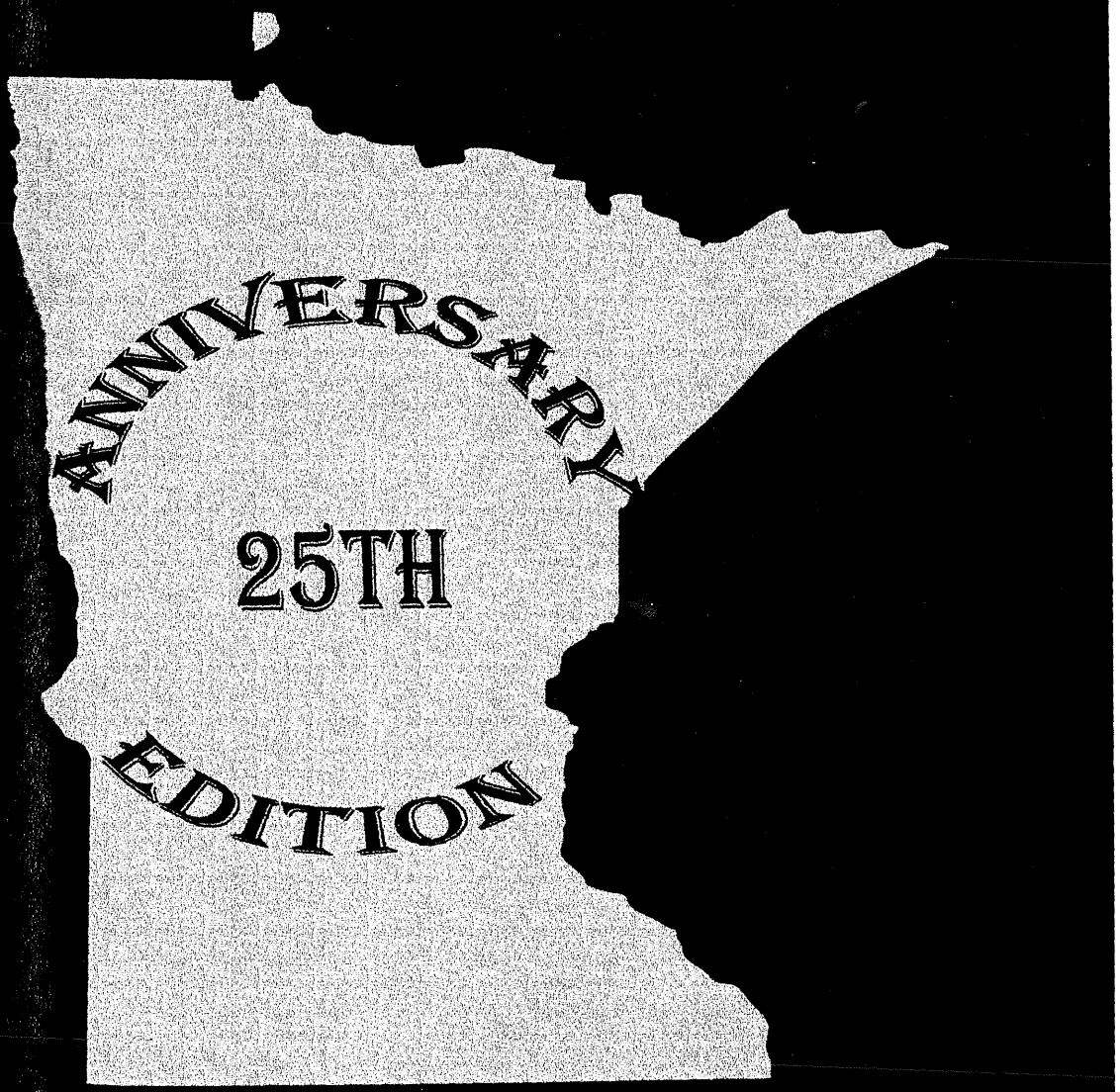
OF WILDLIFE POPULATIONS, FALL 2001

(INCLUDING 1990 - 2000
HUNTING AND TRAPPING HARVEST STATISTICS)



MINNESOTA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WILDLIFE
WILDLIFE POPULATIONS AND RESEARCH UNIT
ST. PAUL, MINNESOTA

STATUS OF WILDLIFE POPULATIONS, FALL 2001

(Including 1990-2000 Hunting and Trapping Harvest Statistics)

edited by
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Note: Data in this report may change as a result of future verification and more comprehensive analy

Status of Wildlife Populations, Fall 2001

(Including 1990-2000 Hunting and Trapping Harvest Statistics)

This is the 25th year that the Wildlife Populations and Research Unit has compiled this booklet; it is primarily an administrative document intended for DNR personnel. (Since 1984 we have also generated a companion volume containing annual summaries of activities and findings from ongoing research projects in the Unit).

Most of the field work associated with collection of census and survey data for farmland and forest wildlife is performed by wildlife biologists and managers (conservation officers also participate in August roadside counts). The Farmland and Forest Wildlife Population and Research groups coordinate these activities, analyze and interpret data, and prepare recommendations for harvest regulations and season setting.

Much of the census and survey work for wetland species is done by personnel in the Wetland Wildlife Populations and Research Group.

Most of the hunting and trapping harvest estimates are calculated and summarized by St. Paul central office personnel.

New for this year, we have added a table for the all-season buck harvest by permit area.

Compiling and publishing this report was funded in part under the Federal Aid in Wildlife Restoration Act, Minnesota project W-69-S.

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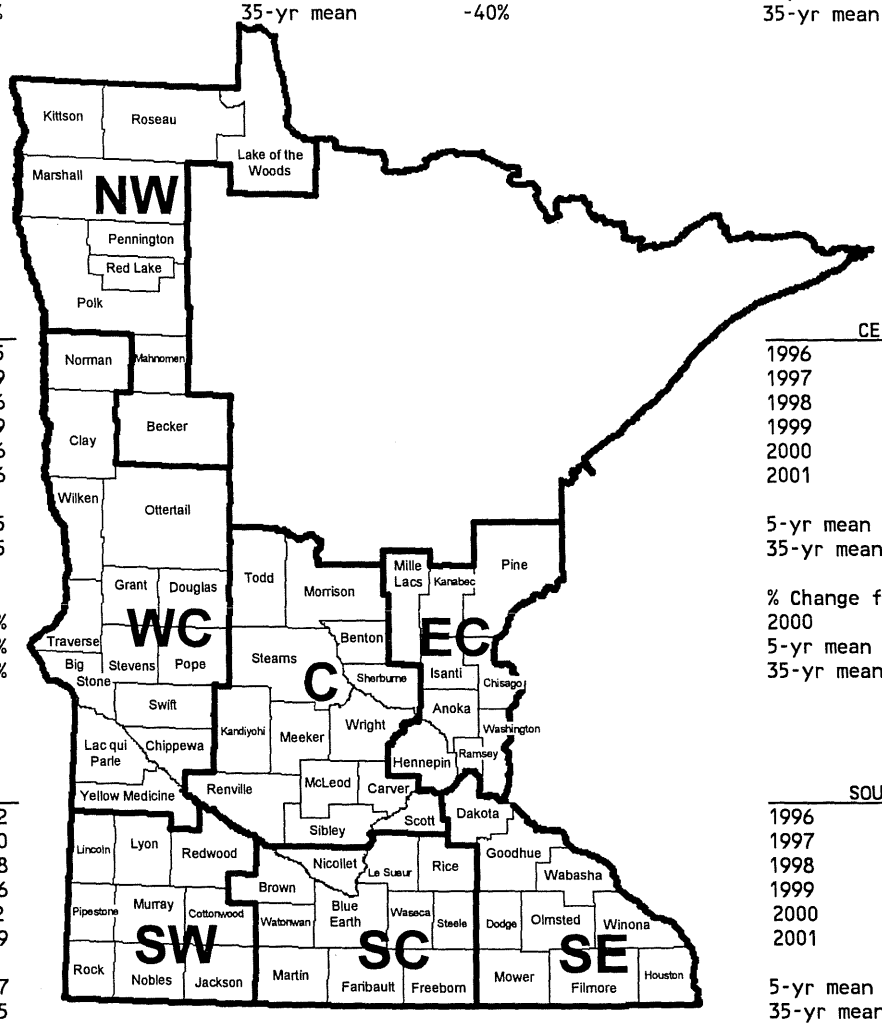
FARMLAND WILDLIFE POPULATIONS

Wildlife Populations and Research Group
Rt 1, Box 181
Madelia, MN 56062
(507) 642-8478

WEST CENTRAL	
1996	23
1997	8
1998	25
1999	31
2000	63
2001	25
5-yr mean	30
35-yr mean	46
% Change from:	
2000	-60%
5-yr mean	-16%
35-yr mean	-45%

RANGE-WIDE	
1996	38
1997	32
1998	66
1999	62
2000	70
2001	35
5-yr mean	54
35-yr mean	58
% Change from:	
2000	-50%
5-yr mean	-35%
35-yr mean	-40%

EAST CENTRAL	
1996	35
1997	21
1998	59
1999	35
2000	72
2001	55
5-yr mean	45
35-yr mean	65
% Change from:	
2000	-24%
5-yr mean	+24%
35-yr mean	-15%



SOUTH CENTRAL	
1996	65
1997	69
1998	126
1999	79
2000	86
2001	26
5-yr mean	85
35-yr mean	75
% Change from:	
2000	-70%
5-yr mean	-69%
35-yr mean	-65%

CENTRAL	
1996	17
1997	23
1998	30
1999	56
2000	64
2001	46
5-yr mean	38
35-yr mean	47
% Change from:	
2000	-28%
5-yr mean	+21%
35-yr mean	-1%

SOUTHWEST	
1996	42
1997	20
1998	88
1999	136
2000	102
2001	49
5-yr mean	77
35-yr mean	45
% Change from:	
2000	-52%
5-yr mean	-33%
35-yr mean	+9%

SOUTHEAST	
1996	53
1997	46
1998	83
1999	56
2000	36
2001	18
5-yr mean	55
35-yr mean	77
% Change from:	
2000	-51%
5-yr mean	-68%
35-yr mean	-77%

Figure 1. Ring-necked pheasants seen per 100 miles of August roadside surveys (1996-2001) and percent change from 2000, 5-yr mean, and 35-yr mean.

Table 1. County, regional, and range-wide August roadside-count indices for ring-necked pheasants in Minnesota, 1996-2001.

Region County	No. routes[a] (2001)	Pheasants observed/100 miles							Percent change[b] (2000-2001)		
		1996	1997	1998	1999	2000	2001	5-yr mean (1996-2000)	% change	95% CI	n
West Central	36	22.9	8.2	25.0	30.6	62.6	25.1	29.9	-59.5	-108 to -11	33
Big Stone	3	0	0	7	1	49	31				
Chippewa	2	58	22	56	44	176	58				
Clay	3	0	0	0	0	0	4				
Douglas	2	8	0	18	20	6	13				
Grant	2	0	0	0	24	2	0				
Lac Qui Parle	3	98	31	39	53	163	91				
Norman	2	0	0	0	0	0	0				
OtterTail	2	10	0	0	2	6	0				
Pope	3	4	35	44	80	153	24				
Stevens	3	23	5	0	1	57	0				
Swift	3	19	4	79	55	5	71				
Traverse	3	0	0	0	0	12	9				
Wilkin	2	0	0	0	0	0	0				
Yellow Med.	3	81	9	83	115	184	24				
Central	31	17.3	23.0	30.2	55.6	64.1	46.1	38.0	-26.7	-55 to +2	30
Benton	2	0	18	60	72	104	60				
Carver	2	52	--	60	42	34	0				
Kandiyohi	3	55	24	63	112	113	95				
McLeod	2	17	20	2	54	88	70				
Meeker	3	37	57	39	151	61	77				
Morrison	2	6	32	4	50	84	6				
Renville	2	26	14	2	12	6	6				
Scott	2	19	36	24	28	22	30				
Sherburne	2	0	0	20	2	18	0				
Sibley	3	0	24	72	23	72	49				
Stearns	4	1	11	5	62	80	49				
Todd	2	0	0	0	4	24	68				
Wright	2	0	40	26	46	84	45				

(Table 1. Continued.)

Region County	No. routes[a] (2001)	Pheasants observed/100 miles							Percent change[b] (2000-2001)		
		1996	1997	1998	1999	2000	2001	5-yr mean (1996-2000)	% change	95% CI	n
East Central	17	35.4	21.2	58.8	34.8	72.2	55.0	44.5	-23.9	-68 to +20	17
Anoka	2	0	0	26	14	14	25				
Chisago	3	116	68	131	68	144	91				
Hennepin	1	77	16	80	0	0	24				
Isanti	3	9	0	21	25	23	47				
Kanabec	2	0	28	58	20	94	34				
Mille Lacs	2	32	12	72	34	104	114				
Pine	2	28	20	56	84	144	64				
Washington	2	16	10	20	4	8	12				
Southwest	19	41.6	20.0	88.2	135.6	101.7	48.7	77.4	-52.1	-86 to -18	19
Cottonwood	2	147	38	374	422	210	92				
Jackson	2	38	28	126	52	42	84				
Lincoln	2	46	14	62	56	80	4				
Lyon	2	16	2	2	136	118	34				
Murray	2	10	2	30	178	110	26				
Nobles	3	32	25	79	132	103	12				
Pipestone	2	52	18	18	32	96	68				
Redwood	2	22	32	20	128	48	18				
Rock	2	16	18	88	86	108	117				
South Central	32	65.0	68.6	126.1	79.0	86.1	26.3	85.0	-69.4	-99 to -40	32
Blue Earth	3	126	20	143	73	79	24				
Brown	3	49	69	135	184	213	59				
Faribault	3	48	60	89	83	40	6				
Freeborn	3	92	43	92	9	20	12				
LeSueur	3	147	200	128	75	96	60				
Martin	3	50	64	115	95	136	45				
Nicollet	3	15	1	41	36	17	24				
Rice	3	59	100	187	93	115	9				
Steele	2	38	92	186	60	42	14				
Waseca	3	52	72	173	124	92	29				
Watonwan	3	29	41	119	31	83	3				

(Table 1. Continued.)

Region County	No. routes[a] (2001)	Pheasants observed/100 miles							Percent change[b] (2000-2001)		
		1996	1997	1998	1999	2000	2001	5-yr mean (1996-2000)	% change	95% CI	n
Southeast	20	53.1	46.2	82.7	56.2	35.6	17.5	54.8	-50.8	-87 to -14	19
Dakota	2	84	36	24	18	20	30				
Dodge	2	110	42	106	118	40	41				
Fillmore	2	15	68	122	38	22	0				
Goodhue	2	2	24	78	20	12	0				
Houston	2	22	8	46	38	0	0				
Mower	3	56	88	95	108	69	49				
Olmsted	3	85	59	157	88	60	0				
Wabasha	2	86	46	56	36	46	12				
Winona	2	0	18	4	0	22	18				
Range-wide	155	38.2	31.6	65.7	62.4	70.1	34.8	53.6	-50.2	-66 to -35	150

[a] Each route was approximately 25 miles long.

[b] Percent change only for routes surveyed in both years (n).

Table 2. Range-wide[a] pheasant population parameters calculated from August roadside surveys, 1996-2001.

Population parameter	Year						5-yr mean	Percent change[b]
	1996	1997	1998	1999	2000	2001	1996-00	2000-2001
Cocks/100 Miles	3.0	3.4	4.2	5.4	6.5	4.4	4.5	- 32
Hens/100 Miles	4.9	3.8	8.7	9.5	11.0	4.5	7.6	- 59
Broods/100 Miles	5.5	4.6	9.9	9.7	11.8	5.0	8.3	- 58
Mean Brood Size	5.5	5.3	5.3	4.9	4.4	5.2	5.1	+ 17
Broods/100 Hens	112.0	121.0	115.0	103.0	108.0	112.1	111.8	+ 4
Median Hatch Date	Jun 7	Jun 7	Jun 2	Jun 8	Jun 4	Jun 9	Jun 5	

[a] Does not include the Northwest agricultural region.

[b] Percent change only for routes surveyed in both years.

Table 3. Regional and range-wide August roadside indices for gray (Hungarian) partridge, 1996-2001.

Agricultural Region	Number routes[a] (2001)	Gray partridge observed/100 miles							Percent change[b]
		1996	1997	1998	1999	2000	2001	5-yr mean (1996-00)	2000-2001
Northwest	19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
West Central	33	1.0	0.2	1.7	2.4	4.2	2.7	1.9	- 37
Central	30	0.1	3.1	7.6	9.9	0.9	8.1	4.3	+800
East Central	17	0.0	0.0	0.2	0.0	0.2	0.0	0.1	-100
Southwest	19	7.9	18.5	65.5	96.0	45.9	19.1	46.8	- 59*
South Central	32	15.4	35.4	43.4	36.4	13.0	11.6	28.7	- 11
Southeast	19	22.5	18.4	9.5	9.4	5.0	5.0	13.0	0
Range-wide[c]	174	6.5	11.4	18.0	20.6	9.0	6.8	13.1	- 25

[a] Each route was approximately 25 miles long.

[b] Percent change only for routes surveyed in both years (2000-2001).

[c] Includes the Northwest agricultural region.

* $P < 0.05$, paired-t test.

Table 4. Regional and range-wide gray (Hungarian) partridge population parameters calculated from August roadside surveys, 2001.

Agricultural region	Partridge/100 miles		Brood size			Broods per 100 adults	Median hatch date
	Adults	Broods	n	Mean	SE		
Northwest	0.0	0.0	0				
West Central	0.4	0.2	2	10.0	3.0	50.0	July 4
Central	1.9	0.5	4	12.0	2.3	26.7	June 2
East Central	0.0	0.0	0				
Southwest	6.3	1.9	9	6.8	1.6	30.0	July 3
South Central	3.2	1.0	8	8.4	1.2	30.8	June 30
Southeast	2.0	0.6	2	5.0	5.0	22.2	June 19
Range-wide[a]	1.9	0.6	25	8.5	0.9	29.8	June 24

[a] Includes the Northwest agricultural region.

Table 5. August roadside indices for selected farmland-wildlife species by agricultural region, 2000-2001.

Agricultural region	No. routes[a] (2001)	Animals observed/100 miles											
		Eastern cottontail			White-tailed jackrabbit			Mourning dove			White-tailed deer		
		2000	2001	Percent change[b]	2000	2001	Percent change[b]	2000	2001	Percent change[b]	2000	2001	Percent change[b]
Northwest	19	1.5	0.8	-43	0.2	1.0	+396	120.0	65.9	-45	32.4	59.4	+83
West Central	36	5.7	1.1	-78	1.0	1.1	-11	324.1	197.0	-39	14.0	9.0	-37
Central	31	7.5	6.1	-21	0.1	0.4	+200	172.9	171.6	-1	7.0	4.8	-32
East Central	17	17.9	9.1	-49	0.0	0.0		79.1	74.5	-6	17.2	16.0	-7
Southwest	19	14.9	4.4	-71	0.2	1.7	+700	333.5	278.6	-17	8.8	11.1	+25
South Central	32	9.8	6.2	-36	0.3	0.3	0	202.9	211.8	+4	4.4	4.7	+8
Southeast	20	7.7	6.2	-21	0.2	0.0	-100	168.4	161.5	-7	13.6	12.7	-11
Range-wide[c]	174	8.7	4.6	-47	0.3	0.6	+73	211.8	173.8	-17	12.7	14.3	+12

[a] Each route was approximately 25 miles long.

[b] Percent change only for routes surveyed in both years.

[c] Includes the Northwest agricultural region.

Table 6. Range-wide August roadside indices for selected farmland-wildlife species, 1996-2001.

Species	Animals observed/100 miles						Percent change[a]
	1996	1997	1998	1999	2000	2001	2000-2001
Ring-necked pheasant[b]	38.2	31.6	65.7	62.4	70.1	34.8	-50
Gray (Hungarian) partridge	6.5	11.4	18.0	20.6	9.0	6.8	-25
Mourning dove	203.6	219.6	244.0	220.1	211.8	173.8	-17
Eastern cottontail	5.0	3.2	4.5	6.7	8.7	4.6	-47
White-tailed jack rabbit	0.5	0.4	0.3	0.5	0.3	0.6	+73
White-tailed deer	11.1	10.9	8.2	9.1	12.7	14.3	+12
Sharp-tailed grouse	0.0	0.0	0.0	<0.1	0.1	0.1	+152
Greater prairie-chicken	0.0	0.0	<0.1	0.0	0.1	0.1	+100
Sandhill crane	2.7	3.2	5.1	6.0	3.7	7.2	+93
Badger	<0.1	<0.1	<0.1	0.0	0.0	0.0	0
Gray and fox squirrel	0.4	1.0	0.5	0.7	0.4	1.2	+171
Gray and red fox	0.5	0.1	0.3	0.4	0.1	0.1	0
Striped and spotted skunk	0.2	0.2	0.4	0.4	0.3	0.1	-41

[a] Percent change only for routes surveyed in both years. Annual percent change for species with low detection rates should be interpreted cautiously.

[b] Ring-necked pheasant indices do not include the Northwest agricultural region.

Table 7. Range-wide[a] August roadside indices for 5 species in the agricultural zone of Minnesota, 1955-2001.

Year	Animals observed/100 miles									
	Ring-necked pheasant	Gray partridge		Eastern cottontail		White-tailed jackrabbit		Mourning dove		
1955	368.1	9.9		17.8		7.0		324.5		
1956	290.0	6.6		13.0		5.6		422.6		
1957	272.6	5.5		11.2		6.3		274.5		
1958	409.1	8.7		14.8		8.5		326.0		
1959	266.8	9.3		6.2		4.0		311.4		
1960	276.3	4.4		9.8		3.6		300.8		
1961	336.0	4.5		9.4		3.5		392.4		
1962	197.4	5.8		7.9		2.7		334.6		
1963	248.1	5.1		7.4		3.6		396.5		
1964	149.8	1.6		5.4		2.0		375.9		
1965	77.2	3.6		4.4		1.6		271.6		
1966	105.0	4.9		5.6		1.8		299.6		
1967	61.9	4.6		5.5		2.8		---		
1968	71.4	3.5		5.8		1.9		293.5		
1969	39.2	3.7		5.1		2.7		245.6		
1970	69.6	9.1		4.9		1.8		348.3		
1971	66.4	10.8		3.7		2.1		415.4		
1972	47.3	7.5		3.9		1.9		349.8		
1973	63.3	19.1		5.8		1.9		428.2		
1974	76.3	12.0		6.2		1.5		380.8		
1975	34.8	14.6		3.3		1.3		405.8		
1976	44.8	17.6		5.2		2.2		407.4		
1977	85.0	32.1		6.8		2.4		409.8		
1978	79.0	37.0		8.9		3.8		344.5		
1979	54.2	33.9		7.3		3.7		347.9		
1980	104.9	44.6		6.4		2.8		352.2		
1981	133.5	42.9		10.2		2.5		347.6		
1982[b]	60.2	24.5	(22.1)	5.6	(5.2)	1.8	(1.7)	325.0	(313.6)	
1983	56.2	24.4	(23.4)	7.2	(6.7)	1.0	(1.0)	298.9	(286.6)	
1984	28.6	21.3	(20.0)	3.3	(2.9)	0.9	(0.8)	292.0	(279.2)	
1985	34.6	40.7	(37.0)	4.8	(4.4)	1.3	(1.2)	273.7	(270.1)	
1986	21.2	22.4	(20.6)	4.4	(4.0)	0.4	(0.5)	207.0	(204.1)	
1987	50.0	37.1	(33.4)	7.7	(6.9)	0.7	(0.7)	257.1	(252.4)	
1988	34.8	41.5	(37.3)	4.3	(4.0)	0.7	(0.7)	252.3	(245.0)	
1989	39.8	41.5	(39.7)	5.9	(5.4)	1.7	(1.6)	297.9	(283.4)	
1990	57.5	37.1	(35.2)	7.3	(6.7)	1.4	(1.4)	266.0	(255.6)	
1991	76.9	21.5	(20.9)	5.7	(5.3)	0.7	(0.8)	252.8	(248.3)	
1992	44.2	7.4	(6.7)	5.2	(4.7)	0.6	(0.6)	224.7	(222.2)	
1993	24.3	2.7	(2.4)	4.2	(3.8)	0.2	(0.2)	139.8	(133.5)	
1994	44.7	14.0	(12.5)	3.8	(3.4)	0.4	(0.4)	179.7	(167.1)	

(Table 7. Continued)

Year	Animals observed/100 miles									
	Ring-necked pheasant	Gray partridge		Eastern cottontail		White-tailed jackrabbit		Mourning dove	
1995	58.9	11.1	(9.8)	4.9	(4.4)	0.4	(0.4)	184.1	(173.4)
1996	38.2	7.4	(6.5)	5.6	(5.0)	0.5	(0.5)	219.4	(203.6)
1997	31.6	12.8	(11.4)	3.6	(3.2)	0.4	(0.4)	232.0	(219.6)
1998	65.7	20.2	(18.0)	5.0	(4.5)	0.4	(0.3)	263.8	(244.0)
1999	62.4	23.2	(20.6)	7.5	(6.7)	0.5	(0.5)	238.4	(220.1)
2000	70.1	10.1	(9.0)	9.6	(8.7)	0.4	(0.3)	223.0	(211.8)
2001	34.8	7.6	(6.8)	5.1	(4.6)	0.6	(0.6)	187.0	(173.8)

[a] Range-wide estimates do not include the Northwest agricultural region unless the estimates are in parentheses.

[b] Eight counties in the Northwest agricultural region were added to the August Roadside Count in 1982. Numbers in parentheses are estimates that include the Northwest agricultural region.

