102	29	1.48
	1998	78	23	1.34
	1997	70	18	1.56
	1996	83	17	1.29
	1995	59	+	+
	1994	77	+	+
	1993	110	12	1.75
	1992	75	12	0.92
	1991	90	7	1.14
	1990	125	8	1.13
	1989	135	4	1.75
	1988	84	2	2.00
	1987	35	0	0
	1986	79	0	1.00
Fort Peck Reservoir, MT	2000	-	0	0
	1999	-	0	0
	1998	-	0	0
	1997	-	0	0
	1996	-	0	0
	1995	-	0	0
	1994	-	0	0
	1993	-	-	-
	1992	-	-	-
	1991	-	-	-
	1990	-	-	-
	1989	-	-	-
	1988	-	-	-
	1987	8	0	0
	1986	-	-	-

Location of Population	Year ^{2/}	Wintering Population	Nesting Population Pairs	Fledgings Per Pair
Fort Peck Dam to Lake Sakakawea, MT, ND	2000	+	0	0
	1999	17	0	0
	1998	32	0	0
	1997	19	0	0
	1996	6	0	0
	1995	35	0	0
	1994	34	0	0
	1993	38	0	0
	1992	47	0	0
	1991	45	0	0
	1990	41	0	0
	1989	36	0	0
	1988	10	0	0
	1987	11	0	0
	1986	7	0	0
Lake Sakakawea, ND	1993-2000	0	-	-
Garrison Dam to Lake Oahe, ND	2000	32	+	+
	1999	28	8	+
	1998	32	+	+
	1997	2	8	1.50
	1996	23	2	1.00
	1995	12	1	2.00
	1994	2	1	1.00
	1993	25	1	3.00
	1992	59	1	2.00
	1991	12	1	2.00
	1990	27	1	2.00
	1989	24	1	2.00
	1988	57	1	1.00
1987	43	0	0	
1986	30	0	0	

Location of Population	Year ^{2/}	Wintering Population	Nesting Population Pairs	Fledgings Per Pair
Lake Oahe, ND and SD	2000	1	+	+
	1999	0	0	0
	1998	4	0	0
	1997	1	0	0
	1996	8	0	0
	1995	1 0	0	
	1994	1	0	0
	1993	-	0	0
	1992	-	0	0
	1991	19	0	0
	1990	17	0	0
	1989	9	0	0
	1988	10	0	0
	1987	6	0	0
	1986	5	0	0
Oahe Dam to Big Bend Dam, SD	2000	16	+	+
	1999	47	0	0
	1998	39	0	0
	1997	40	0	0
	1996	102	0	0
	1995	98	0	0
	1994	78	0	0
	1993	49	0	0
	1992	9*	0	0
	1991	50	0	0
	1990	143	0	0
	1989	104	0	0
	1988	60	0	0
	1987	88	0	0
	1986	54	0	0

Location of Population	Year ^{2/}	Wintering Population	Nesting Population Pairs	Fledgings Per Pair
Big Bend Dam to Fort Randall Dam Tailrace, SD	2000	21	+	+
	1999	11	0	0
	1998	116	0	0
	1997	8	0	0
	1996	3	0	0
	1995	0	0	0
	1994	2	0	0
	1993	-	0	0
	1992	1	0	0
	1991	0	0	0
	1990	2	0	0
	1989	54	0	0
	1988	42	0	0
	1987	59	0	0
	1986	7	0	0
Karl Mundt NWR, SD**	2000	+	2	+
	1999	200	2	3
	1998	162	2	2.5
	1997	153	2	3
	1996	150	2	1
	1995	169	1	1
	1994	138	1	3
	1993	58	1	2
	1992	39	1	0
	1991	49	0	0
	1990	52	0	0
	1989	54	0	0
	1988	43	0	0
	1987	81	0	0
	1986	47	0	0

Location of Population	Year ^{2/}	Wintering Population	Nesting Population Pairs	Fledgings Per Pair
Karl Mundt NWR to Rulo (inc. Desoto NWR): SD, NE, and IA**	2000	312	8	+
	1999	251	1	2
	1998	435	2	1
	1997	186	1	2
	1996	188	1	1
	1995	216	0	0
	1994	283	0	0
	1993	174	2	0
	1992	420	0	0
	1991	235	0	0
	1990	244	0	0
	1989	209	0	0
	1988	150	0	0
	1987	282	0	0
	1986	41*	0	0
Rulo to St. Louis: NE, KS, and MO	2000	298	+	+
	1999	427	1	2
	1998	289	2	1
	1997	475	2	3
	1996	398	2	1
	1995	294	1	1
	1994	409	1	1
	1993	323	1	2
	1992	136	1	0
	1991	181	1	0
	1990	399	1	0
	1989	+	0	0
	1988	130	0	0
1987	199	0	0	
1986	-	-	-	

Location of Population	Year ^{2/}	Wintering Population	Nesting Population Pairs	Fledgings Per Pair
Kansas River	2000	119	2	1
	1999	388	1	2
	1998	244	1	0
	1997	159	1	1
	1996	187	-	-
	1995	86	-	-
	1994	65	-	-

+ Not available at date of biological opinion.

- No surveys or not determined. Fort Peck reservoir is usually ice-covered.

* Partial survey.

** Winter survey numbers at National Wildlife Refuges represent the highest count for that winter.

^{1/} Information sources include G. Bade, D. Christopherson, , R. Collins, M. Dryer, G. Guenther, D. Haley, L. Hanebury, R. Hazlewood, D. Howell, W. Jobman, R. Kreil, J. Ledwin, M. LeValley, D. Mulhern, J. Peterson, B. Schoonover, T. Benzon, J. Sidle, and E. Stukel (personal communication); National Wildlife Federation (1988).

^{2/} The year noted is the year when surveys were completed; i.e., the 1988-1989 winter survey results are recorded as 1989.