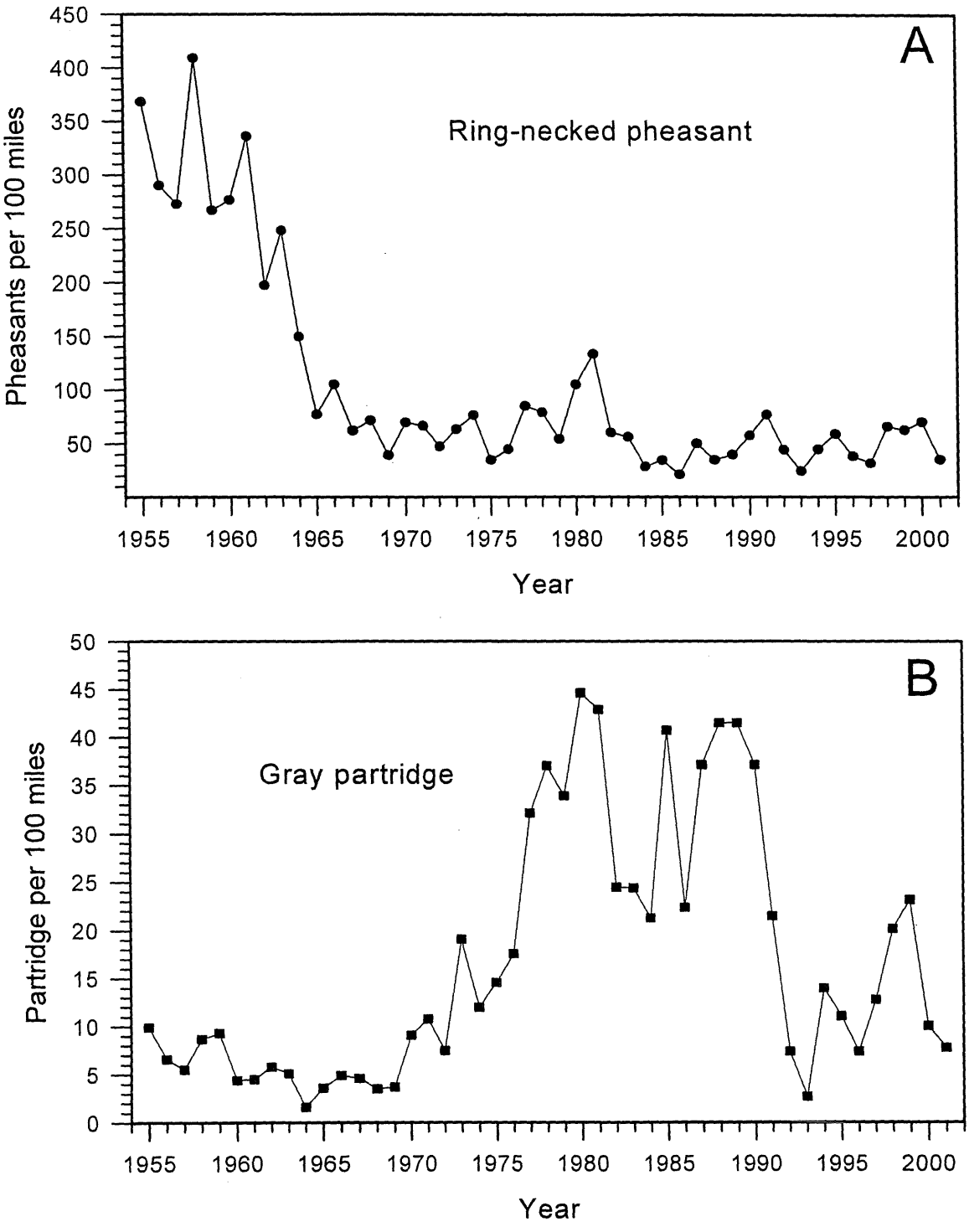


Figure 2. August roaside indices (birds seen per 100 miles driven) for (A) Ring-necked pheasant and (B) Gray partridge, 1955-2001. Indices do not include the Northwest agricultural region.

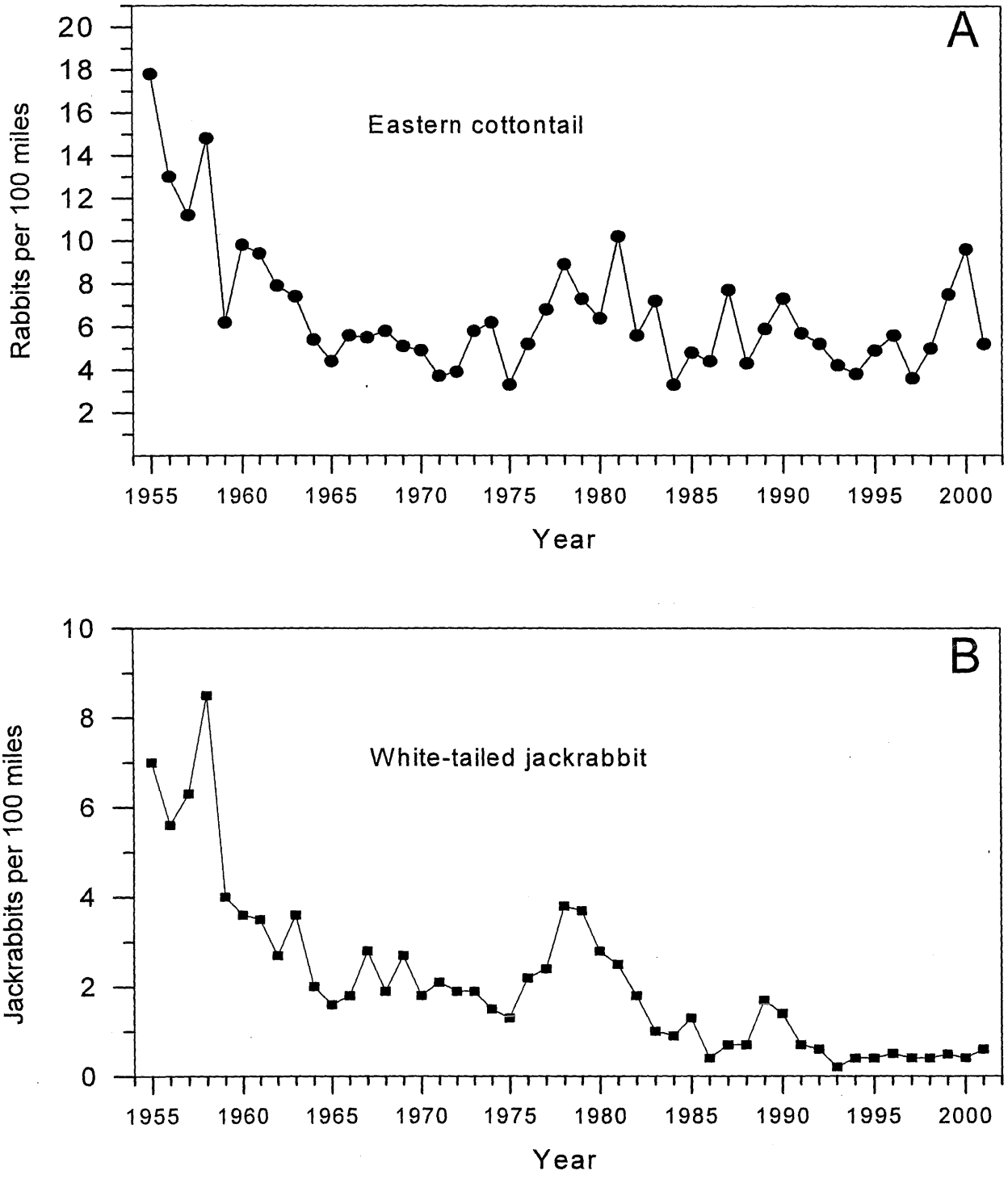


Figure 3. August roadside indices (animals seen per 100 miles driven) for (A) Eastern cottontail and (B) White-tailed jackrabbit, 1955-2001. Indices do not include the Northwest agricultural region.

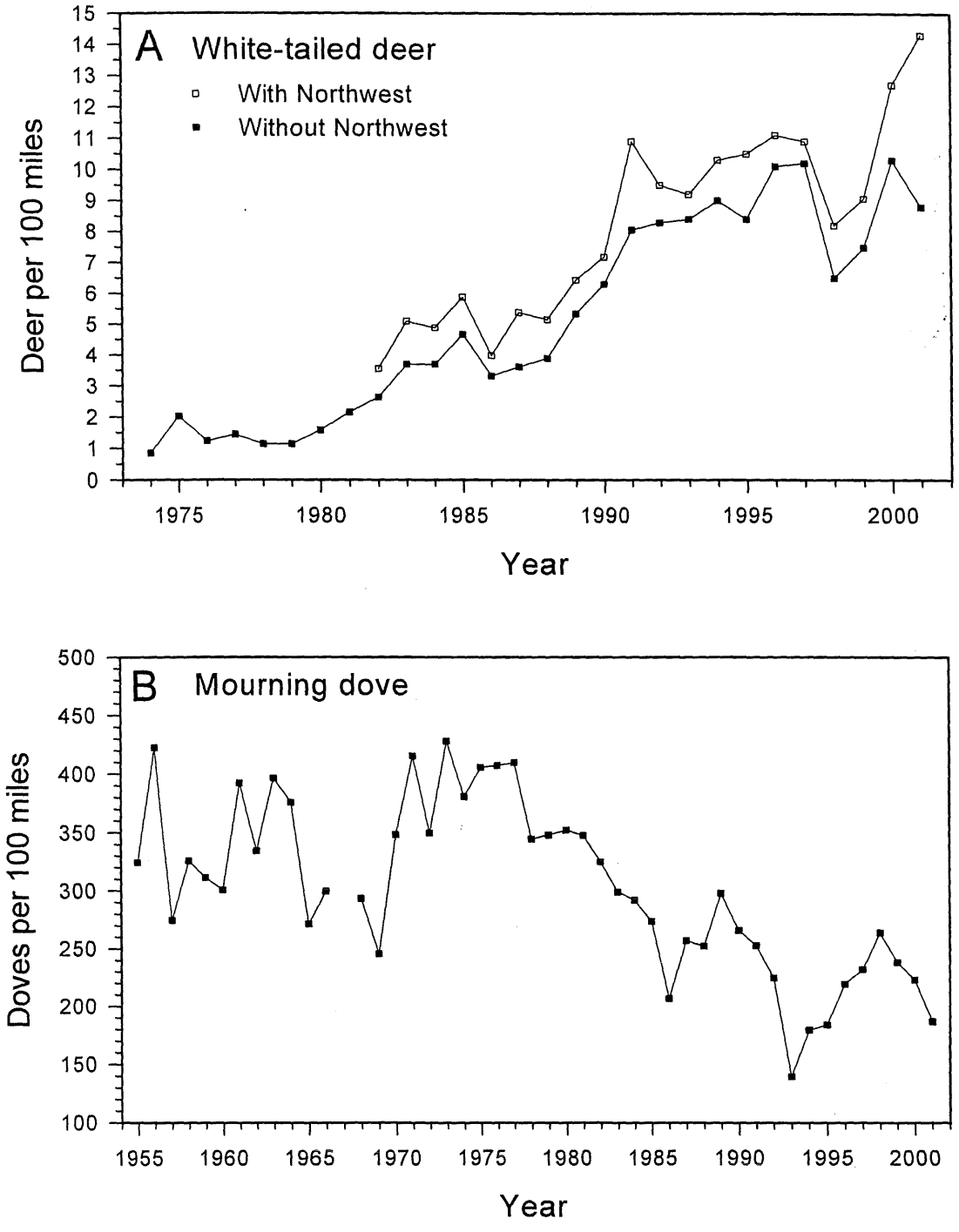


Figure 4. August roadside indices (animals seen per 100 miles driven) for (A) White-tailed deer, including and excluding the Northwest agricultural region, 1974-2001; and (B) Mourning dove, 1955-2001. Dove indices do not include the Northwest agricultural region. Doves were not counted in 1967.

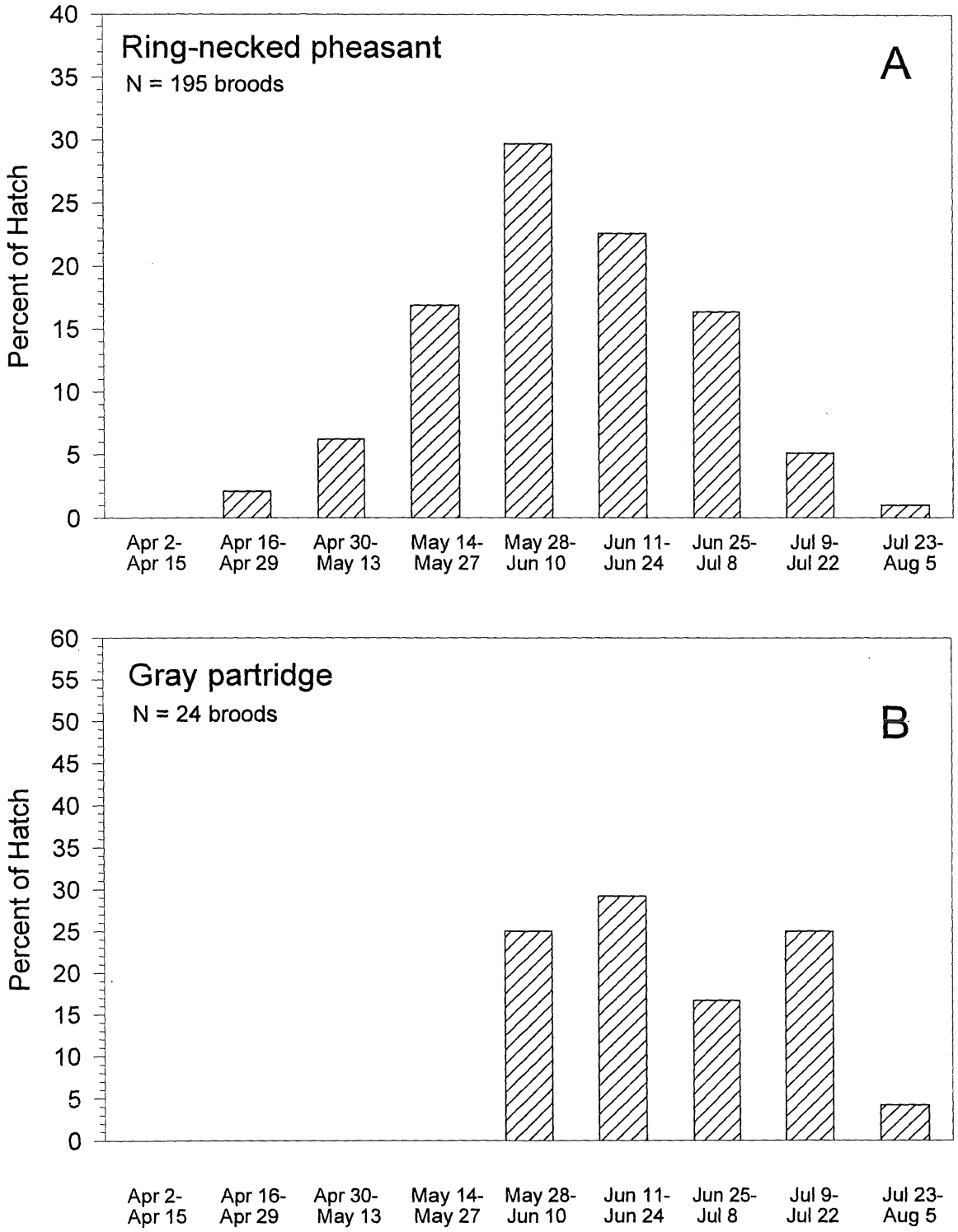


Figure 5. Biweekly distribution of (A) Ring-necked pheasant, and (B) Gray partridge hatch, 2001, based on August roadside surveys. Note: young broods are probably undercounted in August roadside surveys; thus the data may not accurately reflect hatching chronology in some years.

Table 8. Ring-necked pheasants seen per 100 miles of August roadside surveys in Minnesota, by agricultural region, 1955-2001.

Year	Agricultural region							Range[a] wide
	WC	C	EC	SW	SC	SE	NW	
1955	334.8	163.2	140.0	580.5	620.2	212.0	NO	368.1
1956	248.8	208.1	175.2	357.2	477.5	169.0	COUNT	290.0
1957	260.2	130.4	134.6	336.6	522.2	179.6		272.6
1958	490.3	261.9	300.0	473.4	592.9	125.6		409.1
1959	306.6	187.3	73.1	509.5	412.8	55.3		266.8
1960	367.0	243.4	202.5	294.3	356.8	37.7		276.3
1961	494.3	266.7	254.5	365.8	381.3	115.1		336.0
1962	264.2	140.5	143.8	214.7	239.3	114.0		197.4
1963	443.8	191.5	156.9	251.8	227.4	134.8		248.1
1964	224.5	83.1	26.3	185.3	211.1	83.8		149.8
1965	121.4	38.1	8.7	90.4	98.1	68.8		77.2
1966	109.6	67.2	26.3	108.8	175.5	101.8		105.0
1967	56.4	29.7	10.4	51.5	126.2	81.0		61.9
1968	64.9	39.7	16.9	78.1	124.7	94.0		71.4
1969	12.8	22.3	20.2	33.3	68.3	101.9		39.2
1970	19.7	26.9	8.9	55.2	108.6	194.2		69.6
1971	40.3	44.0	14.8	59.3	76.7	175.2		66.4
1972	19.9	28.0	44.0	37.3	66.7	104.8		47.3
1973	38.3	35.4	53.0	36.2	74.5	168.0		63.3
1974	50.6	73.3	84.7	59.8	93.0	107.5		76.3
1975	13.1	33.7	75.1	6.7	24.6	78.6		34.8
1976	11.9	28.1	68.2	2.1	82.8	80.8		44.8
1977	45.8	84.7	101.4	6.4	145.0	125.8		85.0
1978	36.1	79.9	178.4	23.2	106.0	77.2		79.0
1979	44.6	61.7	100.5	13.4	53.3	54.7		54.2
1980	78.8	116.8	221.2	19.5	110.0	84.9		104.9
1981	123.8	139.1	267.8	75.8	125.8	95.2		133.5
1982[b]	70.8	43.7	155.1	26.1	49.1	28.9	0.0	60.2
1983	89.7	51.5	107.3	10.1	24.9	51.4	0.0	56.2
1984	66.5	13.6	10.1	8.4	25.8	20.6	0.4	28.6
1985	62.9	16.3	41.3	14.3	29.6	31.6	2.5	34.6
1986	19.6	10.7	22.4	19.8	23.5	37.4	0.0	21.2
1987	79.5	36.4	24.5	60.4	41.7	39.0	0.0	50.0
1988	45.3	31.2	40.0	24.7	31.6	30.1	0.0	34.8
1989	33.1	42.3	53.6	32.0	39.6	43.4	0.0	39.8
1990	45.6	60.5	72.0	59.6	61.8	53.6	0.0	57.5
1991	78.0	80.0	88.2	83.6	79.0	51.0	0.0	76.9
1992	29.5	46.6	51.3	37.5	47.2	63.4	0.0	44.2
1993	11.0	23.1	20.2	15.6	30.8	52.2	0.0	24.3
1994	24.8	29.9	31.3	51.8	61.3	81.2	0.0	44.7
1995	21.4	39.5	25.3	65.9	101.9	109.2	0.0	58.9

Table 8. Continued.

Year	Agricultural region							Range[a] wide
	WC	C	EC	SW	SC	SE	NW	
1996	22.9	17.3	35.4	41.6	65.0	53.1	0.0	38.2
1997	8.2	23.0	21.2	20.0	68.6	46.2	0.0	31.6
1998	25.0	30.2	58.8	88.2	126.1	82.7	0.0	65.7
1999	30.6	55.6	34.8	135.6	79.0	56.2	0.0	62.4
2000	62.6	64.1	72.2	101.7	86.1	35.6	0.0	70.1
2001	25.1	46.1	55.0	48.7	26.3	17.5	0.0	34.8

[a] Range-wide means do not include the Northwest agricultural region.

[b] Eight counties in the Northwest agricultural region were added to the August roadside survey in 1982 for all species except the ring-necked pheasant.

Table 9. Gray partridge seen per 100 miles of August roadside surveys in Minnesota, by agricultural region, 1955-2001.

Year	Agricultural region							Range-wide mean	
	WC	C	EC	SW	SC	SE	NW	Without NW	With NW
1955	16.4	8.0	0.0	10.8	9.5	9.0	NO	9.9	
1956	2.9	8.3	0.0	14.7	6.0	7.8	COUNT	6.6	
1957	6.4	4.5	0.0	11.7	7.0	0.2		5.5	
1958	20.4	8.6	0.0	10.2	0.3	6.0		8.7	
1959	13.0	17.3	0.0	20.4	5.3	0.0		9.3	
1960	3.9	6.5	0.0	12.1	0.6	4.9		4.4	
1961	5.6	13.4	0.0	2.1	0.6	0.0		4.5	
1962	2.5	10.4	0.0	3.1	0.3	22.0		5.8	
1963	3.3	10.8	0.0	11.1	0.9	4.8		5.1	
1964	0.9	2.5	0.0	2.0	1.9	2.4		1.6	
1965	5.3	2.9	0.0	6.8	2.3	4.0		3.6	
1966	1.8	3.5	0.0	18.3	0.1	11.4		4.9	
1967	2.6	2.2	0.0	8.2	13.5	0.0		4.6	
1968	4.4	3.1	0.0	9.5	0.0	5.0		3.5	
1969	5.2	2.6	0.0	10.9	0.0	4.5		3.7	
1970	7.1	8.2	0.0	32.8	3.7	4.0		9.1	
1971	12.7	3.8	0.0	28.9	7.2	10.1		10.8	
1972	6.7	3.3	0.0	18.3	1.6	18.4		7.5	
1973	8.2	7.8	0.0	66.9	11.7	26.0		19.1	
1974	6.9	10.3	0.0	27.4	8.4	20.2		12.0	
1975	11.0	2.3	0.0	67.5	8.6	5.6		14.6	
1976	10.6	8.7	0.0	59.3	15.4	22.4		17.6	
1977	16.0	32.8	0.0	93.3	31.0	31.6		32.1	
1978	26.1	22.6	0.2	144.2	30.7	14.8		37.0	
1979	43.0	24.3	0.0	88.5	34.8	12.2		33.9	
1980	57.9	41.7	0.0	99.0	41.2	27.6		44.6	
1981	38.1	26.8	0.5	138.7	44.4	19.0		42.9	
1982[a]	23.6	23.0	0.7	69.7	17.1	16.0	3.6	24.5	22.1
1983	29.3	18.7	0.0	64.6	22.8	8.0	15.2	24.4	23.4
1984	18.2	17.3	0.0	49.7	26.5	16.2	9.5	21.3	20.0
1985	30.7	17.5	0.0	94.9	63.3	42.2	2.2	40.7	37.0
1986	10.1	4.6	0.0	59.6	45.3	20.8	3.5	22.4	20.6
1987	14.7	15.1	0.0	99.2	47.0	66.6	3.6	37.1	33.4
1988	25.9	18.2	3.1	110.7	63.6	40.4	3.8	41.5	37.3
1989	20.0	13.1	0.0	93.5	84.1	42.0	24.8	41.5	39.7
1990	14.8	19.5	0.0	101.5	62.7	34.6	20.4	37.1	35.2
1991	15.5	11.6	0.7	66.5	23.9	18.4	15.3	21.5	20.9
1992	6.3	5.5	0.0	11.8	10.9	10.4	1.7	7.4	6.7
1993	0.8	1.9	0.0	3.2	1.0	11.8	0.0	2.7	2.4
1994	2.2	7.4	0.0	36.0	22.1	23.4	0.2	14.0	12.5
1995	2.1	2.8	0.0	23.5	24.5	15.0	0.0	11.1	9.8
1996	1.0	0.1	0.0	7.9	15.4	22.5	0.0	7.4	6.5
1997	0.2	3.1	0.0	18.5	35.4	18.4	0.0	12.8	11.4
1998	1.7	7.6	0.2	65.5	43.4	9.5	0.0	20.2	18.0
1999	2.4	9.9	0.0	96.0	36.4	9.4	0.0	23.2	20.6
2000	4.2	0.9	0.2	45.9	13.0	5.0	0.0	10.1	9.0
2001	2.7	8.1	0.0	19.1	11.6	5.0	0.0	7.6	6.8

[a] Eight counties in the Northwest agricultural region were added to the August roadside surveys in 1982.

Table 10. Eastern cottontails seen per 100 miles of August roadside surveys in Minnesota, by agricultural region, 1955-2001.

Year	Agricultural region							Range-wide mean	
	WC	C	EC	SW	SC	SE	NW	Without NW	With NW
1955	8.1	15.0	14.5	20.3	19.6	32.0	NO	17.8	
1956	9.6	16.2	12.4	16.2	12.8	12.7	COUNT	13.0	
1957	6.6	9.7	8.3	18.3	13.7	14.0		11.2	
1958	12.8	13.5	16.2	22.1	17.2	6.5		14.8	
1959	5.0	16.0	5.6	6.5	5.3	2.2		6.2	
1960	5.9	13.6	6.4	15.6	11.9	4.9		9.8	
1961	6.2	12.4	6.1	13.8	10.9	5.6		9.4	
1962	5.6	7.3	4.2	12.6	10.0	8.2		7.9	
1963	6.8	4.2	4.9	11.6	9.3	8.6		7.4	
1964	5.2	3.3	1.0	11.8	6.6	5.4		5.4	
1965	3.9	4.4	0.9	5.4	5.7	5.8		4.4	
1966	5.3	3.2	1.8	9.5	7.5	6.0		5.6	
1967	5.8	4.6	2.1	7.1	8.7	3.2		5.5	
1968	4.6	3.2	3.5	9.3	8.8	5.8		5.8	
1969	3.6	3.9	0.9	9.5	8.3	4.5		5.1	
1970	3.6	5.0	1.5	6.9	5.7	6.2		4.9	
1971	4.8	2.6	1.5	6.7	3.2	2.1		3.7	
1972	3.8	4.7	3.6	4.8	3.5	3.5		3.9	
1973	5.0	8.6	6.0	6.5	5.4	4.2		5.8	
1974	3.4	6.5	14.2	6.5	6.1	6.4		6.2	
1975	2.3	4.4	8.3	1.6	1.5	3.1		3.3	
1976	3.7	5.5	6.5	2.1	6.1	7.6		5.2	
1977	4.8	6.7	12.9	6.4	4.9	7.8		6.8	
1978	5.0	8.6	21.4	11.8	7.3	4.6		8.9	
1979	4.6	7.7	7.5	12.7	8.0	4.4		7.3	
1980	4.4	7.0	9.9	6.7	7.2	3.8		6.4	
1981	7.0	10.3	18.1	9.9	8.4	12.0		10.2	
1982[a]	4.8	6.6	7.8	3.2	6.7	4.9	1.9	5.6	5.2
1983	7.0	5.9	13.2	5.7	3.6	12.2	1.9	7.2	6.7
1984	2.4	2.0	3.5	3.8	4.1	4.8	0.2	3.3	2.9
1985	2.4	4.4	4.7	6.5	5.7	7.6	0.2	4.8	4.4
1986	1.5	4.8	5.9	6.3	5.3	4.8	0.2	4.4	4.0
1987	5.7	7.0	11.5	8.2	6.6	10.6	0.6	7.7	6.9
1988	2.7	3.2	6.4	6.4	3.9	5.9	1.3	4.3	4.0
1989	3.6	5.9	8.9	6.7	4.2	9.2	1.3	5.9	5.4
1990	3.6	6.3	10.6	4.0	6.6	16.8	1.9	7.3	6.7
1991	2.8	5.8	8.9	4.2	6.0	9.2	2.0	5.7	5.3
1992	3.0	6.1	8.5	4.0	4.7	7.2	0.4	5.2	4.7
1993	1.1	3.1	8.5	2.1	5.7	7.8	0.4	4.2	3.8
1994	1.1	4.0	4.9	2.3	5.4	6.4	0.0	3.8	3.4
1995	2.3	3.7	6.7	4.2	6.5	8.1	0.6	4.9	4.4

(Table 10. Continued.)

Year	Agricultural region							Range-wide mean	
	WC	C	EC	SW	SC	SE	NW	Without NW	With NW
1996	1.4	2.9	7.5	6.6	10.5	6.5	0.2	5.6	5.0
1997	1.2	3.3	5.4	2.3	4.9	5.6	0.2	3.6	3.2
1998	2.8	2.1	4.5	7.2	7.6	8.0	0.6	5.0	4.5
1999	3.0	7.7	9.4	10.1	8.6	9.0	0.6	7.5	6.7
2000	5.7	7.5	17.9	14.9	9.8	7.7	1.5	9.6	8.7
2001	1.1	6.1	9.1	4.4	6.2	6.2	0.8	5.1	4.6

[a] Eight counties in the Northwest agricultural region were added to the August roadside surveys in 1982.

Table 11. White-tailed jackrabbits seen per 100 miles of August roadside surveys in Minnesota, by agricultural region, 1955-2001.

Year	Agricultural region							Range-wide mean	
	WC	C	EC	SW	SC	SE	NW	Without NW	With NW
1955	9.0	2.6	1.5	13.0	10.6	1.6	NO	7.0	
1956	5.8	3.7	1.9	10.1	7.7	2.4	COUNT	5.6	
1957	4.8	5.2	0.9	19.5	6.1	1.3		6.3	
1958	7.3	6.4	0.7	20.1	11.9	0.9		8.5	
1959	1.4	0.7	0.4	15.4	7.8	0.6		4.0	
1960	3.7	4.8	0.2	9.8	2.5	0.2		3.6	
1961	3.7	5.0	0.0	6.5	3.5	0.2		3.5	
1962	4.2	2.3	0.2	4.5	2.8	0.7		2.7	
1963	9.7	2.2	0.0	2.4	3.0	1.0		3.6	
1964	2.9	1.3	0.0	3.7	2.4	0.6		2.0	
1965	1.9	1.9	0.2	4.2	1.2	0.4		1.6	
1966	2.3	1.8	0.2	4.6	1.1	0.6		1.8	
1967	5.3	1.2	0.2	4.2	4.0	0.0		2.8	
1968	1.7	0.8	0.0	6.9	1.9	1.0		1.9	
1969	3.1	0.7	0.5	10.1	1.8	0.7		2.7	
1970	4.0	1.5	0.0	1.9	1.3	0.4		1.8	
1971	5.3	1.6	0.0	2.9	0.8	0.0		2.1	
1972	3.6	1.3	0.0	1.5	2.1	0.5		1.9	
1973	4.0	0.2	0.0	2.9	1.7	0.2		1.9	
1974	3.9	1.5	0.0	1.5	0.7	0.0		1.5	
1975	3.2	0.6	0.3	2.1	0.2	0.2		1.3	
1976	4.4	0.6	0.0	5.2	1.7	1.2		2.2	
1977	3.5	2.8	0.2	4.9	1.6	0.8		2.4	
1978	3.4	2.8	0.7	13.1	3.0	1.0		3.8	
1979	4.6	5.3	0.5	6.4	2.7	1.1		3.7	
1980	3.7	1.2	1.2	8.3	1.5	2.7		2.8	
1981	2.1	2.2	0.0	7.2	1.5	3.0		2.5	
1982[a]	2.6	0.9	0.5	4.6	1.1	0.9	1.5	1.8	1.7
1983	2.3	0.9	0.0	0.0	0.9	0.8	1.3	1.0	1.0
1984	1.5	0.8	0.0	1.7	0.4	0.6	0.4	0.9	0.8
1985	1.7	0.4	0.0	3.2	1.5	0.7	1.0	1.3	1.2
1986	0.4	0.4	0.0	0.6	0.9	0.0	1.0	0.4	0.5
1987	1.2	0.3	0.0	0.4	1.0	1.0	0.4	0.7	0.7
1988	0.6	0.4	0.0	2.0	1.0	0.4	0.6	0.7	0.7
1989	2.6	1.1	0.0	2.1	2.4	0.6	1.1	1.7	1.6
1990	2.2	0.4	0.2	1.3	2.1	1.2	2.1	1.4	1.4
1991	1.4	0.7	0.0	0.4	0.4	0.4	2.3	0.7	0.8
1992	0.3	0.8	0.0	1.1	0.8	0.4	0.4	0.6	0.6
1993	0.0	0.3	0.0	0.2	0.2	0.4	0.6	0.2	0.2
1994	0.6	0.1	0.2	0.2	1.0	0.0	0.0	0.4	0.4
1995	0.4	0.3	0.0	0.2	1.0	0.4	0.2	0.4	0.4

(Table 11. Continued.)

Year	Agricultural region							Range-wide mean	
	WC	C	EC	SW	SC	SE	NW	Without NW	With NW
1996	0.8	0.1	0.0	0.2	1.0	0.2	0.8	0.5	0.5
1997	0.6	0.1	0.5	0.6	0.5	0.0	0.2	0.4	0.4
1998	1.0	0.3	0.0	0.4	0.1	0.0	0.0	0.4	0.3
1999	0.8	0.4	0.0	0.8	0.4	0.4	0.2	0.5	0.5
2000	1.0	0.1	0.0	0.2	0.3	0.2	0.2	0.4	0.3
2001	1.1	0.4	0.0	1.7	0.3	0.0	1.0	0.6	0.6

[a] Eight counties in the Northwest agricultural region were added to the August Roadside Count in 1982.

Table 12. Mourning doves seen per 100 miles of August roadside surveys in Minnesota, by agricultural region, 1955-2001.

Year	Agricultural region							Range-wide mean	
	WC	C	EC	SW	SC	SE	NW	Without NW	With NW
1955	334.8	274.6	116.0	539.1	395.7	196.8	NO	324.5	
1956	347.4	552.6	277.7	591.5	461.0	285.9	COUNT	422.6	
1957	303.3	245.9	167.7	243.3	382.8	200.4		274.5	
1958	350.2	296.8	192.3	270.1	455.6	292.8		326.0	
1959	377.4	307.3	220.9	358.0	447.3	94.4		311.4	
1960	273.7	333.5	121.7	336.8	430.4	186.7		300.8	
1961	377.3	372.7	135.7	480.8	563.0	316.7		392.4	
1962	338.1	337.5	215.3	312.5	395.7	314.3		334.6	
1963	636.2	273.2	212.0	506.2	435.4	313.4		396.5	
1964	680.6	256.5	167.1	399.7	395.3	217.4		375.9	
1965	311.7	244.5	185.2	460.0	217.2	270.8		271.6	
1966	363.4	210.2	152.0	505.3	310.9	229.3		299.6	
1967[a]									
1968	411.4	207.7	124.9	261.3	254.2	385.0		293.5	
1969	268.3	280.1	124.9	476.5	132.0	194.9		245.6	
1970	601.2	217.9	113.2	527.1	203.7	273.5		348.3	
1971	580.4	256.9	181.6	365.8	258.9	751.7		415.4	
1972	600.2	233.8	169.0	307.7	229.6	314.3		349.8	
1973	601.7	279.6	288.0	480.3	392.1	329.1		428.2	
1974	588.4	321.1	241.5	352.4	269.1	381.5		380.8	
1975	653.5	302.5	152.9	546.0	338.3	259.8		405.8	
1976	599.9	373.4	224.0	535.7	367.0	281.8		407.4	
1977	699.2	308.2	168.0	679.5	281.5	223.7		409.8	
1978	502.1	326.2	173.9	430.6	275.9	282.4		344.5	
1979	600.7	406.1	138.0	379.5	197.5	212.8		347.9	
1980	695.7	302.1	140.3	421.5	235.0	182.3		352.2	
1981	634.1	284.6	153.0	513.6	213.0	178.9		347.6	
1982[b]	557.3	242.8	175.1	304.0	277.7	213.1	225.1	325.0	313.6
1983	517.0	289.2	130.5	277.9	213.9	193.3	188.6	298.9	286.6
1984	530.9	233.2	128.7	267.4	183.2	269.0	175.6	292.0	279.2
1985	500.6	245.4	93.2	242.5	212.5	151.1	233.9	273.7	270.1
1986	325.0	180.1	115.1	204.0	160.5	180.4	176.8	207.0	204.1
1987	440.9	222.9	104.7	257.3	208.1	161.1	215.2	257.1	252.4
1988	385.7	203.9	121.5	300.0	202.6	210.2	184.4	252.3	245.0
1989	501.4	242.5	125.9	329.7	257.3	180.0	165.9	297.9	283.4
1990	443.1	232.4	128.0	159.4	175.5	353.4	170.3	266.0	255.6
1991	316.9	255.0	187.3	169.5	234.9	287.0	205.8	252.8	248.3
1992	261.2	241.2	134.8	198.3	222.3	236.6	202.1	224.7	222.2
1993	175.4	179.5	86.8	92.8	100.2	165.2	82.1	139.8	133.5
1994	282.4	189.4	86.6	158.5	133.5	153.2	63.6	179.7	167.1
1995	242.2	169.1	74.5	112.9	197.5	234.5	85.2	184.1	173.4

(Table 12. Continued.)

Year	Agricultural region							Range-wide mean	
	WC	C	EC	SW	SC	SE	NW	Without NW	With NW
1996	425.3	138.0	75.8	141.4	181.4	232.7	70.1	219.4	203.6
1997	368.4	169.0	111.3	309.5	195.6	162.0	120.4	232.0	219.6
1998	389.0	199.7	134.6	328.6	245.8	212.6	83.2	263.8	244.0
1999	340.8	223.5	64.7	318.3	212.4	195.6	72.0	238.4	220.1
2000	324.1	172.9	79.1	333.5	202.9	168.4	120.0	223.0	211.8
2001	197.0	171.6	74.5	278.6	211.8	161.5	65.9	173.8	187.0

[a] Mourning doves were not counted in 1967.

[b] Eight counties in the Northwest agricultural region were added to the August roadside surveys in 1982.

Table 13. Greater prairie-chicken spring booming ground counts for 14 northwestern counties. 1988-2000. (counts summarized by AWM Terry Wolfe, Crookston).

	Number of booming males (Number of booming grounds)												
County	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Becker	19 (3)	18 (3)	69 (7)	30 (3)	69 (6)	58 (10)	21 (3)	20 (3)	2 (1)	14 (1)	51 (5)	9 (1)	8 (1)
Cass	59 (13)	48 (9)	51 (8)	52 (12)	55 (10)	38 (8)	30 (5)	18 (5)	17 (2)	7 (2)	8 (3)	9 (3)	8 (3)
Chippewa	0	0	0	0	0	0	0	0	0	0	0	0	6 (1)
Clay	0	83 (8)	307 (18)	441 (28)	654 (45)	366 (36)	306 (31)	422 (38)	539 (46)	335 (32)	411 (39)	454 (32)	541 (44)
Hubbard	24 (4)	19 (5)	29 (5)	24 (5)	18 (2)	17 (3)	14 (3)	9 (3)	9 (3)	3 (1)	2 (1)	3 (1)	3 (1)
Lac qui Parle	0	0	0	0	0	0	0	0	0	0	0	0	4 (1)
Mahnomen	29 (5)	0	46 (6)	21 (3)	143 (13)	76 (76)	31 (4)	21 (6)	11 (2)	53 (4)	32 (3)	0 (0)	0 (0)
Marshall	0	0	1 (1)	0	0	0	0	0	0	0	0	0	0 (0)
Norman	111 (9)	73 (7)	145 (11)	215 (12)	339 (15)	221 (26)	248 (25)	278 (30)	314 (37)	160 (19)	260 (26)	274 (25)	263 (29)
Ottertail	21 (3)	0	0	1 (1)	4 (1)	16 (2)	5 (1)	0	28 (3)	19 (3)	58 (7)	56 (7)	75 (8)
Pennington	0	0	9 (1)	0	0	0	0	0	0	0	0	0	0
Polk	72 (10)	150 (17)	204 (23)	267 (25)	311 (27)	190 (22)	189 (18)	228 (27)	197 (19)	154 (21)	251 (25)	239 (21)	302 (33)
Red Lake	0	5 (1)	34 (6)	38 (6)	38 (5)	12 (2)	21 (3)	25 (4)	32 (4)	33 (6)	21 (3)	40 (6)	51 (7)
Wadena	99 (16)	59 (13)	134 (17)	145 (21)	38 (7)	43 (8)	12 (4)	9 (2)	15 (3)	18 (2)	0	0	12 (2)
Wilkin	58 (3)	100 (6)	199 (15)	228 (13)	244 (13)	142 (11)	207 (12)	213 (16)	283 (19)	138 (12)	368 (22)	335 (21)	296 (17)
Total	492 (66)	555 (69)	1228 (118)	1432 (129)	1913 (144)	1179 (138)	1084 (109)	1274 (133)	1447 (142)	934 (103)	1462 (134)	1419 (117)	1569 (147)
males/ground	7.4	8.0	10.4	11.1	13.3	8.5	9.9	9.6	10.2	9.1	10.9	12.1	10.7

[a] Data include only grounds on which counts were conducted. In several counties booming grounds were located but counts were not made, they are not included in the data presented.

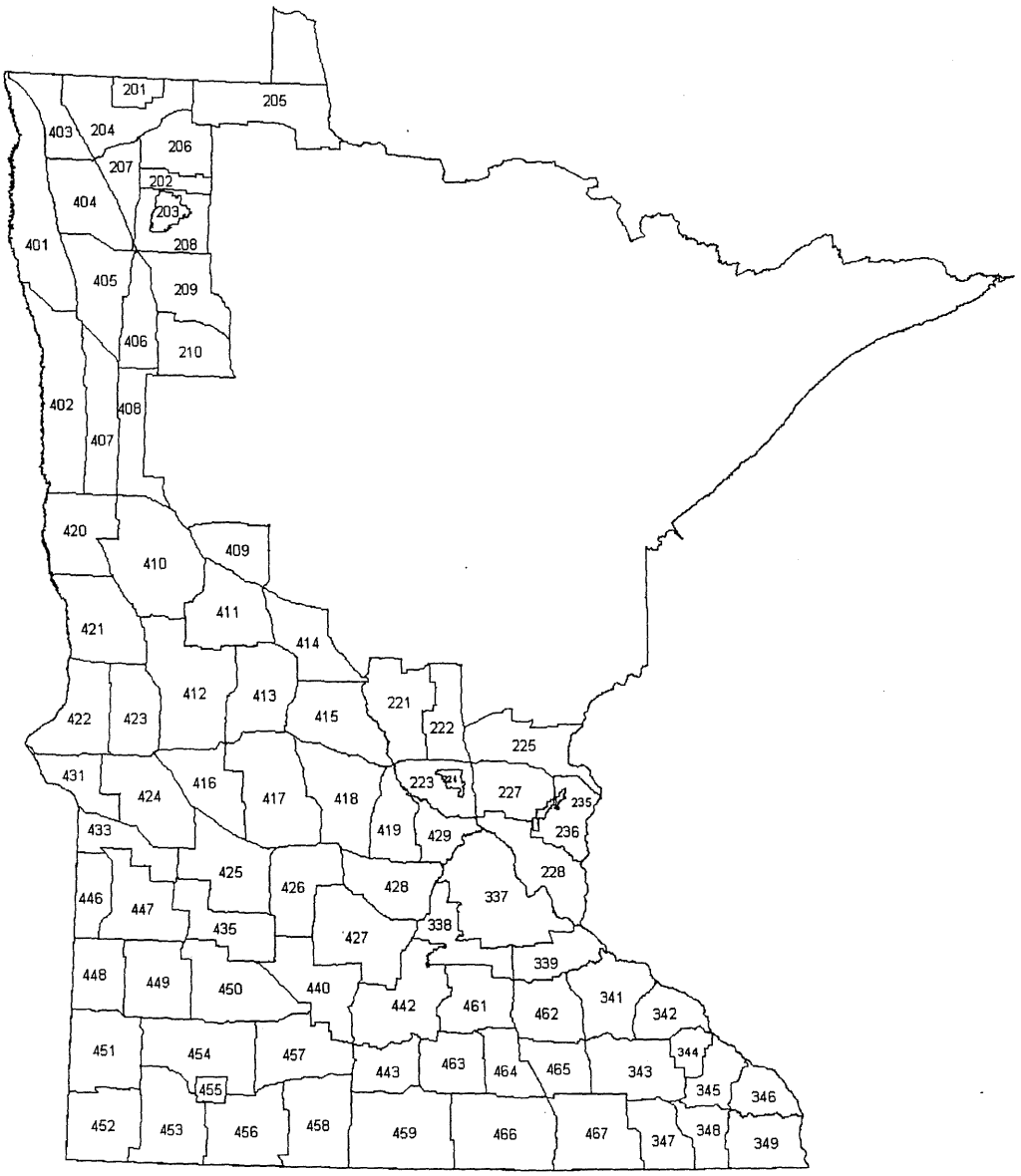


Figure 6. Deer Permit Areas in Minnesota's Farmland zone, 2001.

Table 14. Reproductive performance of white-tailed deer in Minnesota for the Northwest[a] Deer Management Unit (DMU), 1980-2001.

	Fawns			Adults		
Year	N	Percent pregnant	Fetuses per doe	N	Percent pregnant	Fetuses per doe
2001	4	0	0.00	8	100	1.75
2000	7	14	0.14	11	100	2.00
1999	5	0	0.00	14	100	1.57
1998	3	0	0.00	7	86	1.57
1997	4	0	0.00	12	100	1.50
1996	5	0	0.00	21	81	1.33
1995	4	25	0.25	6	100	2.00
1994	7	14	0.14	13	92	1.38
1993	7	0	0.00	11	100	1.64
1992	13	8	0.08	24	96	1.63
1991	11	9	0.09	15	87	1.60
1990	18	22	0.22	29	93	1.66
1989	14	21	0.29	27	93	1.70
1988	3	33	0.33	4	50	0.75
1987	3	0	0.00	5	100	1.6
1986	3	0	0.00	6	83	1.33
1985	6	17	0.17	11	91	1.73
1984	10	40	0.60	23	87	1.65
1983	15	27	0.27	26	85	1.60
1982	6	67	0.67	18	94	1.78
1981	4	0	0.00	11	100	1.73
1980	8	50	0.63	12	92	1.67
Mean (1980's)		29	0.35		90	1.64
Mean (1990's)		10	0.10		97	1.57

[a]Red River (East and West) and Agassiz DMUs were combined into the Northwest DMU due to the small sample sizes.

Table 15. Reproductive performance of white-tailed deer in Minnesota for the Big Woods Deer Management Unit, 1978-2001.

	Fawns			Adults		
Year	N	Percent pregnant	Fetuses per doe	N	Percent pregnant	Fetuses per doe
2001	36	14	0.14	65	94	1.66
2000	62	23	0.25	76	91	1.64
1999	49	37	0.43	95	91	1.61
1998	53	23	0.25	109	91	1.71
1997	40	33	0.35	96	88	1.64
1996	59	15	0.17	112	96	1.84
1995	21	19	0.19	54	91	1.78
1994	46	15	0.17	99	94	1.67
1993	47	38	0.43	95	93	1.67
1992	67	24	0.27	100	95	1.84
1991	50	20	0.22	71	96	1.76
1990	96	32	0.34	125	95	1.82
1989	51	31	0.31	85	96	1.82
1988	14	64	0.79	31	97	1.77
1987	45	44	0.47	146	94	1.78
1986	79	37	0.41	116	88	1.62
1985	60	50	0.57	105	96	1.80
1984	77	22	0.27	123	95	1.75
1983	83	55	0.67	167	95	1.77
1982	95	43	0.51	197	95	1.75
1981	78	58	0.63	132	92	1.68
1980	87	61	0.74	107	97	1.79
1979	87	30	0.32	119	92	1.70
1978	74	47	0.53	133	96	1.77
Mean (1980's)		46	0.52		94	1.75
Mean (1990's)		26	0.29		93	1.74

Table 16. Reproductive performance of white-tailed deer in Minnesota for the Prairie Deer Management Unit, 1978-2001.

	Fawns			Adults		
Year	N	Percent pregnant	Fetuses per doe	N	Percent pregnant	Fetuses per doe
2001	18	6	0.11	39	87	1.54
2000	13	23	0.38	23	87	1.61
1999	26	19	0.23	47	96	1.74
1998	18	17	0.17	38	97	1.66
1997	26	4	0.04	49	92	1.67
1996	28	14	0.14	30	90	1.57
1995	39	21	0.26	50	92	1.72
1994	32	16	0.22	46	98	1.89
1993	39	38	0.41	75	93	1.76
1992	37	19	0.22	51	94	1.92
1991	30	20	0.20	67	94	1.82
1990	43	42	0.44	62	97	1.84
1989	37	38	0.38	54	89	1.65
1988	20	40	0.45	16	100	1.87
1987	27	52	0.56	47	94	1.87
1986	25	64	0.76	56	93	1.70
1985	21	38	0.38	49	94	1.85
1984	30	23	0.27	69	84	1.61
1983	42	62	0.86	51	96	1.88
1982	50	46	0.56	85	94	1.88
1981	57	44	0.47	65	92	1.77
1980	51	63	0.67	55	91	1.69
1979	83	34	0.41	92	90	1.76
1978	25	44	0.56	69	100	1.87
Mean (1980's)		48	0.55		92	1.77
Mean (1990's)		23	0.25		94	1.77

Table 17. Pre-fawning deer density estimates[a] (deer/mi²) by deer management unit (DMU), sub-unit, (DMSU), and permit area (PA) in Minnesota's farmland zone, 1993-01.

DMU / DMSU / PA	Area (mi²)	Density								
		1993	1994	1995	1996	1997	1998	1999	2000	2001
RED RIVER										
West										
401	1,039	1.9	2.0	2.2	2.0	1.7	1.6	1.6	1.8	1.9
402	1,021	2.9	3.0	3.2	2.9	2.5	2.6	2.6	2.6	2.6
Total	2,060	2.4	2.5	2.7	2.4	2.1	2.1	2.1	2.2	2.2
East										
403	396	5.6	5.6	6.0	4.9	4.6	4.9	5.1	5.4	5.6
404	631	5.9	5.8	6.1	5.3	4.7	5.0	5.0	5.0	4.9
405	654	5.5	5.5	5.7	5.8	4.3	4.6	4.7	4.8	4.7
406	413	9.4	9.9	11.1	9.6	8.1	8.3	8.4	8.6	8.4
407	618	7.1	7.0	7.2	6.1	5.4	5.2	5.1	5.3	5.1
408	494	6.9	6.8	6.8	5.7	5.2	5.3	5.2	5.4	5.6
Total	3,206	6.6	6.6	7.0	5.9	5.3	5.4	5.4	5.6	5.6
RED RIVER TOTAL	5,266	5.0	5.0	5.3	4.5	4.0	4.1	4.1	4.3	4.3
AGASSIZ										
201	155	5.9	5.3	4.6	3.8	3.7	5.2	6.8	8.8	11.2
202	156	10.9	9.8	9.2	6.9	5.9	7.4	8.7	10.0	11.3
203	108	12.3	10.9	9.8	7.0	7.6	10.3	13.3	17.0	21.6
204	718	7.0	7.0	6.7	5.5	4.6	5.1	5.4	5.5	5.6
205	642	10.8	11.0	10.5	8.0	6.6	7.5	7.9	8.3	8.4
206	471	8.1	7.6	7.6	6.1	4.9	5.4	5.9	6.5	6.8
207	300	8.1	7.6	7.2	5.8	5.3	6.0	6.6	7.2	7.7
208	448	3.9	3.7	3.4	2.6	2.4	3.0	3.6	4.1	4.5
209	576	5.3	5.2	5.4	4.4	4.0	4.3	4.3	4.2	4.3
210	485	9.4	9.4	9.4	7.8	7.1	7.3	7.2	6.8	6.8
AGASSIZ TOTAL	4,059	7.6	7.4	7.1	5.7	5.1	5.7	6.2	6.6	7.0

Table 17. (Cont.)

DMU / DMSU / PA	Area (mi^2)	Density								
		1993	1994	1995	1996	1997	1998	1999	2000	2001
BIG WOODS										
North										
409	417	19.1	20.4	22.3	22.8	20.7	18.9	19.2	20.3	17.5
410	924	11.3	11.2	11.3	10.6	9.8	9.8	10.7	11.4	11.7
411	642	15.8	15.7	16.4	15.5	14.5	14.4	14.8	15.4	15.2
412	989	9.4	9.0	9.0	8.5	7.8	7.7	8.4	8.8	9.2
413	644	11.2	11.3	11.8	11.4	10.6	10.7	10.6	11.3	11.7
414	557	13.1	13.1	14.0	13.5	13.5	13.1	13.1	13.0	12.6
415	702	7.4	7.5	7.9	7.6	7.2	7.0	7.3	7.6	7.7
416	544	7.7	7.9	8.0	7.7	7.3	7.1	7.1	7.0	7.4
417	939	7.7	7.6	7.8	8.1	7.5	7.0	7.5	8.1	9.0
418	760	6.6	6.4	6.5	6.4	6.0	5.9	6.4	6.7	7.2
419	393	8.0	8.1	8.3	8.3	7.9	7.0	7.7	9.3	10.7
429	288	4.9	5.1	5.0	5.3	5.4	5.5	6.6	8.2	9.7
Total	7,799	10.1	10.1	10.4	10.2	9.5	9.3	9.7	10.3	10.5
Central										
221	642	7.6	7.5	8.1	8.0	8.1	8.4	9.1	10.0	9.9
222	412	11.2	10.9	11.8	11.3	11.3	11.9	12.7	13.6	13.8
223	376	10.5	10.8	11.2	10.7	10.5	10.3	10.3	11.3	11.7
224	48	12.5	13.0	14.0	13.6	14.6	16.0	16.9	18.9	21.4
225	619	15.2	14.9	15.9	14.9	15.0	14.6	15.1	15.6	15.9
Total	2,097	11.2	11.1	11.8	11.3	11.4	11.4	12.0	12.8	13.0
Metro[b]										
227	472	13.9	13.9	14.8	11.7	12.0	12.1	13.1	14.0	15.7
235	33	13.7	13.7	14.5	14.1	15.6	17.1	22.7	28.2	35.8
236	374	13.7	14.0	14.8	15.5	15.7	15.7	17.4	19.3	21.9
338	452	4.5	4.3	4.3	4.5	4.3	4.2	4.8	5.7	6.8
339	395	5.0	5.4	5.5	5.7	5.6	5.6	6.6	7.9	9.7
Total	1,726	8.9	9.0	9.4	9.3	9.4	9.4	10.5	11.9	13.7

Table 17. (Cont.)

DMU / DMSU / PA	Area (mi^2)	Density								
		1993	1994	1995	1996	1997	1998	1999	2000	2001
Southeast										
341	611	7.4	7.7	8.1	8.4	8.6	8.9	9.4	10.1	10.9
342	352	10.4	10.5	10.8	10.4	11.1	12.9	14.3	16.4	18.9
343	663	7.1	7.1	7.4	7.8	8.2	8.2	9.0	10.2	11.4
344	189	17.9	16.8	16.7	16.4	15.5	15.2	15.6	17.6	20.1
345	326	11.0	10.4	10.5	10.4	11.0	11.8	12.8	13.9	15.1
346	319	16.3	15.3	15.6	16.4	17.5	18.1	20.1	23.1	26.5
347	434	9.0	9.0	9.0	9.4	9.7	9.8	10.5	11.7	13.0
348	332	15.3	15.0	15.4	15.9	16.3	16.7	16.6	17.2	17.3
349	492	11.2	11.1	11.6	12.2	12.8	14.1	15.1	16.5	17.1
Total	3,718	10.6	10.4	10.7	11.0	11.5	12.0	12.8	14.2	15.6
BIG WOODS TOTAL	15,340	10.2	10.2	10.6	10.4	10.2	10.2	10.9	11.7	12.4
PRAIRIE North										
420	651	3.7	3.4	3.2	3.1	2.6	2.5	3.0	3.3	3.6
421	749	3.3	3.1	3.0	2.8	2.5	2.4	2.7	3.1	3.5
422	634	2.8	2.6	2.6	2.7	2.5	3.0	3.5	4.0	4.8
423	531	3.9	3.7	3.7	3.7	3.4	3.2	3.3	3.5	4.0
424	766	5.3	5.3	5.2	5.8	4.6	4.0	4.0	4.1	4.5
425	779	2.4	2.3	2.3	2.1	1.7	1.8	2.1	2.4	3.1
426	614	3.7	3.6	3.4	3.0	2.8	2.8	3.1	3.5	4.2
427	837	2.5	2.4	2.4	2.2	2.0	2.2	2.7	3.3	4.1
428	550	3.9	3.7	3.8	3.7	3.5	3.5	3.9	4.4	5.1
Total	6,111	3.5	3.3	3.3	3.2	2.8	2.8	3.1	3.5	4.1
River										
431	360	6.5	6.5	6.4	7.0	6.1	5.4	5.2	4.6	4.4
433	397	9.3	9.5	10.1	10.3	9.2	8.7	8.3	8.2	7.8
435	575	5.6	5.4	5.6	5.8	5.0	4.8	4.7	4.7	4.7
440	662	4.0	3.9	4.1	4.0	3.7	3.4	3.4	3.4	3.5
442	806	4.4	4.4	4.6	4.4	3.9	3.7	3.8	4.0	4.0
443	386	6.0	6.3	6.6	6.6	5.9	5.4	5.0	4.6	4.2
Total	3,186	5.6	5.6	5.8	5.9	5.2	4.9	4.8	4.7	4.5
Southwest										
446	345	5.6	5.7	6.1	6.4	6.1	5.8	5.8	5.7	5.5
447	675	2.8	2.6	2.7	2.7	2.4	2.3	2.4	2.7	2.9
448	447	3.9	3.8	3.6	3.8	3.6	3.8	4.3	5.7	7.4
449	625	4.1	4.1	4.1	3.9	3.6	3.5	3.8	5.0	6.4
450	816	1.9	2.0	1.9	1.8	1.6	1.5	1.7	1.7	1.9
451	687	2.6	2.5	2.6	3.0	2.7	2.6	3.0	3.4	4.0

Table 17. (Cont.)

DMU / DMSU / PA	Area (mi^2)	Density								
		1993	1994	1995	1996	1997	1998	1999	2000	2001
452	637	2.4	2.4	2.7	2.9	2.8	2.7	2.9	3.0	3.2
453	729	2.2	2.3	2.4	2.5	2.2	2.2	2.5	2.8	3.1
454	840	3.5	3.5	3.6	3.7	3.4	3.3	3.5	3.9	4.2
455	95	4.9	5.2	5.1	5.3	5.0	5.1	5.2	5.0	5.0
456	712	3.3	3.4	3.5	3.6	3.4	3.1	3.2	3.1	3.1
457	666	2.7	2.6	2.5	2.7	2.4	2.2	2.5	2.6	2.6
458	715	2.6	2.8	2.9	3.0	2.7	2.5	2.5	2.7	2.8
459	974	3.1	3.4	3.6	3.8	3.6	3.2	3.3	3.4	3.4
Total	8,963	3.0	3.0	3.1	3.2	3.0	2.9	3.1	3.4	3.7
Southeast										
461	481	6.5	6.9	7.1	7.0	6.9	6.5	6.1	6.0	5.9
462	506	6.3	6.8	7.0	6.8	6.7	6.7	6.6	6.0	5.7
463	453	3.2	3.3	3.3	3.0	3.0	3.1	3.3	3.6	4.1
464	377	4.0	4.2	4.4	4.3	3.9	4.0	4.0	4.6	5.2
465	385	4.1	4.4	4.6	4.3	4.2	4.0	4.1	3.9	4.1
466	931	3.1	3.3	3.4	3.6	3.5	3.5	3.7	3.6	3.4
467	774	2.9	3.3	3.4	3.4	3.5	3.7	3.9	4.4	4.8
Total	3,907	4.1	4.4	4.5	4.4	4.4	4.4	4.4	4.5	4.6
PRAIRIE TOTAL	22,167	3.7	3.7	3.8	3.8	3.5	3.4	3.6	3.8	4.1
FARMLAND TOTAL	46,832	6.3	6.3	6.5	6.2	5.9	5.9	6.2	6.7	7.1

[a] Historic pre-fawning deer density estimates were calculated using a new population model and may differ from estimates previously published.

[b] Excluding permit areas 228 and 337, which are not modeled.

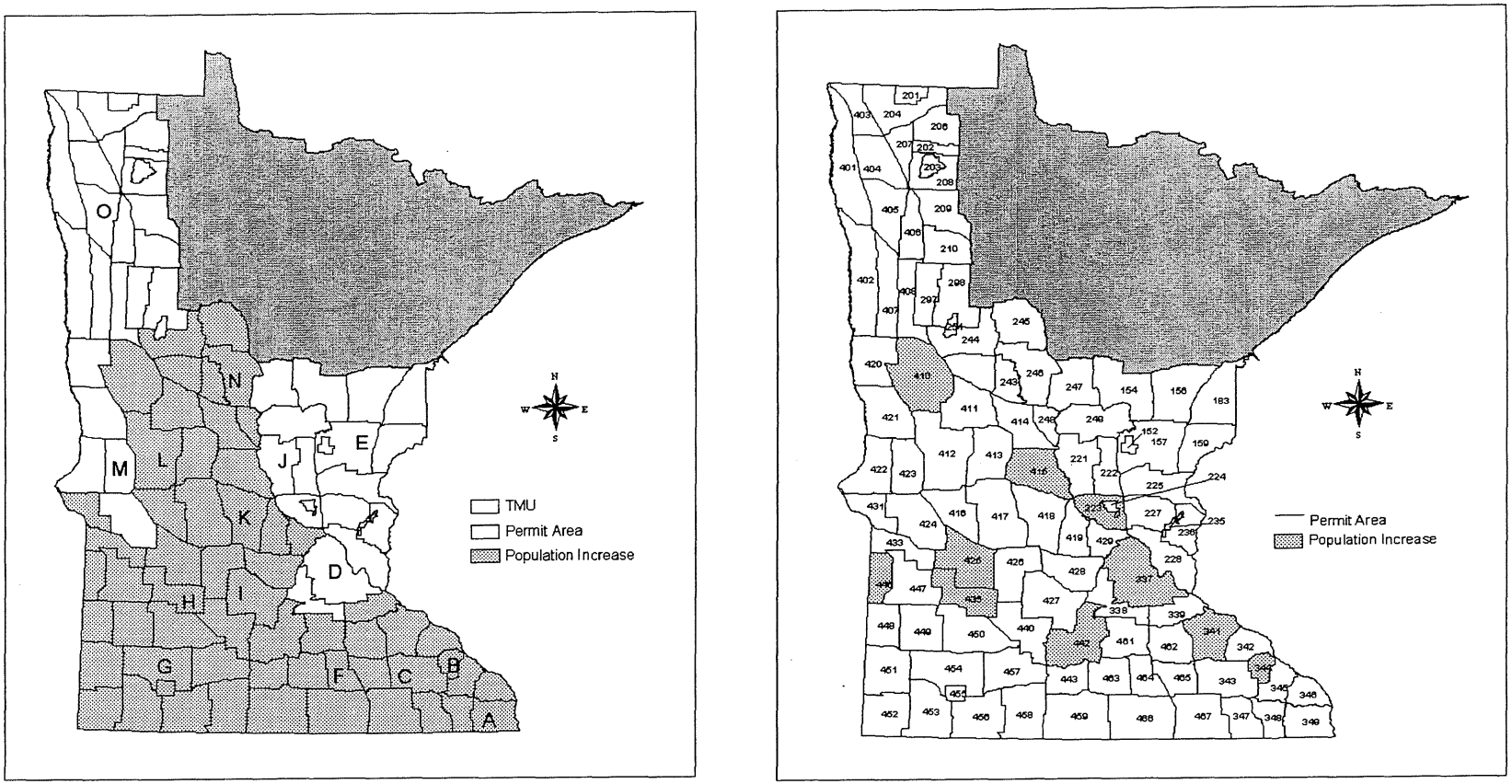


Figure 7. (a) Location of turkey management units (TMU's) and (b) antlerless deer permit areas used for the wild turkey survey, Minnesota, November-December, 1999.

Table 18. Percent of antlerless-deer hunters observing wild turkeys (HOWT) in Minnesota, November-December, 1992-99. *Note: No survey conducted in 1995, 1996, 1998, or 2000.*

Turkey Management Unit	Year	n (Respondents)	HOWT	99% CI on HOWT for 1997-99
A	1992	629	62.8	7.0
	1993	637	64.8	
	1994	618	61.2	
	1997	571	64.1	
	1999	591	72.8*	
B	1992	473	62.4	8.4
	1993	467	53.1	
	1994	421	59.6	
	1997	386	58.8	
	1999	409	77.0*	
C	1992	632	52.4	7.0
	1993	637	57.6	
	1994	615	55.0	
	1997	556	64.9	
	1999	571	75.1*	
D	1992	563	17.1	7.3
	1993	633	17.4	
	1994	633	19.3	
	1997	576	38.0	
	1999	598	39.8	
E	1992	581	3.4	5.0
	1993	647	7.1	
	1994	638	4.7	
	1997	608	14.1	
	1999	609	11.8	
F	1992	583	19.0	7.2
	1993	594	24.8	
	1994	652	27.6	
	1997	614	36.3	
	1999	612	46.1*	
G	1992	625	3.7	5.7
	1993	644	5.3	
	1994	616	7.6	
	1997	595	14.8	
	1999	617	21.1*	
H	1992	598	16.4	7.0
	1993	655	16.0	
	1994	636	17.1	
	1997	626	31.8	
	1999	615	45.0*	
I	1992	596	4.5	5.7
	1993	569	3.9	
	1994	562	2.7	
	1997	525	9.7	
	1999	471	18.3*	
J	1992	560	2.1	5.4
	1993	609	1.6	
	1994	539	4.6	
	1997	559	15.0	
	1999	589	14.6	

Table 18. Continued

Turkey Management Unit	Year	n (Respondents)	HOWT	99% CI on HOWT for 1997-99
K	1992	600	6.0	6.1
	1993	624	5.6	
	1994	614	8.5	
	1997	578	16.6	
	1999	612	26.5*	
L	1992	653	1.7	4.9
	1993	687	2.5	
	1994	667	4.2	
	1997	675	10.1	
	1999		16.8*	
M	1992	578	2.9	3.5
	1993	597	3.4	
	1994	613	3.1	
	1997	540	4.8	
	1999	557	5.8	
N	1992	663	2.1	3.7
	1993	710	1.7	
	1994	657	2.3	
	1997	607	4.6	
	1999	614	8.8*	
O	1992	576	3.8	2.2
	1993	626	1.9	
	1994	620	2.6	
	1997	553	1.3	
	1999	637	3.5	

* Significant change in index from 1997 to 1999 ($p < 0.01$)

WILDLIFE DAMAGE COMPLAINTS

NOTE:Wildlife damage complaint information is collected statewide from wildlife managers. The data is compiled and summarized at the Farmland Wildlife Research Station, Route 1 Box 181, Madelia MN 56062.

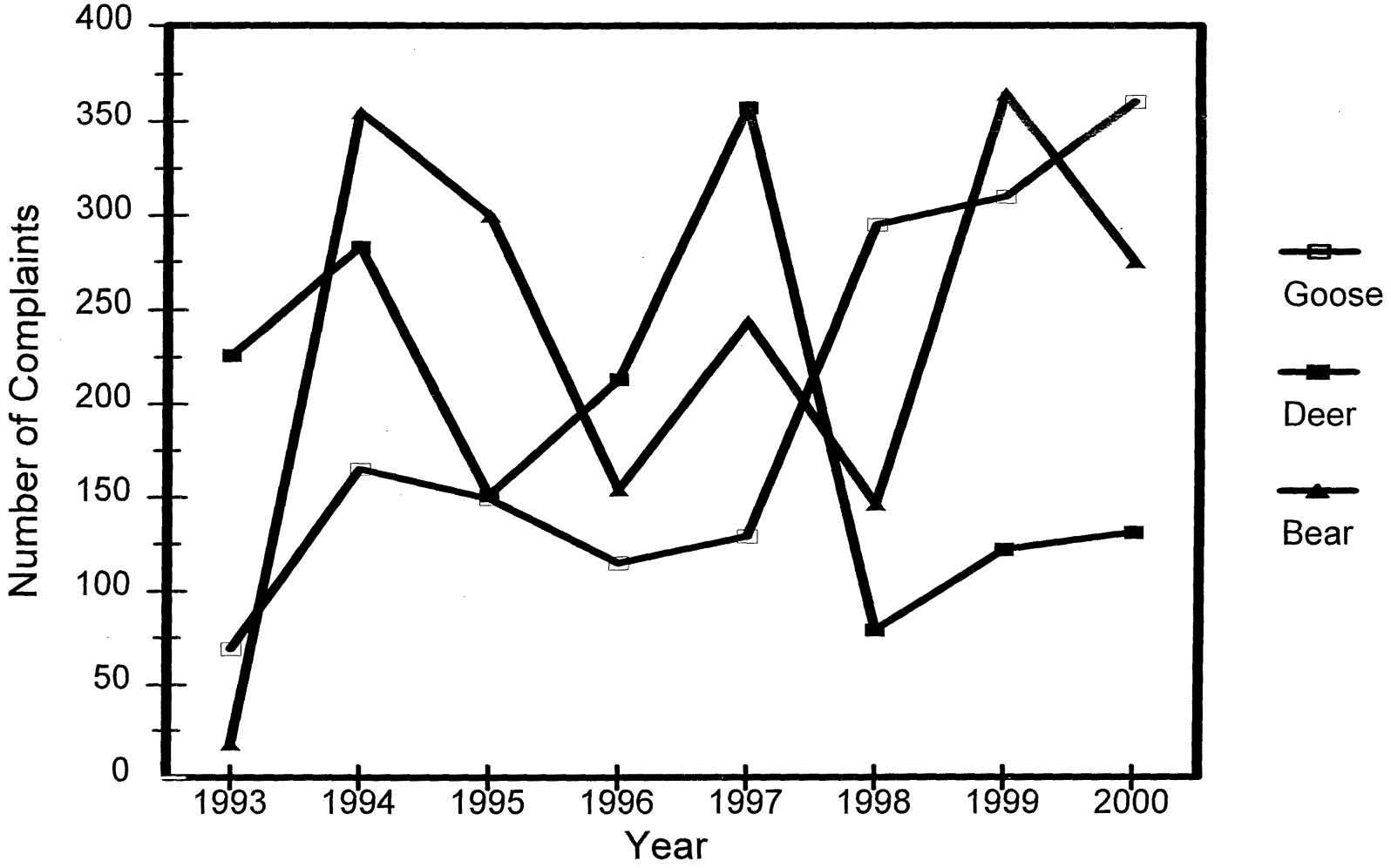


Figure 8. Number of wildlife complaints recorded by species from 1993-2000.

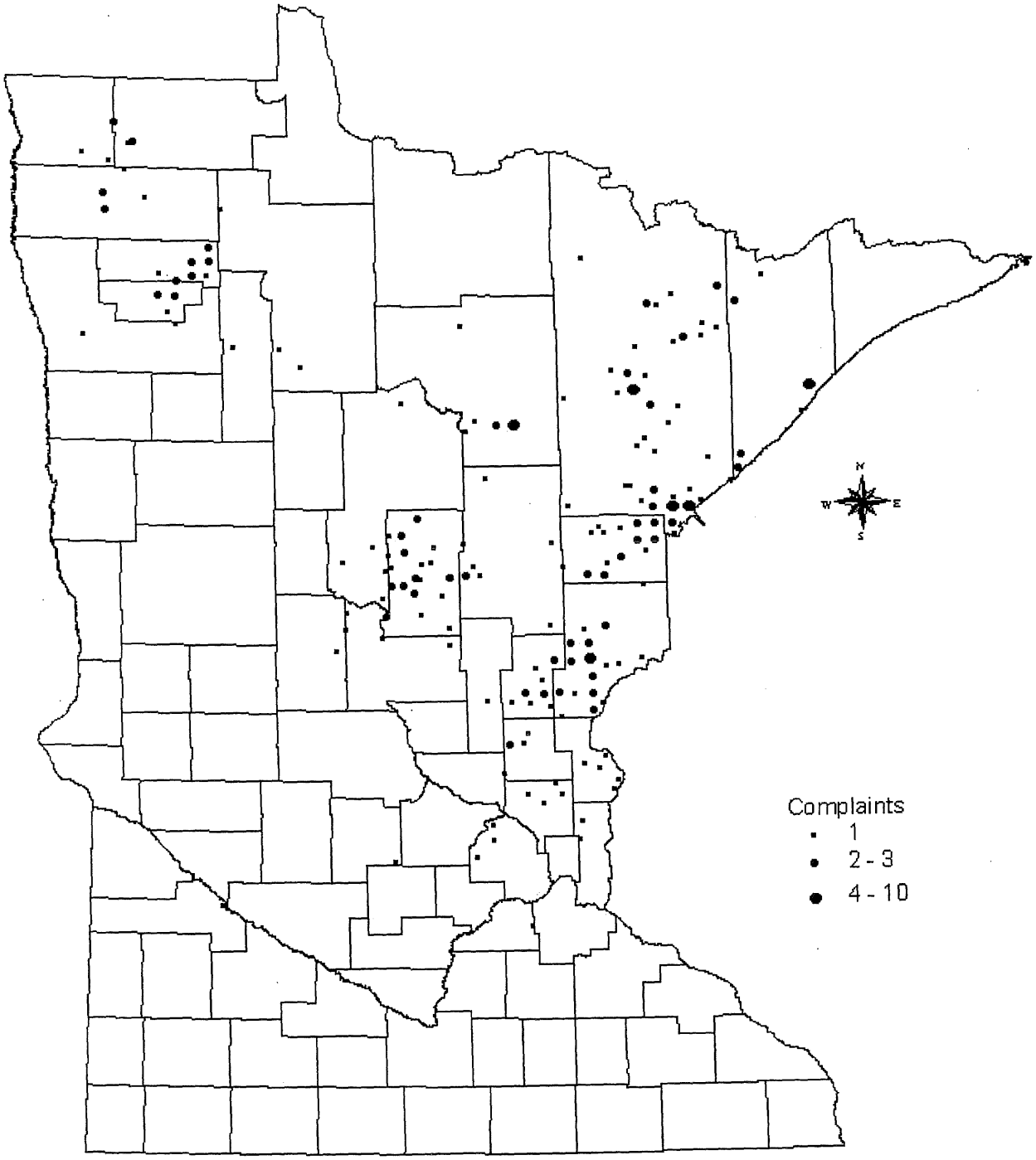


Figure 9. Location of bear damage complaints recorded in 2000.

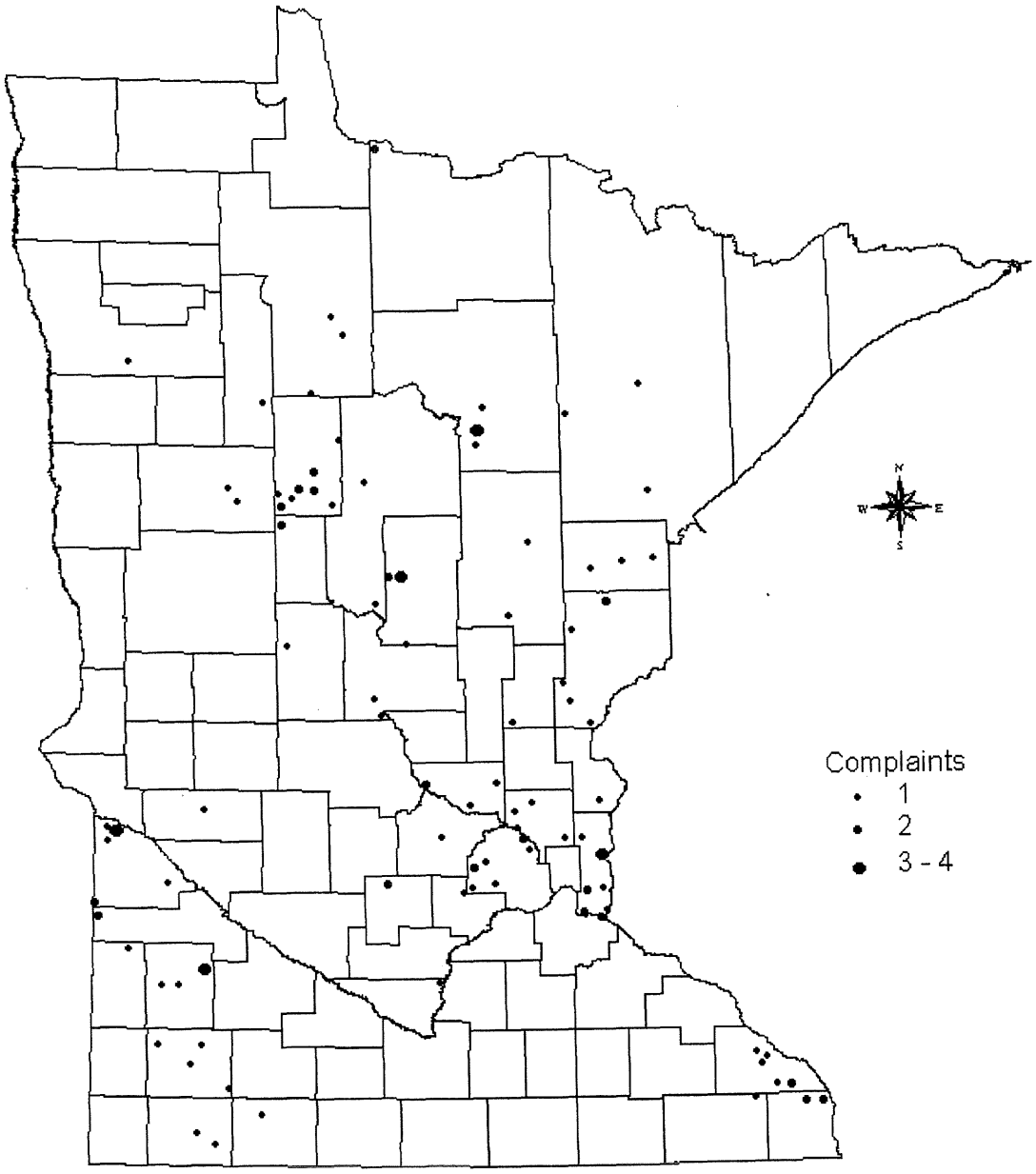


Figure 10. Location of deer damage complaints recorded in 2000.

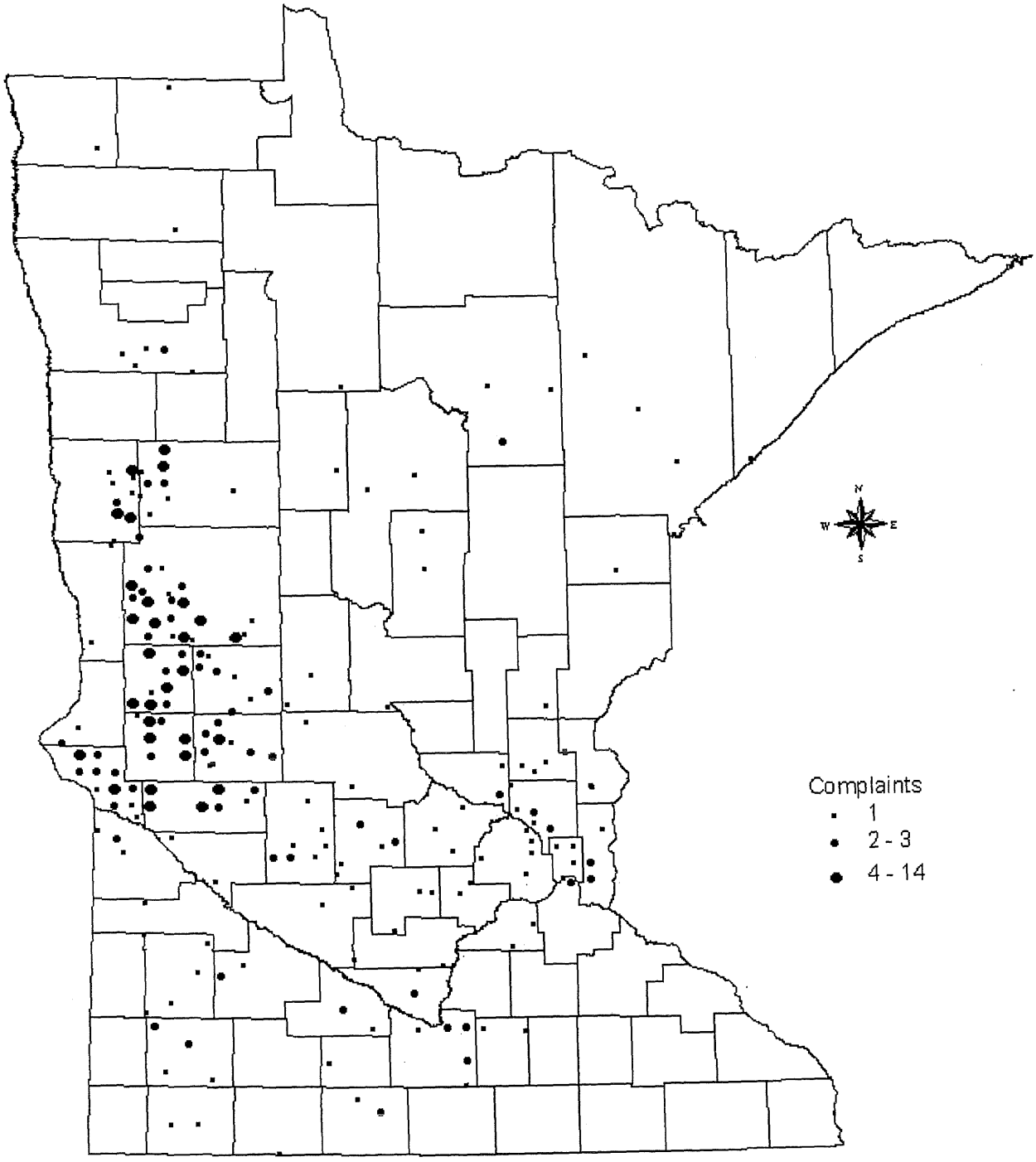


Figure11. Location of goose damage complaints recorded in 2000.

PREDATOR SCENT POST SURVEY

AND

WINTER TRACK INDICES

NOTE: This survey is organized and coordinated by the Forest Wildlife Populations and Research Group, 1201 E. Hwy 2, Grand Rapids, MN 55744. Results are presented at this location in the book because of the statewide nature of the data.

2000 SCENT STATION ROUTE SPECIFICS

Zone	Routes Done	No. Segments	Segment Density	Station Nights
Forest	46	192	1/169 mi^2	1,853
Transition	30	126	1/201 mi^2	1,202
Farm	20	82	1/320 mi^2	764
Totals	96	400		3,819

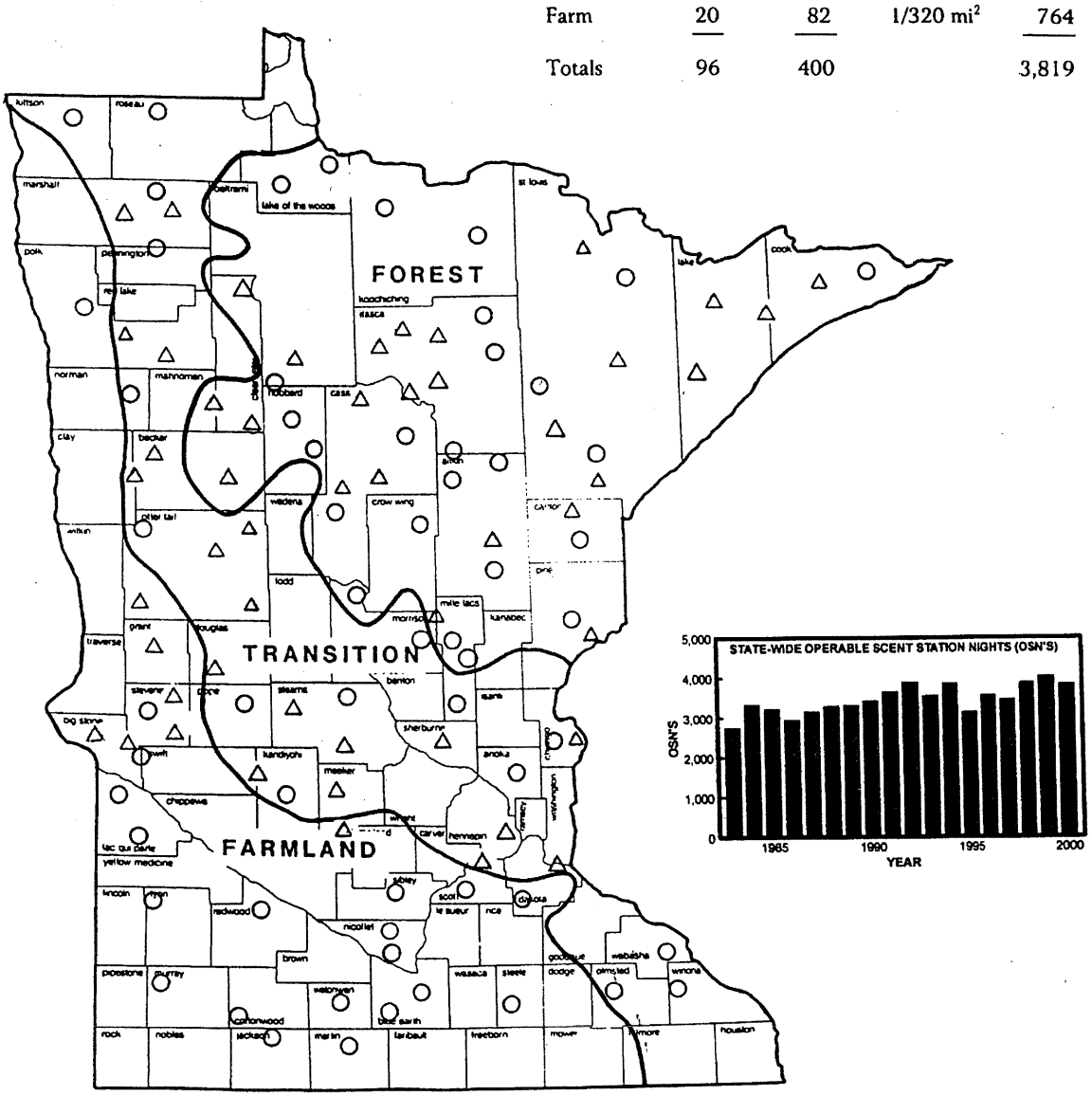


Figure 12. Approximate locations of scent station routes conducted by DNR Section of Wildlife (O) and interagency cooperators (Δ), 2000. Inset shows 2000 route specifics and statewide scent sation night totals, 1983-2000.

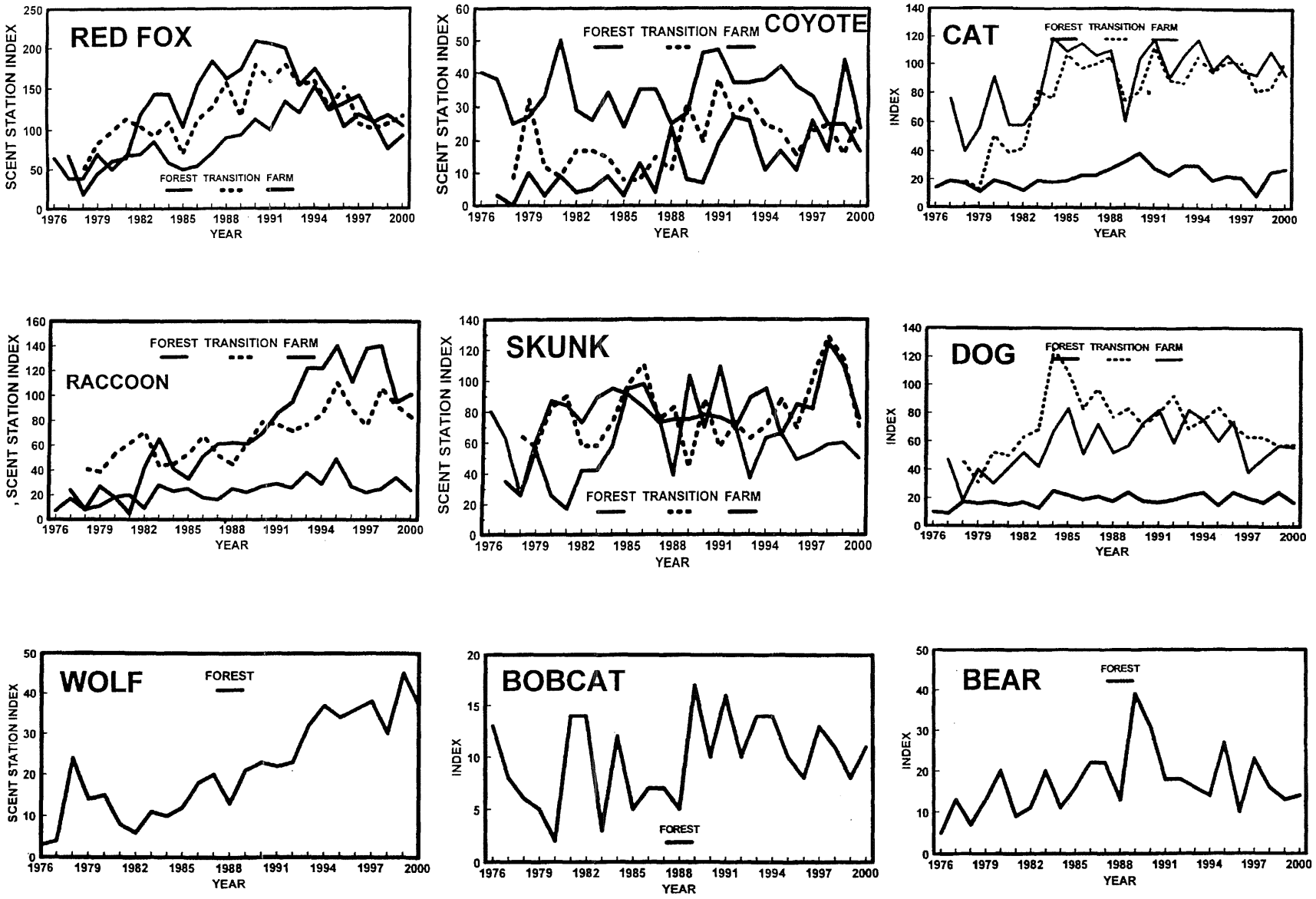


Figure 13. Scent post visitation indices for nine species in the Forest, Transition, and Farmland survey zones, 1976-2000.

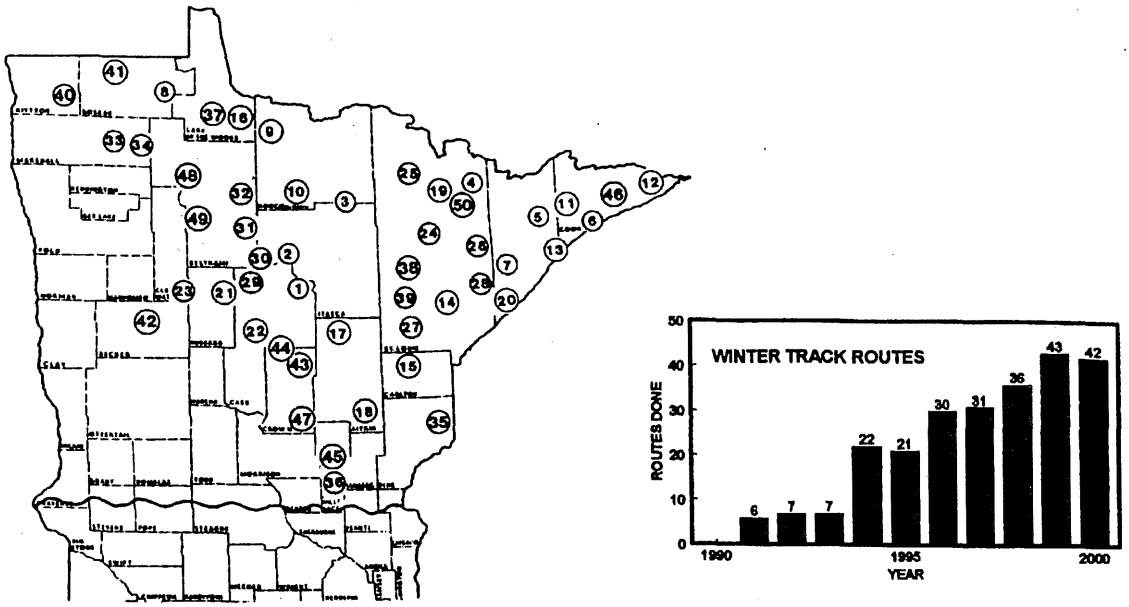


Figure 14. General locations of 49 winter track routes, 2000.

Table 19. Range-wide winter track indices[1] for 7 species, 1991-2000.

Species	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Fisher	100	128	86	241	286	190	159	189	277	257
Marten	183	314	343	273	400	247	231	139	274	210
Red Fox	150	200	228	486	390	317	484	614	860	760
Coyote	0	71	43	32	119	87	106	94	93	55
Wolf	133	171	157	150	226	147	281	214	263	264
Hare[2]	1166	607	1000	1147	2107	1408	2370	1756	2326	2845
Weasel[3]	-	-	-	-	776	393	432	342	391	381
Deer[3]	-	-	-	-	805	760	700	897	1000	1157
No. Routes	6	7	7	22	21	30	31	36	43	42

[1] index = $\frac{\text{adjusted total tracks}}{\text{total miles}} \times 1000$

[2] index calculated from tracks on only 2 miles (20 0.1 segments) of each route

[3] weasel and deer were first recorded in 1995

FOREST WILDLIFE POPULATIONS
1201 E. Hwy 2
Grand Rapids, MN 55744
(218) 327-4432

Table 20. Mean number of ruffed grouse drums per stop by census zone, 1961-2001.

	Census Zone					
Year	Northwest	North	Northeast	Central Hardwoods	Southeast	Rangewide mean
1961	1.4	2.2	0.9	1.0	1.0	1.4
1962	3.0	2.1	0.5	1.2	1.6	1.6
1963	0.4	0.6	0.5	0.4	1.1	0.6
1964	0.4	0.7	0.9	0.3	0.6	0.6
1965	1.5	1.3	0.7	0.6	1.4	1.0
1966	1.6	1.2	0.6	0.7	1.9	1.0
1967	2.8	1.9	1.3	1.0	2.2	1.6
1968	3.8	2.3	1.6	1.0	2.4	2.0
1969	3.3	2.7	1.4	1.4	2.3	2.2
1970	2.1	3.2	0.9	1.6	2.1	2.2
1971	1.4	3.6	1.0	1.7	3.7	2.4
1972	2.1	3.7	1.0	2.1	3.1	2.7
1973	0.5	1.5	0.6	0.9	3.7	1.1
1974	0.7	1.1	0.8	0.7	3.0	1.0
1975	1.2	1.4	0.8	0.8	2.6	1.3
1976	0.8	1.5	0.4	0.9	1.8	1.1
1977	0.9	1.6	0.7	0.9	2.5	1.2
1978	2.1	2.4	0.8	1.4	2.3	1.7
1979	1.7	2.2	0.7	1.3	2.2	1.6
1980	1.9	2.1	0.7	1.9	2.7	1.7
1981	1.2	1.7	0.8	1.8	2.4	1.4
1982	0.9	1.1	0.3	0.9	1.1	0.8
1983	0.6	1.1	0.6	0.8	1.5	0.9
1984	1.0	1.1	0.6	0.5	1.4	0.8
1985	0.7	1.2	0.6	0.6	1.5	0.9
1986	1.7	1.1	0.4	0.6	2.5	1.0
1987	1.6	1.6	0.7	0.8	1.2	1.2
1988	1.3	2.0	1.0	1.0	1.1	1.4
1989	2.2	2.6	1.5	1.2	1.2	1.9
1990	0.8	2.5	0.9	1.1	1.2	1.6
1991	1.0	1.7	0.8	0.7	0.7	1.2
1992	1.0	1.0	0.5	0.6	0.6	0.8
1993	0.9	0.8	0.5	0.6	0.5	0.7
1994	1.7	1.0	0.5	0.5	0.4	0.9
1995	2.1	1.5	0.6	0.9	0.5	1.2
1996	2.4	1.8	0.7	0.8	0.5	1.4
1997	2.0	2.3	1.5	0.9	0.4	1.7
1998	1.7	2.7	1.2	1.2	0.5	1.8
1999	2.3	2.1	1.2	1.3	0.5	1.7
2000	1.5	1.9	1.1	1.3	0.4	1.5
2001	1.3	1.1	0.6	0.7	0.4	0.9

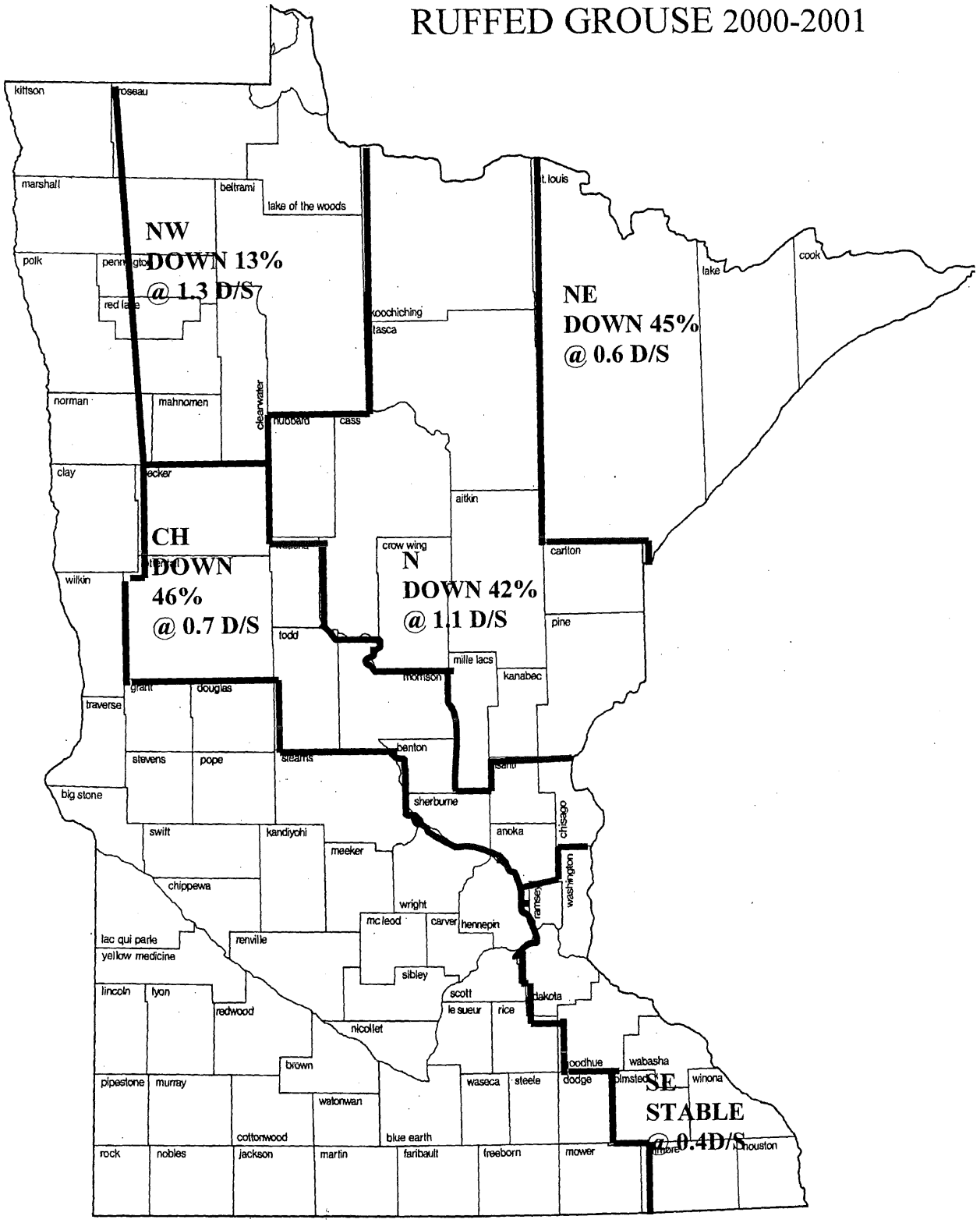


Figure 15. Changes in average numbers of ruffed grouse drums per stop on roadside counts, 2000-2001.

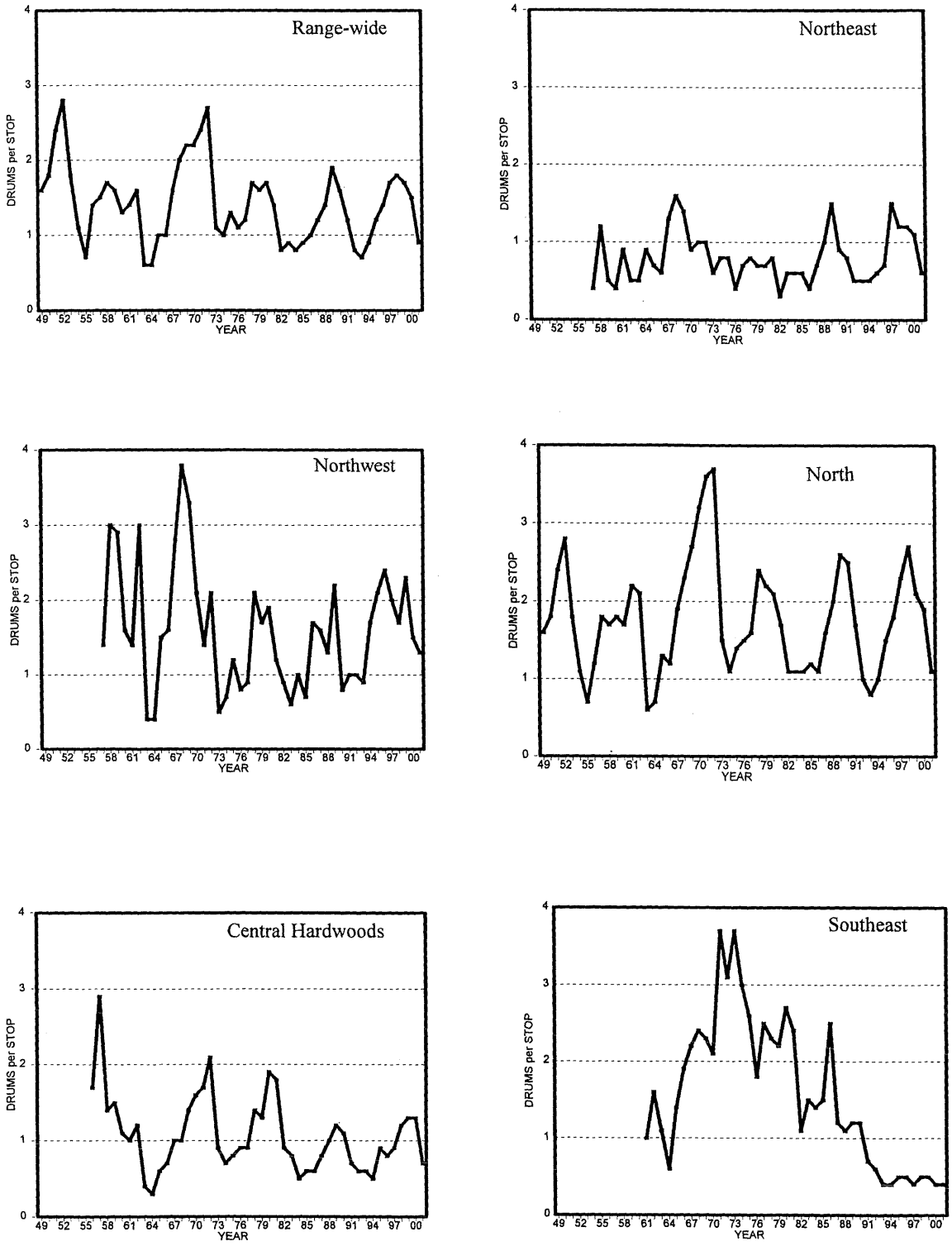


Figure 16. Summary of ruffed grouse drumming trends range-wide and in each of five survey zones, 1949-2001.

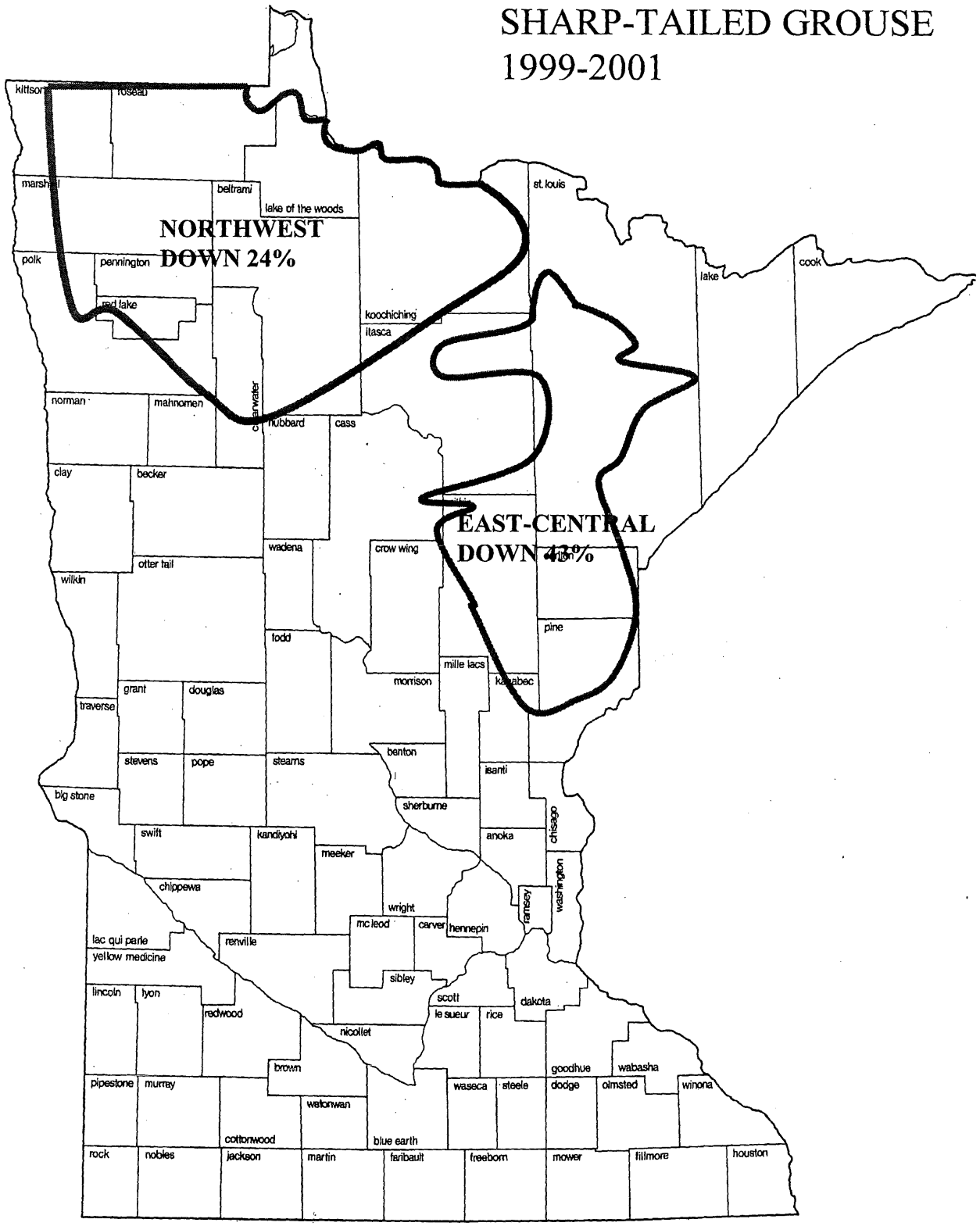


Figure 17. Changes in male sharp-tailed grouse counted on comparable dancing grounds in the Northwest and East-central ranges, 1999-2001.

Table 21. Number of snowshoe hares seen per 100 km of ruffed grouse drumming routes in the North, Northwest, and Northeast survey zones, 1974-2001.

Year	Hares seen per 100 km
1974	0.45
1975	0.00
1976	2.04
1977	2.76
1978	8.98
1979	8.77
1980	14.06
1981	9.81
1982	1.83
1983	0.70
1984	0.16
1985	0.38
1986	0.17
1987	0.51
1988	0.90
1989	2.69
1990	2.30
1991	1.16
1992	1.36
1993	0.46
1994	0.20
1995	0.46
1996	0.78
1997	0.57
1998	0.42
1999	1.08
2000	0.90
2001	1.68

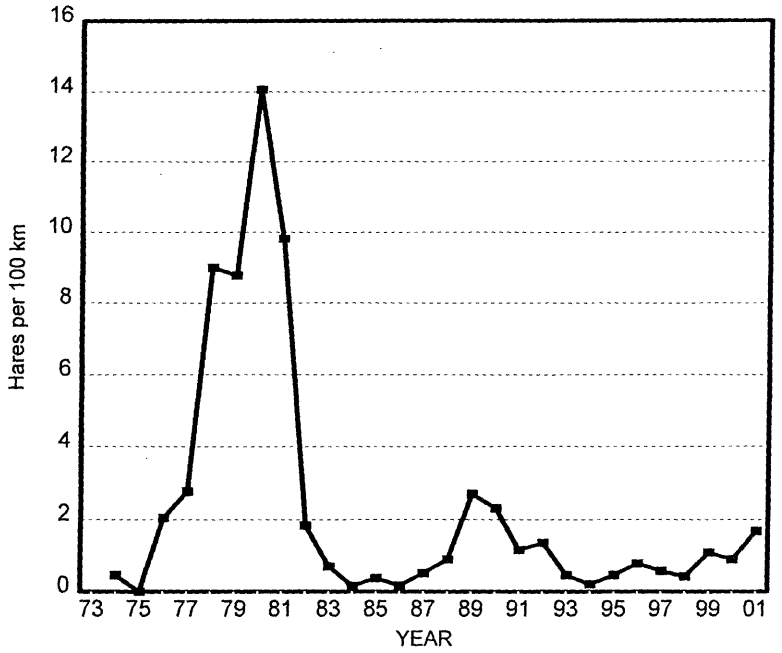


Figure 18. Snowshoe hare index (hares/100 km) based on hares seen on northern ruffed grouse drumming routes in Minnesota, 1974-2001.

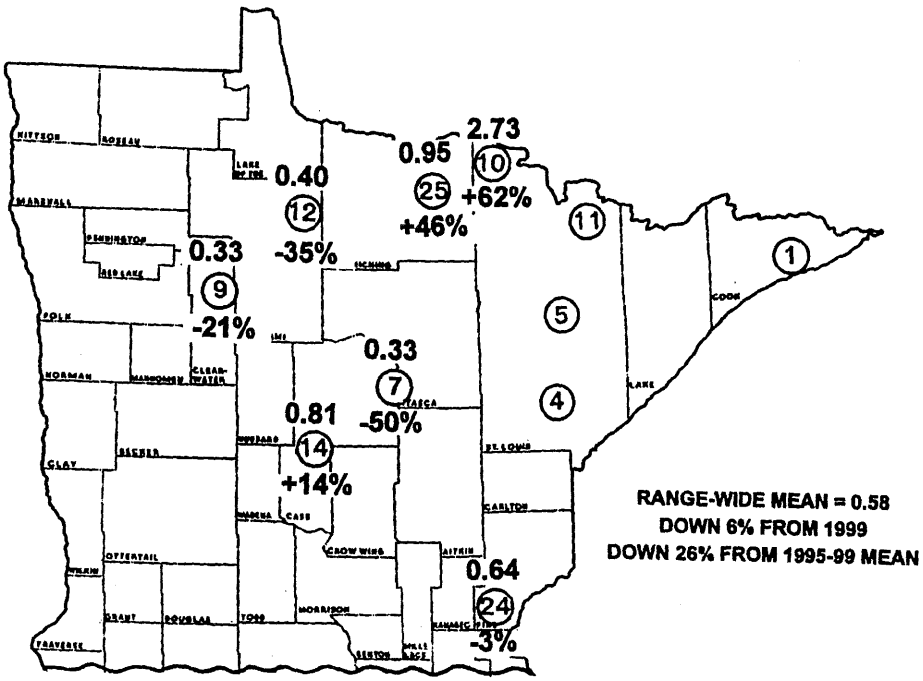


Figure 19. Approximate locations of the aerial beaver routes (route numbers circled), live colonies per mile (LC/M) in 2000, and percent change from 1999. Routes 1, 4, 5, and 11 were not flown in 2000.

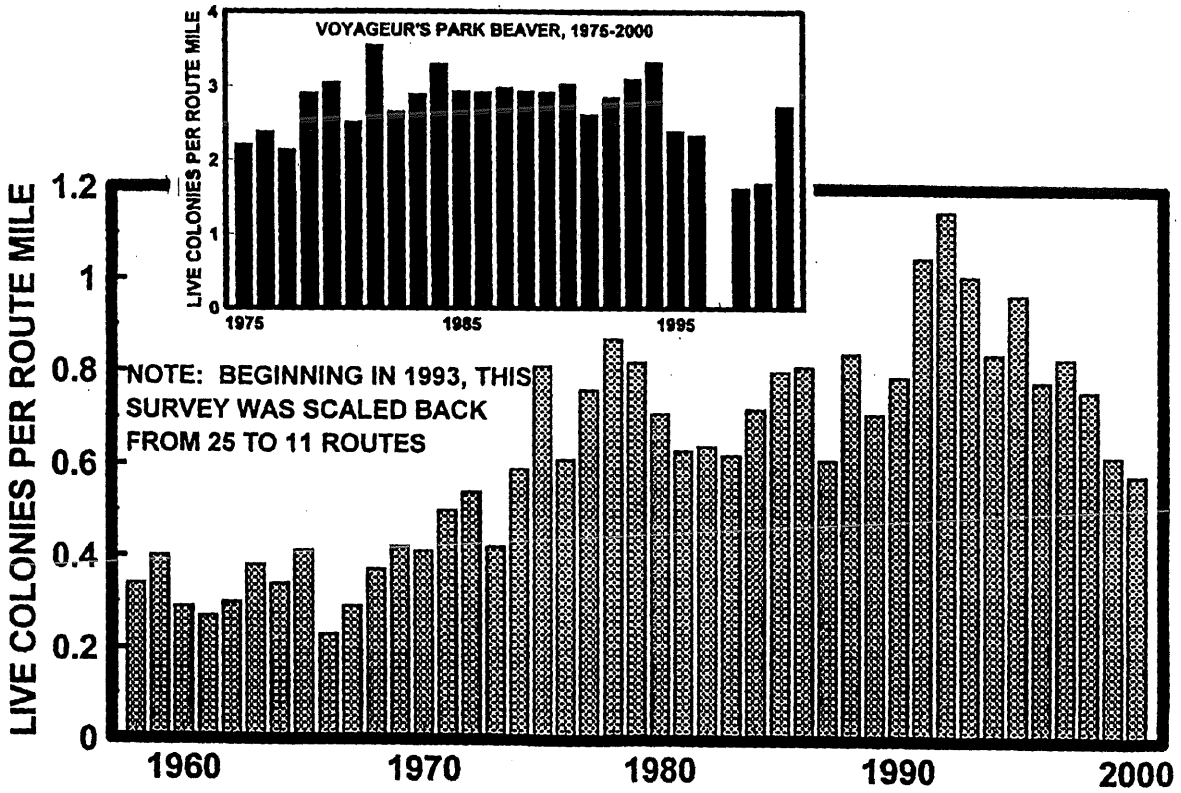


Figure 20. Average range-wide (excluding route 10, and VNP) LC/M of survey route, 1958-2000. Inset shows LC/M for route 10, 1975-2000.

Table 22. Live beaver colonies per mile of census route in northern Minnesota, 1989-2000.

Number	Route name	Year												
		1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	1994-99 Mean
1	Cascade	0.43	0.44	1.13	1.50	0.68	0.43	1.51	0.90	-	0.81	0.28	-	0.66
2	Kawishiwi	0.47	0.80	1.03	1.08	-	-	-	-	-	-	-	-	-
3	Itasca	0.56	0.45	0.92	1.09	-	-	-	-	-	-	-	-	-
4	South St. Louis	-	0.92	1.35	0.87	0.70	0.57	0.78	0.64	0.88	0.63	0.58	-	0.68
5	Central St. Louis	0.83	0.81	1.12	1.02	0.98	1.06	0.89	0.88	1.02	0.98	0.82	-	0.94
6	Carlton & Pine	-	1.06	1.50	1.09	-	-	-	-	-	-	-	-	-
7	Cass	0.84	0.98	1.16	1.62	1.14	1.00	0.82	0.79	0.80	0.98	0.66	0.33	0.84
8	Balsam-Hennepin	0.59	0.46	0.61	-	-	-	-	-	-	-	-	-	-
9	Pinewood-Mississippi	0.36	0.49	0.41	-	0.79	0.40	0.64	0.37	0.35	0.26	0.42	0.33	0.41
10	Kabetogama Peninsula	2.92	3.3	2.62	2.85	3.10	3.33	2.40	2.34	-	1.62	1.69	2.73	1.90
11	Ely-Finger Lakes	1.09	1.20	1.67	1.35	1.40	1.52	1.45	0.83	1.36	1.29	0.85	-	1.22
12	Hay Creek-Kelliher	0.56	0.46	0.58	0.78	0.84	0.36	0.64	0.50	0.50	0.38	0.62	0.40	0.50
13	Cook County Transect	0.68	0.38	1.18	0.83	-	-	-	-	-	-	-	-	-
14	Cass-Crow Wing	0.89	0.87	0.96	0.88	0.75	0.77	0.65	0.62	0.55	0.64	0.71	0.81	0.66
15	Little Willow-Aitkin	0.59	0.63	0.68	-	-	-	-	-	-	-	-	-	-
16	East Aitkin County	0.80	-	-	-	-	-	-	-	-	-	-	-	-
17	West Vermilion	-	1.29	-	1.25	-	-	-	-	-	-	-	-	-
18	Blackduck	-	1.24	-	1.55	-	-	-	-	-	-	-	-	-
19	Splitrock	0.53	0.73	2.42	1.80	-	-	-	-	-	-	-	-	-
20	Isabella	-	-	-	-	-	-	-	-	-	-	-	-	-
21	Red Lake-Pine Island	0.36	0.33	0.51	0.56	-	-	-	-	-	-	-	-	-
22	Northome	-	1.14	0.78	1.08	-	-	-	-	-	-	-	-	-
23	Kanabec County	0.94	0.81	0.58	0.77	-	-	-	-	-	-	-	-	-
24	Southern Pine	1.03	0.93	0.89	1.15	0.86	0.86	0.67	0.83	0.75	0.73	0.66	0.64	0.75
25	Koochiching North	1.15	1.05	1.43	1.62	2.00	1.58	1.65	1.46	1.28	0.90	0.65	0.95	1.25

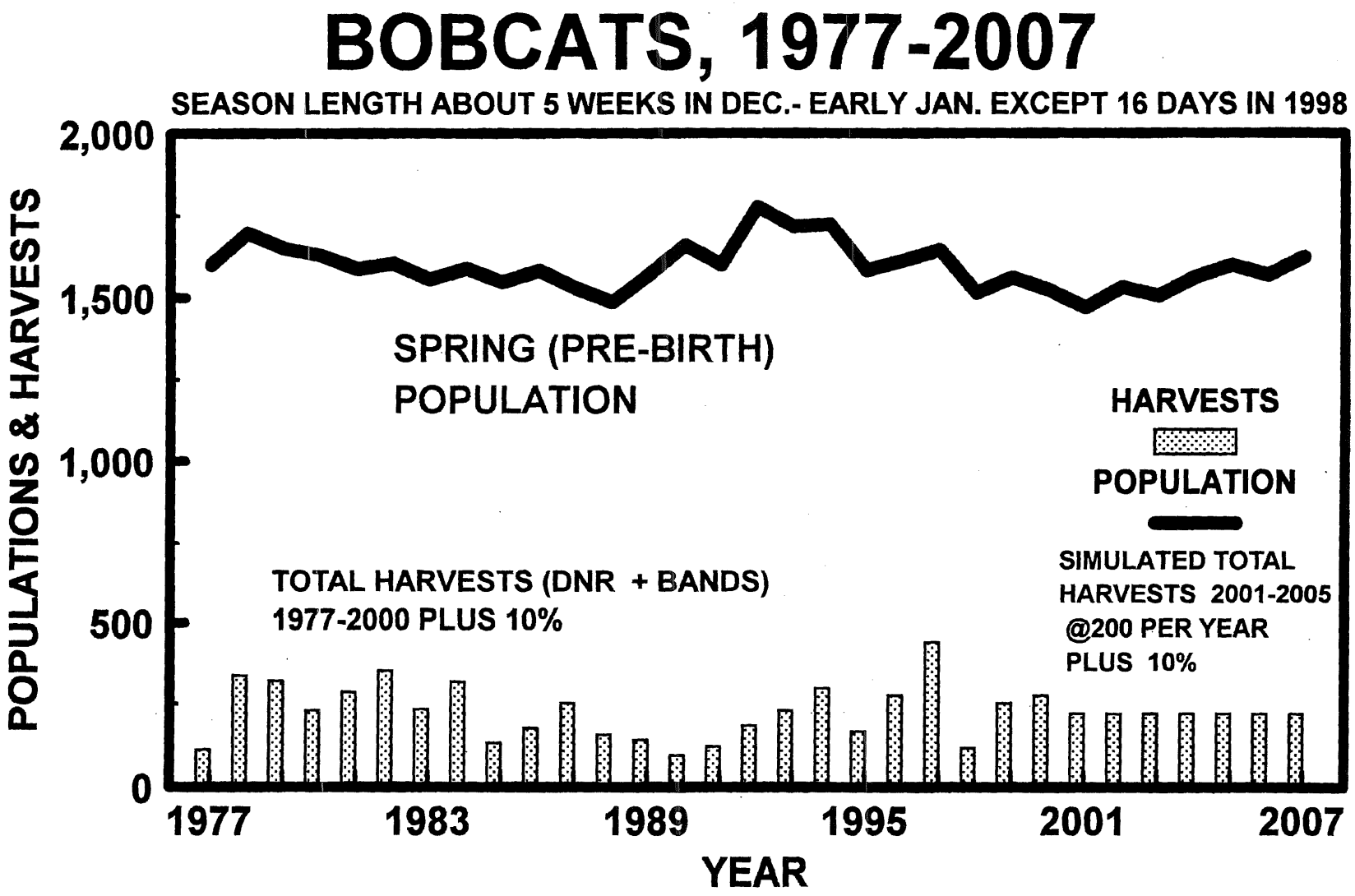


Figure 21. Population modeling summaries for bobcat in Minnesota, 1977-2007.

Table 23. Bobcat harvest, age structure, and population index data in Minnesota, 1985 to 2000.

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Season	11/30-1/19	11/29-1/3	11/28-1/3	11/26-1/1	12/2-1/7	12/1-1/6	11/30-1/5	11/28-1/3	12/4-1/9	12/3-1/8	12/2-1/7	11/30-1/5	11/29-1/4	11/28-12/13	12/4-1/9	12/2-1/7
Limit	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Registered take	119	160	214	140	129	84	106	167	201	238	134	223	364	103	206	231
% autumn pop. taken[1]	6	8	11	8	6	5	6	9	11	14	9	13	20	6	12	13
Carcasses examined	99	132	163	114	119	62	93	151	161	187	96	164	270	77	163	183
% juveniles	33	26	33	49	39	20	35	28	32	26	31	35	35	29	18	31
% 1.7 yrs. old	19	17	16	18	17	34	33	22	20	16	15	20	16	26	24	26
% ≥ 2.7 yrs. old	48	57	51	42	44	46	32	50	48	58	54	45	49	45	58	43
Juv.::≥2.7 yr. females	1.2	0.9	1.4	1.7	2.0	0.8	3.6	1.2	1.4	0.8	2.7	1.5	1.2	1.6	0.8	1.5:1
% male juveniles	41	53	44	58	49	58	59	55	51	64	57	51	60	59	55	54
% male 1.7 yrs.	41	32	52	62	53	80	55	45	45	43	71	30	37	60	59	59
% male ≥ 2.7 yrs.	43	51	48	46	56	44	70	53	52	45	79	49	43	60	62	50
Overall % males	42	51	48	54	53	59	61	53	50	50	71	46	48	60	60	53
Mean pelt price	$70	$120	$101	$68	$48	$43	$37	$28	$43	$36	$34	$33	$30	$28	$24	$33
Scent post index[2]	5	8	7	5	17	10	16	10	14	14	10	9	8	11	8	11
Snowshoe hare index[3]	0.2	0.5	0.9	2.7	2.3	1.2	1.4	0.5	0.2	0.5	0.8	0.6	0.4	1.1	0.90	1.68

[1] estimated from population model, includes accidental harvests of 10% 1977-1999

[2] index for autumn prior to harvest season

[3] number of snowshoe hares seen per 100 m of ruffed grouse routes during the spring after the bobcat season

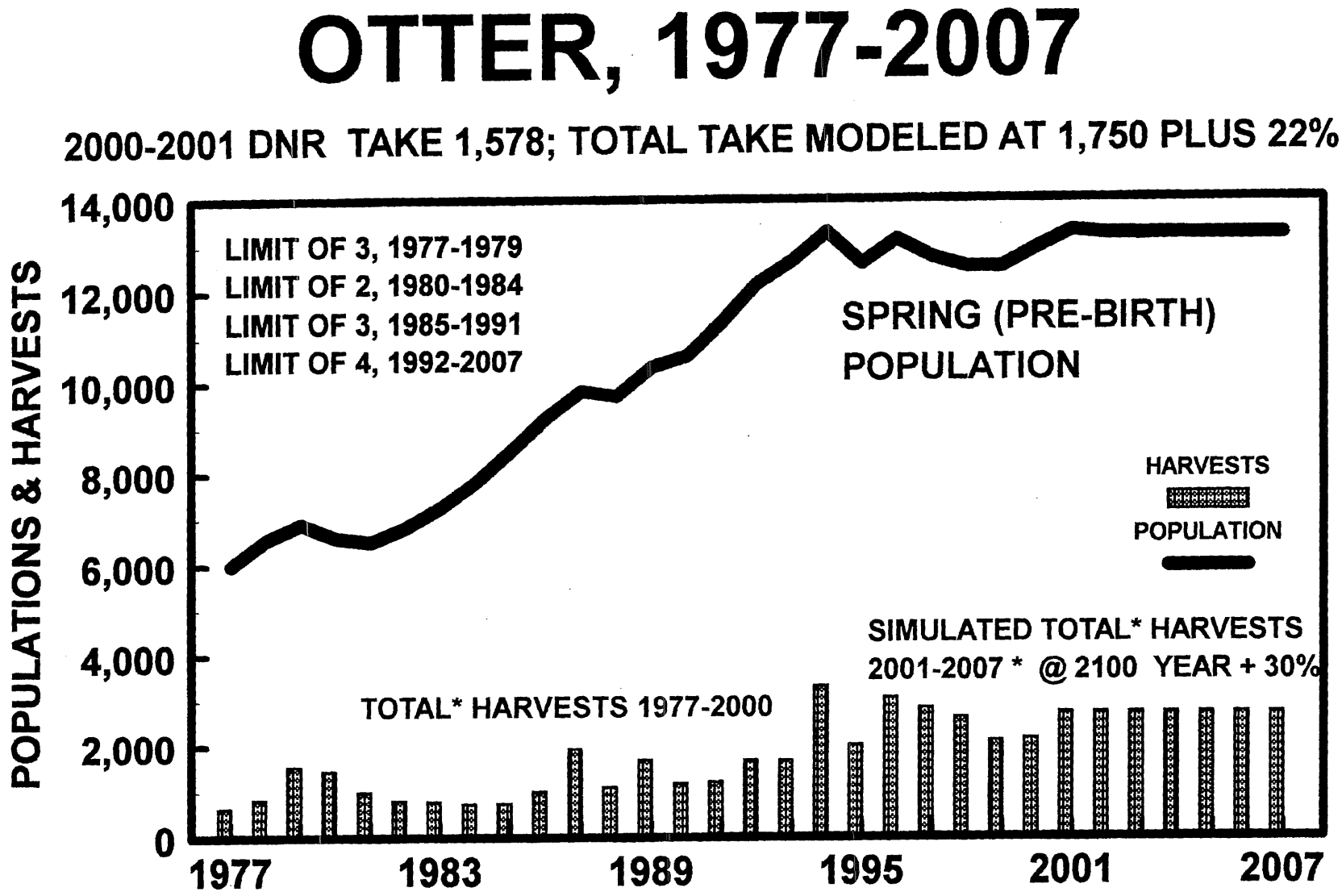


Figure 22. Population modeling summaries for otter in Minnesota, 1977-2007.

Table 24. Otter harvest, carcass collection, and pelt price data in Minnesota, 1986-2000. Carcasses were not collected after 1986.

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Season dates	10/24-11/29	10/24-11/29	10/29-11/27	10/28-12/17	10/27-1/6	10/26-1/5	10/24-1/3	10/23-1/9	10/29-1/8	10/28-1/7	10/26-1/5	10/28-1/4	10/24-1/3	10/23-1/9	10/28-1/7
Limit	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
Registered harvest	777	1,386	922	1,294	903	855	1,365	1,454	2,445	1,435	2,219	2,145	1,946	1635	1578
% of autumn pop. harvested[a]	11	20	12	17	13	13	17	18	22	14	21	16	16	13	12
No. of carcasses examined	745	---	---	---	---	---	---	---	---	---	---	---	---	---	---
% juveniles	45.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---
% yearlings	23.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---
% male juveniles	45.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---
% males ≥ 1.7 yrs.	48.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Mean pelt prices:															
Otter	$24	$23	$22	$22	$24	$25	$29	$43	$48	$38	$39	$40	$34	$41	$51
Beaver (fall)	$20	$17	$14	$12	$9	$9	$7	$11	$14	$13	$19	$16	$11	$12	$15

[a] From population modeling; includes additional accidental harvests of 30% to 1991, and 22% after 1991 over registered total.

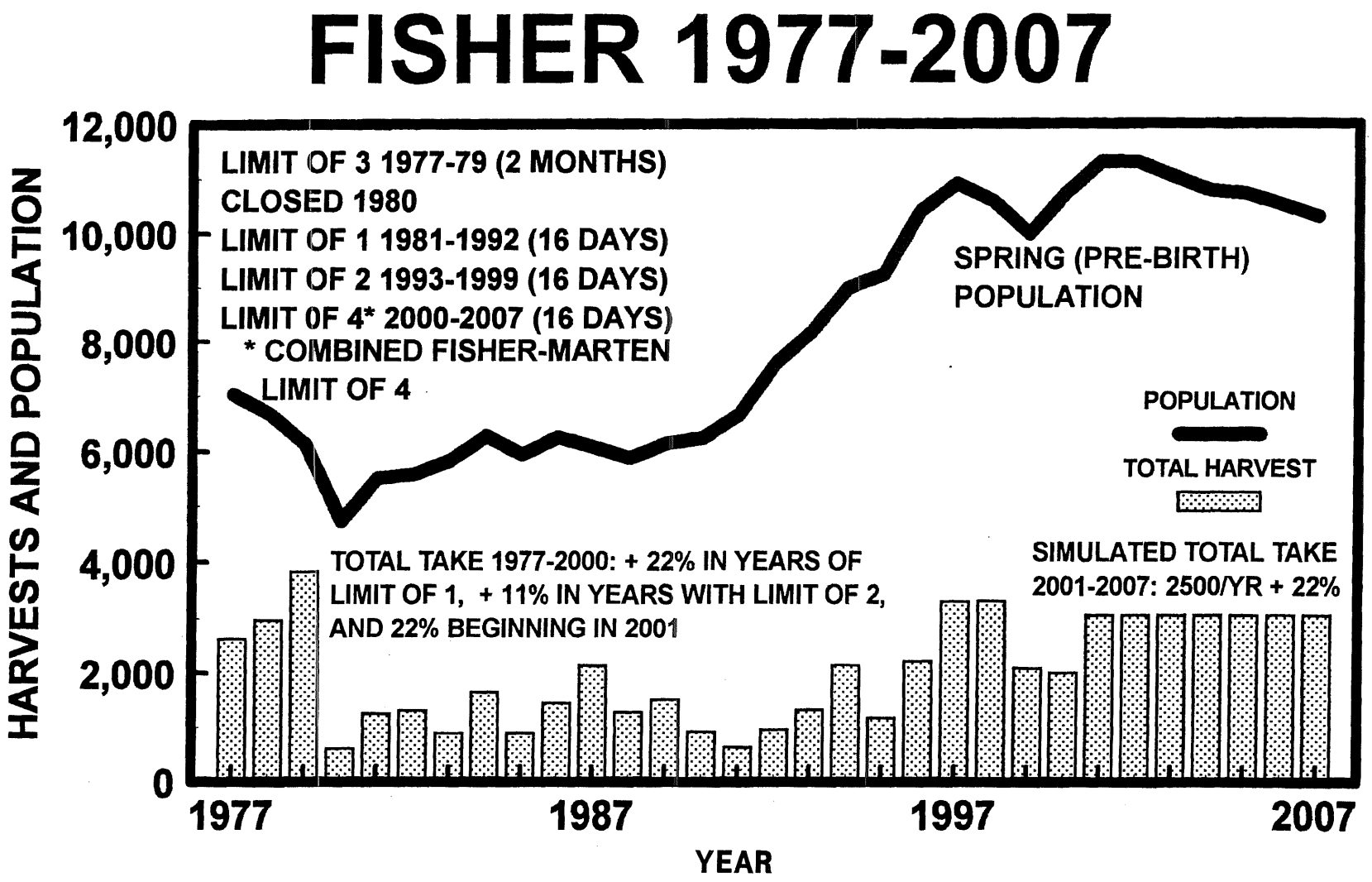


Figure 23. Population modeling summaries for fisher in Minnesota, 1977 - 2007.

Table 25. Fisher harvest, carcass collection, and pelt price data in Minnesota, 1984-2000. Carcass collection ended in 1994.

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Season	12/1-12/16	11/30-12/15	11/23-12/4	11/28-12/13	11/26-12/11	12/2-12/17	12/1-12/16	11/30-12/15	11/28-12/13	12/4-12/19	12/3-12/18	12/2-12/17	11/30-12/15	11/29-12/14	11/28-12/13	12/4-12/19	12/2-12/17
Limit	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	4 [4]
Registered Harvest	1285	678	1068	1642	1025	1243	746	528	777	1158	1771	942	1773	2,761	2,695	1,725	1674
% of available fall population harvested[1]	19	11	17	24	16	15	11	7	10	12	18	10	18	26	25	13	13
No. carcasses examined[2]	1270	712	1186	1534	805	1024	592	410	629	937	1360	---	---	---	---	--	--
% juveniles	63	63	59	53	70	64	65	66	54	59	56	---	---	---	---	--	--
% 1.7 yrs.	20	20	24	15	15	19	14	21	25	22	18	---	---	---	---	--	--
% ≥ 2.7 yrs.	17	18	18	22	15	17	21	13	21	19	26	---	---	---	---	--	--
Juv.:adult female ratio	7.2:1	5.4:1	5.3:1	4.7:1	6.8:1	5.8:1	4.5:1	7.8:1	4.9:1	5.3:1	4.0:1	---	---	---	---	--	--
% male juveniles	52	46	48	46	48	47	44	50	42	47	47	---	---	---	---	--	--
% male 1.7 yrs.	45	40	50	40	45	47	55	52	55	37	54	---	---	---	---	--	--
% male ≥ 2.7 yrs.	45	34	37	37	33	36	30	35	45	42	44	---	---	---	---	--	--
% males overall	49	43	46	43	45	45	43	48	46	44	48	---	---	---	---	--	--
Pelt price: males	$70	$74	$84	$84	$54	$26	$35	$21	$16	$14	$19	$16	$25	$31	$19	$19	$20
females	$122	$130	$162	$170	$100	$53	$46	$48	$29	$28	$30	$25	$34	$34	$22	$20	$19
Snowshoe hare index[3]	0.4	0.2	0.5	0.9	2.7	2.3	1.2	1.4	0.5	0.2	0.5	0.8	0.6	0.4	1.1	0.9	1.68

[1] estimated from population model, includes accidental harvests of 22% 1977-1992, and 11% 1993-1999

[2] may exceed registration totals due to accidental catches, Indian Reservation season framework, etc.

[3] number of snowshoe hares seen per 100 km of ruffed grouse drumming route during the spring after fisher season.

[4] combined limit in 2000 of any combination of marten and fisher totaling 4.

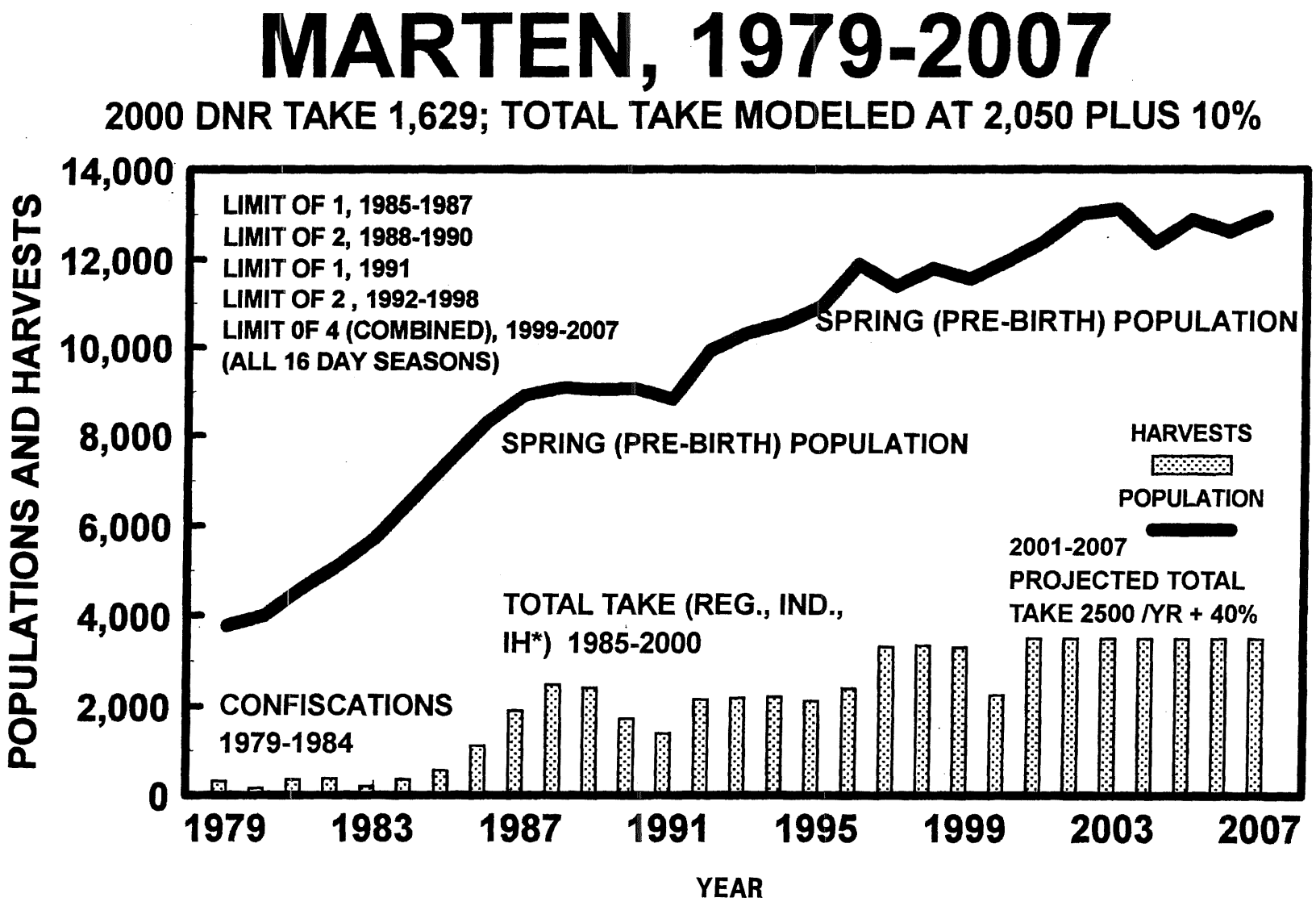


Figure 24. Population modeling summaries for pine marten in Minnesota, 1979 - 2007.

Table 26. Pine marten harvest, carcass collection, and pelt price data in Minnesota, 1987-2000.

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Season	11/28-12/13	11/26-12/11	12/ 2-12/17	12/ 1-12/16	11/30-12/15	11/28-12/13	12/ 4-12/19	12/3-12/18	12/2-12/17	11/30-12/15	11/29-12/14	11/28-12/13	12/4-12/19	12/2-12/17
Limit	1	2	2	2	1	2	2	2	2	2	2	2	4[3]	4[4]
Registered take	1,363	2,072	2,119	1,349	656	1,601	1,436	1,527	1,500	1,625	2,261	2,299	2,423	1629
% of available fall population harvested[1]	15	19	20	15	11	15	15	15	13	16	21	20	18	14
No. carcasses examined[2]	1,754	1,977	1,014	1,375	716	1,661	1,396	1,452	1,393	1,372	2,238	1,577	2,013	1598
% juveniles	66	66	68	48	74	65	57	58	60	48	61	57	67	56
% 1.7 yrs.	18	11	12	18	9	18	20	15	18	22	13	18	12	25
% ≥ 2.7 yrs.	16	23	20	34	17	17	23	27	22	30	26	25	21	19
juv.:adult female ratio	11.2:1	8.6:1	9.7:1	3.6:1	16.1:1	15.1:1	7.5:1	6.4:1	8.2:1	4.8:1	6.2:1	6.6:1	9.8:1	8.9:1
% male juveniles	65	58	57	59	69	63	61	62	63	62	60	62	65	62
% male 1.7 yrs.	67	50	63	54	71	70	71	76	68	69	60	66	66	69
% male ≥ 2.7 yrs.	75	66	65	61	72	75	67	67	66	67	63	65	67	66
% males overall	67	59	59	59	70	66	64	66	65	65	61	63	66	64
Pelt price: male	$43	$50	$48	$44	$40	$28	$36	$34	$28	$34	$28	$20	$25	$28
female	$39	$43	$47	$41	$27	$25	$30	$28	$21	$29	$22	$16	$21	$21

[1] estimated from population model, includes accidental harvests of 40% 1985-1987 and 1991, of 20% 1988-1990 and 1992-1998, and of 10% in 1999

[2] may exceed registration totals due to harvests by Indians, accidental catches, etc.

[3] "combined" limit in 1999 of 4 marten, not to include more than 2 fisher (limit could be all marten)

[4] combined limit in 2000 of any combination of marten and fisher totaling 4.

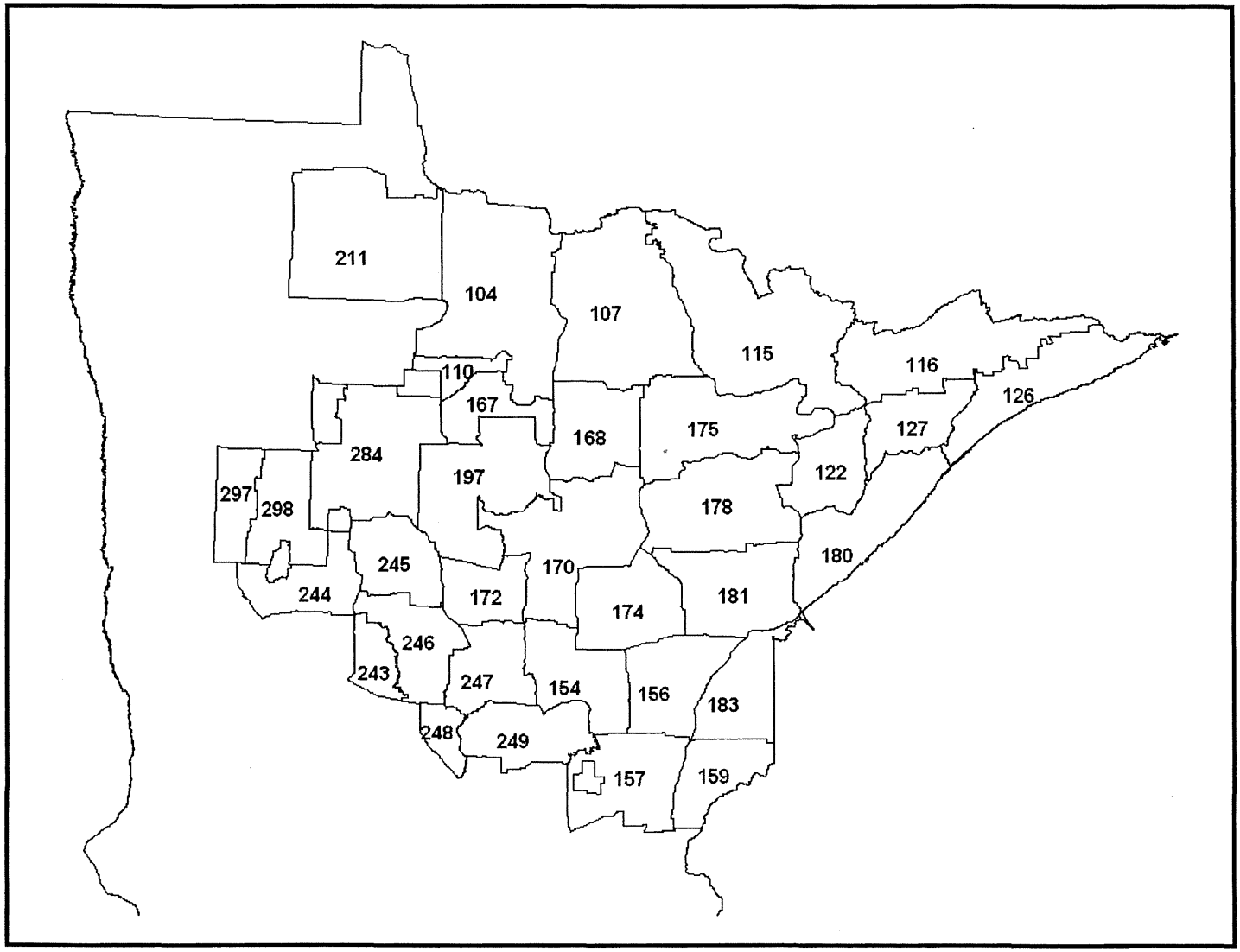


Figure 25. Deer Permit Areas in the Forest zone.

Table 27. Spring (pre-fawning) white-tailed deer density simulated from modeling in each permit area in Minnesota's Forested Zone, 1989-2001[a]

Permit Area	Deer per square mile													% Change
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	
104	6	7	7	8	7	7	7	4	3	4	4	5	6	10%
107	7	8	8	8	7	8	7	6	5	6	7	8	8	-2%
110	17	19	21	22	19	20	21	13	10	13	13	11	9	-24%
115	15	17	17	18	17	15	16	12	11	13	14	16	15	-7%
116	1	1	1	1	1	1	1	1	1	1	1	1	1	0%
122	10	10	10	10	8	7	8	5	5	6	6	8	7	-4%
126	4	4	4	4	3	3	4	3	2	3	3	4	3	-6%
127	2	2	1	1	2	1	1	1	2	2	2	2	2	0%
152	18	17	17	16	17	16	17	15	13	14	15	16	16	-3%
154	11	13	14	13	12	11	12	11	11	13	15	16	16	-4%
156	11	12	13	12	11	10	11	10	9	11	12	14	14	-1%
157	18	22	24	22	19	18	20	19	18	21	23	26	26	0%
159	19	22	22	19	17	18	20	19	19	22	24	26	24	-6%
167	22	26	27	30	26	27	29	19	14	18	18	20	21	3%
168	15	17	17	18	16	14	13	10	10	13	15	17	16	-3%
170	13	14	14	14	12	10	10	8	8	10	12	14	13	-8%
172	25	28	31	32	28	27	27	23	22	26	31	34	30	-12%
174	10	11	11	11	9	9	9	7	7	8	10	11	11	-4%
175	8	9	9	9	9	9	9	6	6	7	9	10	9	-5%
178	8	9	9	9	9	9	9	6	6	7	9	10	10	-3%
180	7	8	7	7	6	6	6	5	4	5	6	7	7	0%
181	11	12	13	12	12	11	12	9	8	10	11	13	12	-5%
183	14	15	16	15	15	14	15	11	11	13	15	15	14	-9%
197	9	10	10	11	10	10	11	7	7	8	9	11	11	5%
211	6	7	7	8	8	8	9	6	4	6	6	7	8	14%
243	22	26	29	30	28	27	28	25	22	25	27	29	27	-9%
244	20	24	28	30	29	28	29	21	19	21	24	27	27	3%
245	18	22	25	26	24	22	24	17	16	20	24	27	27	0%
246	18	21	24	25	23	22	23	21	18	21	23	25	23	-8%
247	13	16	18	19	20	20	22	21	19	22	24	27	26	-3%
248	14	17	18	19	18	18	19	16	14	17	18	19	18	-3%
249	11	13	15	15	14	14	15	13	12	14	16	18	17	-5%
251	33	35	35	36	34	32	33	26	24	28	31	35	38	10%
284	15	17	19	20	19	19	19	13	11	14	17	19	19	3%
297	3	3	3	3	3	3	3	2	2	3	3	3	4	9%
298	10	10	11	11	12	12	13	9	8	10	11	12	13	6%

[a] Historical density figures may differ from those previously published because of annual recalculation as more accurate modeling data are available.

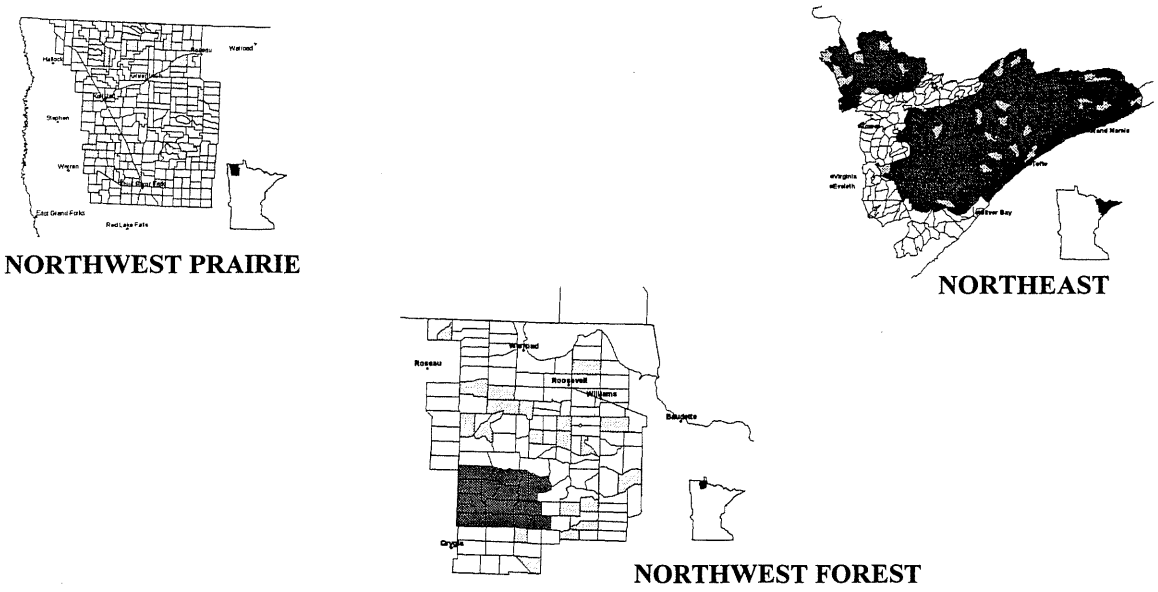


Figure 26. Aerial moose survey area boundaries.

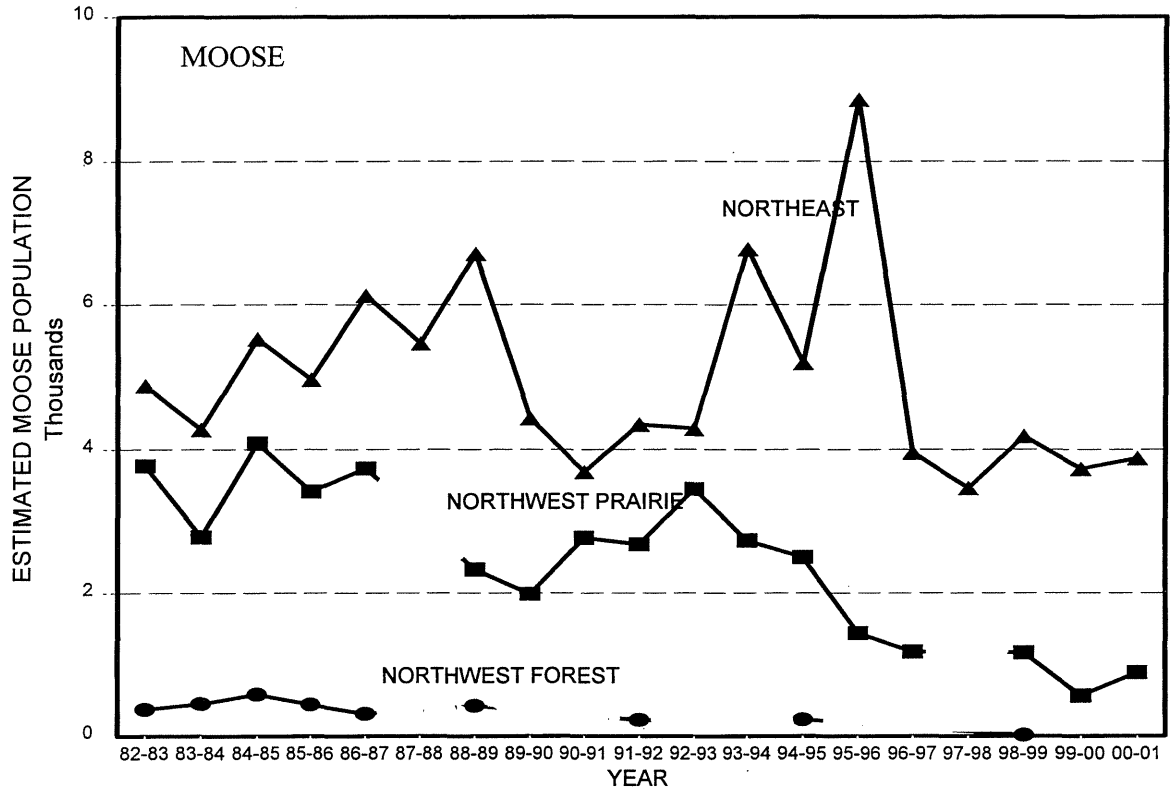


Figure 27. Moose population trends by survey area in northern Minnesota. Trend lines are broken where survey information was not collected.

Table 28. Moose population estimates from aerial moose survey in Minnesota, 1982-2001.

Year	Population Estimate by Survey Area (+90% CI) Northwest Prairie	Northwest Forest	Northeast
1982-83	3772 (± 930)	370 (± 124)	4877 (± 999)
1983-84	2784 (± 567)	446 (± 139)	4274 (± 925)
1984-85	4086 (± 518)	578 (± 148)	4451 (±774)
1985-86	3415 (± 412)	433 (± 100)	4918 (±1029)
1986-87	3740 (± 747)	307 (± 83)	5994 (±1438)
1987-88	no survey	no survey	5492 (±1090)
1988-89	2328 (± 474)	419 (± 153)	6938 (±2502)
1989-90	1985 (± 435)	no survey	4492 (±1227)
1990-91	2771 (± 817)	no survey	3572 (±1670)
1991-92	2678 (± 629)	223 (± 65)	4362 (±1323)
1992-93	3452 (± 640)	no survey	4292 (±1371)
1993-94	2735 (± 491)	no survey	6768 (±1807)
1994-95	2500*	229 (± 88)	5193 (± 1516)
1995-96	1436*	no survey	8854 (± 9513)
1996-97	1170 (± 359)†	no survey	3960 (± 1416)
1997-98	no survey	no survey	3464 (± 1247)‡
1998-99	1,160 (± 384)	11 (± 8)	4186 (± 1423)
1999-00	560 (± 233)	no survey	3733 (± 942)
2000-01	883 (± 253)	no survey	3879 (± 1094)
change since last survey	+ 57 %		+ 4 %

* The Northwest Prairie (NWP) survey area was re-stratified and split into two separate survey areas, the Northwest Prairie East (NWPE) and the Northwest Prairie West (NWPW). Results from these two areas were combined to give the NWP population estimate.

† Because of reduced moose numbers, the Northwest Prairie East and West survey areas were combined into a single area for this year's survey.

‡ In order to maximize the "sampling fraction", the survey area in the northeast was reduced in size so as to include only the moose hunting zones. As a result, this year's survey is not directly comparable with previous year's estimates. For comparative purposes, this year's estimate has been extrapolated to reflect the older, larger survey area.

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Table 29. Estimates of Minnesota mallard breeding populations, 1975-2001.

Species	Year	Unadjusted population index	Visibility factor	Adjusted population estimate (thousands)
Mallard	1975	55,093	3.19	176
	1976	69,844	1.69	118
	1977	60,617	2.21	134
	1978	56,152	2.61	147
	1979	61,743	2.57	159
	1980	83,775	2.05	172
	1981	79,562	1.95	155
	1982	51,655	2.33	121
	1983	73,424	2.12	156
	1984	94,514	1.99	188
	1985	96,045	2.26	217
	1986	108,328	2.16	234
	1987	165,881	1.16	192
	1988	155,453	1.75	272
	1989	124,362	2.19	273
	1990	140,879	1.65	232
	1991	128,315	1.75	225
	1992	144,126	2.50	360
	1993	123,771	2.47	306
	1994	138,481	3.08	426
	1995	142,556	2.24	319
	1996	153,473	2.05	315
	1997	160,628	2.54	407
	1998	188,972	1.95	368
	1999	169,213	1.87	316
	2000	157,853	2.02	318
	2001	146,034	2.20	321

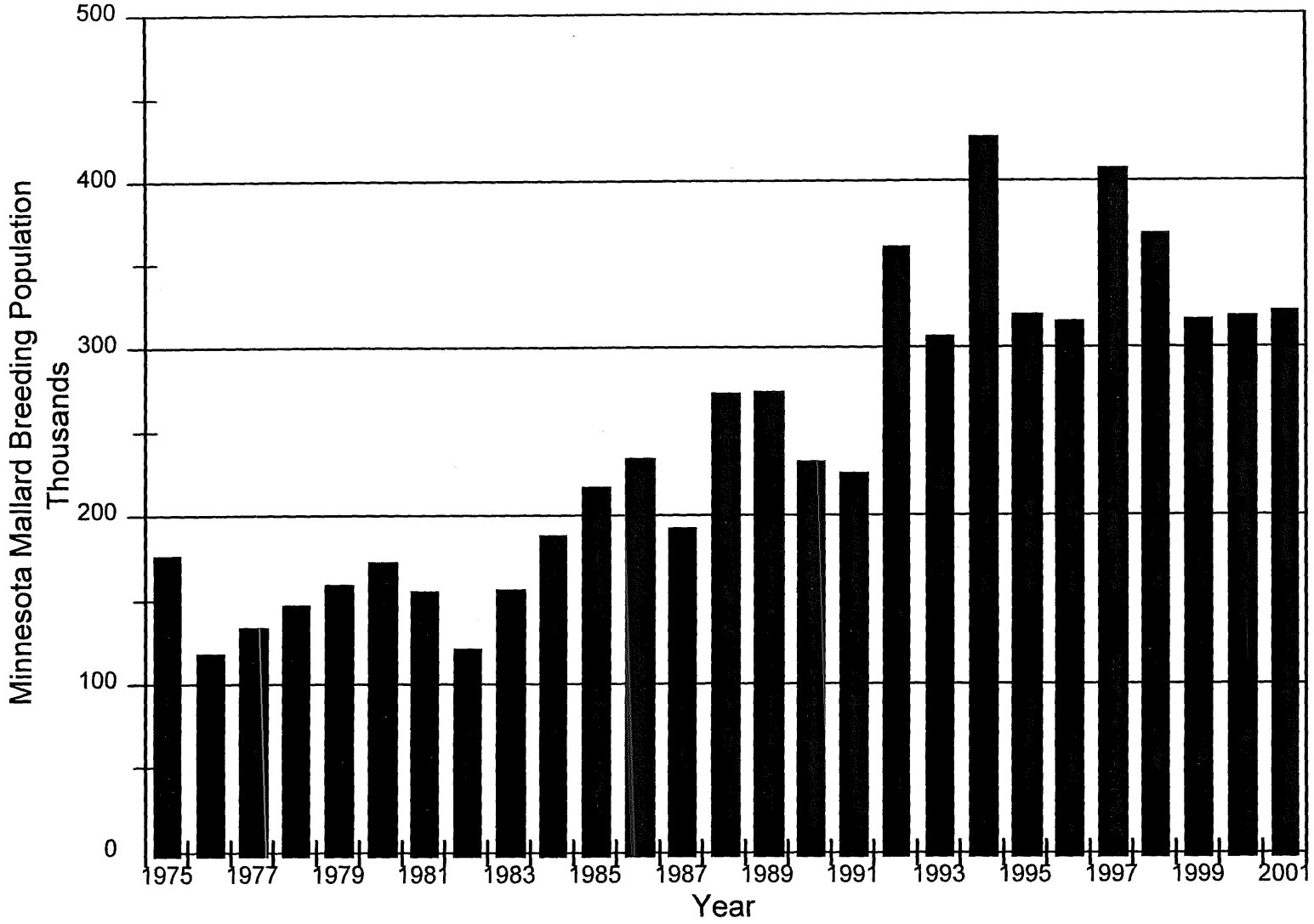

Figure 28. Minnesota mallard breeding populations, 1975-2001.

Table 30. Estimates of Minnesota Blue-winged teal breeding populations, 1975-2001.

Species	Year	Unadjusted population index	Visibility factor	Adjusted population estimate (thousands)
Blue-winged teal	1975	45,948	3.95	181
	1976	89,370	4.87	436
	1977	37,391	3.86	144
	1978	28,491	8.53	243
	1979	46,708	5.21	243
	1980	50,966	6.49	331
	1981	64,546	2.59	167
	1982	42,772	4.75	203
	1983	42.728	2.81	120
	1984	89,896	2.82	254
	1985	90,453	2.91	264
	1986	68,235	2.69	183
	1987	102,480	1.99	204
	1988	101,135	2.38	240
	1989	90,300	3.16	286
	1990	107,183	3.09	331
	1991	91,495	2.90	265
	1992	93,107	3.83	357
	1993	64,670	4.02	260
	1994	70,324	5.48	385
	1995	47,737	4.40	210
	1996	57,196	5.05	289
	1997	45,496	5.57	253
	1998	47,788	3.66	175
	1999	36,106	4.53	163
	2000	60,288	2.97	179
	2001	37,706	3.60	136

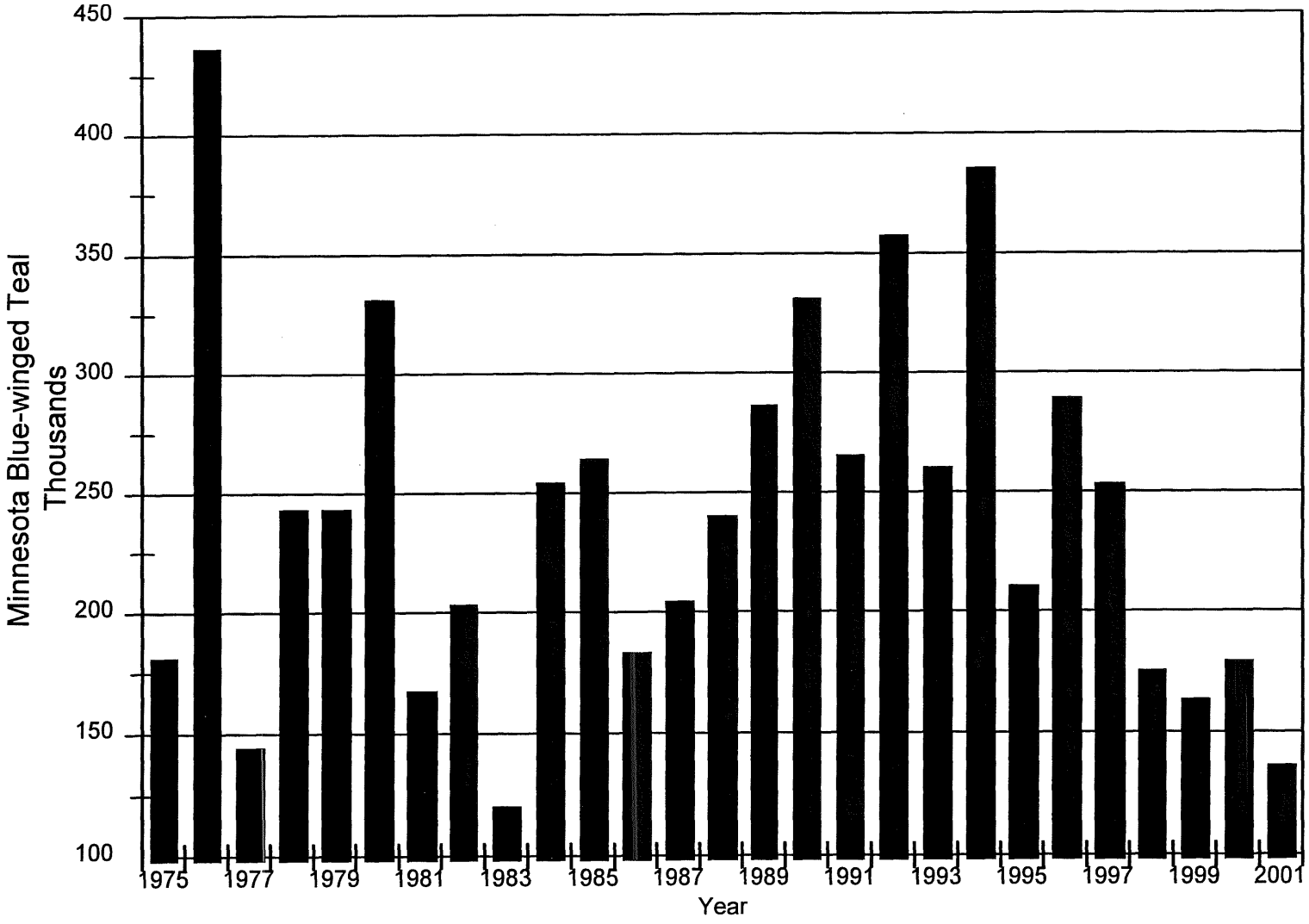

Figure 29. Minnesota blue-winged teal breeding populations, 1975-2001.

Table 31. Canada goose population indices (in thousands) of the eastern prairie flock, 1969-2001 (taken from: U.S. Fish and Wildlife Service/Canadian Wildlife Service, 2001. Waterfowl population status, 2001. July 2001. 48pp).

Year	Population[a,b]
1969	107,000
1970	121,000
1971	142,000
1972	151,000
1973	135,000
1974	162,000
1975	234,000
1976	200,000
1977	228,000
1978	132,000
1979	172,000
1980	160,000
1981	162,000
1982	221,000
1983	169,000
1984	195,000
1985	248,000
1986	247,000
1987	257,000
1988	278,000
1989	297,000
1990	295,000
1991	261,000
1992	206,000
1993	332,000
1994	284,000
1995	259,000
1996	256,000
1997	160,000
1998	270,000
1999	275,000
2000	215,000

[a] Surveys conducted in Spring.
[b] Indirect or preliminary estimate.

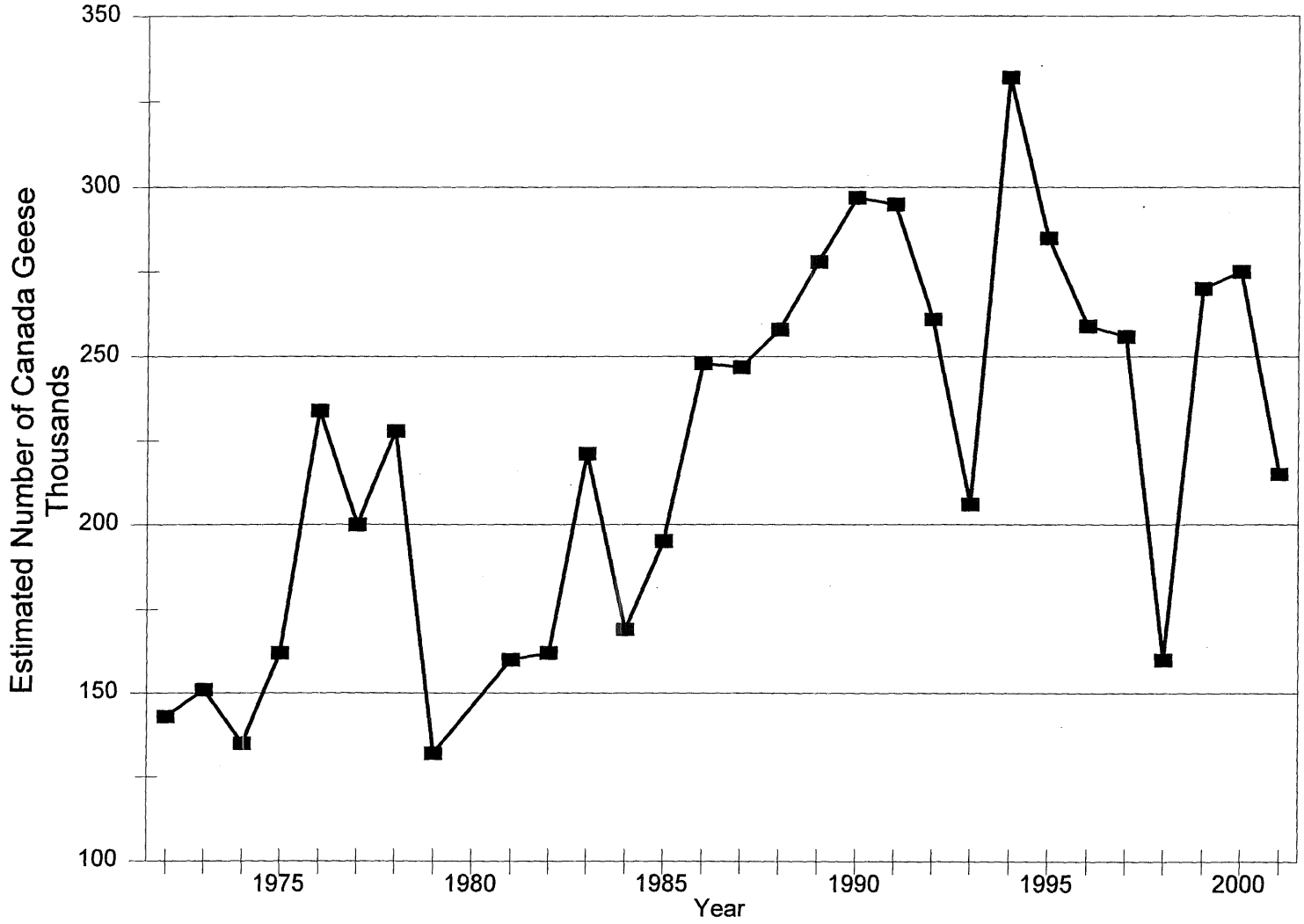

Figure 30. Breeding ground survey estimates of the Eastern Prairie Population of Canada geese, 1972-2001. (from: U.S. Fish and Wildlife Service/Canadian Wildlife Service reports 2001. Waterfowl population status, 2001. July 2001. 48pp). Surveys conducted in spring. Indirect or preliminary estimates. Data not available for 1980.

Table 32. Estimates for EPP components and the population, 1972-2001. Estimates for geese represented by singles (excluding singles with nests) and pairs are "x 2" and are corrected for visibility (x 1.4). "Productive" geese are singles, pairs with nests or broods, and geese initially seen as a single (assumed to be a goose from a nest) and joined by another goose (assumed to be the gander). The estimate of grouped geese does not include groups larger than 15 birds from interior strata (assumed to be comprised largely of molting giant Canada geese). From: 2001 EPP Breeding Population Survey. Humburg, Dale D., Missouri Dept. of Conservation; Paul Telander, Minnesota DNR; Robert Foster, U.S. Fish and Wildlife Service; Brian Lubinski, U.S. Fish and Wildlife Service.

	Singles (x2)		Pairs (x2)		Geese in groups		Singles + Pairs		Total EPP		Productive	
YEAR	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI
72	40905	8225	54063	10573	29764	10885	94969	16696	124634	17260		
73	47952	8596	68630	14380	21063	7073	116581	18573	137522	18185		
74	35597	6608	61062	12716	23213	6859	96659	17136	119770	15887		
75	63995	11549	57542	9623	22815	8902	121536	18313	144225	17471		
76	70596	13556	97791	15596	48153	14684	168388	22089	216364	25350		
77	45459	9648	65348	12810	52961	14159	110808	19518	163653	21393		
78	27286	7131	83911	12659	68529	18475	111197	16696	179609	23504		
79	26850	6348	45989	9497	26537	9808	72839	12640	99300	15056		
80					No survey conducted							
81	31331	6787	47534	10109	46614	15183	78865	14480	125397	19462		
82	43020	8137	53407	8762	35375	12044	96427	13538	131701	16971		
83	27010	5836	65806	10061	62324	13944	92817	12215	155042	18159		
84	48636	8483	63369	9747	23500	8539	112004	14661	135388	15488	60309	9722
85	42983	9345	62613	10204	52846	14754	105595	16347	158331	20226	62419	11276
86	57014	10227	69365	12235	68395	15997	126379	18534	194641	22588	63848	11466
87	50297	9421	95557	14904	57332	15707	145854	19726	203033	23614	59710	10864
88	57739	8843	79245	11977	72199	21870	136984	17619	209040	26456	65079	9942
89	62557	9722	69545	11590	78067	17802	132103	16710	210030	23362	66416	10085
90	66729	10550	96669	12977	68439	15962	163398	18391	231665	23120	79555	11652
91	66190	12847	101237	15160	44381	15107	167427	23004	211633	24962	80607	15048
92	61950	9722	96456	14145	44139	11414	158406	19859	202379	20612	73739	11445
93	71553	10344	64690	11126	21229	7739	136242	16391	157330	17049	82761	11339
94	67681	11212	68556	11424	74545	18790	136237	17107	210639	24683	77668	11816
95	51117	8843	87859	12621	65603	21468	138976	17386	204433	26426	58452	9869
96	55304	9573	85671	13801	49388	15283	140975	19653	190215	22709	66679	10952
97	55536	9031	75036	11897	68807	20295	130539	18049	199243	25199	72347	11673
98	57161	10413	42137	8341	26606	11056	99298	15643	125800	17327	64269	11507
99	65242	10273	74250	12391	67256	13132	139492	18586	206602	20773	76585	11590
2000	32800	6927	97238	15795	145089	34685	130742	19345	274991	38736	40813	7898
2001	38656	8762	83570	13324	93135	23506	122237	17247	215361	28405	51899	9548

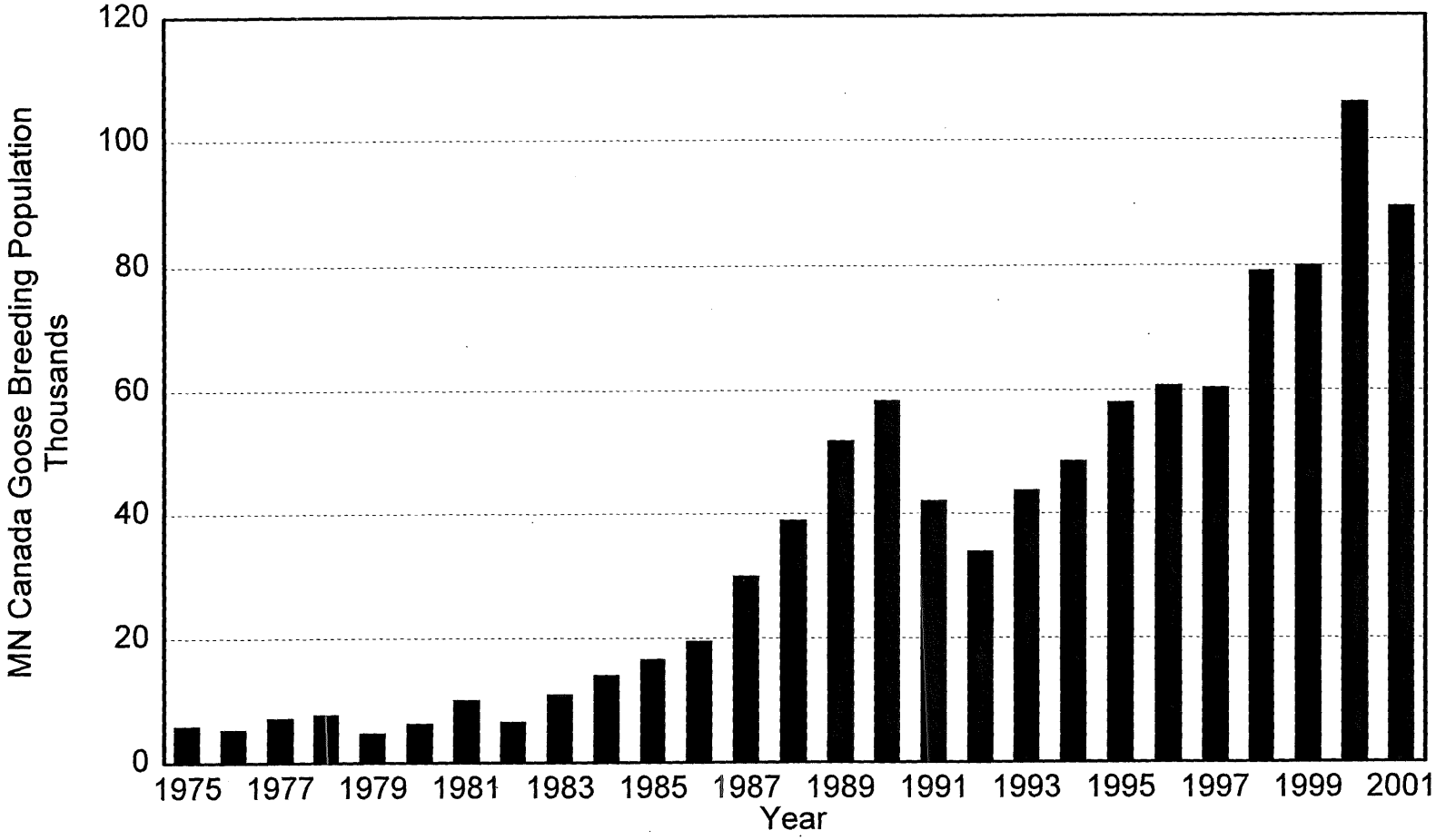

Figure 31. Minnesota Canada goose breeding population, 1975-2001 (from: Lawrence, J.S. 2001. 2001 waterfowl breeding population survey for Minnesota. Minnesota Department of Natural Resources and U.S. Fish and Wildlife Service. Unpublished report. 15pp.)

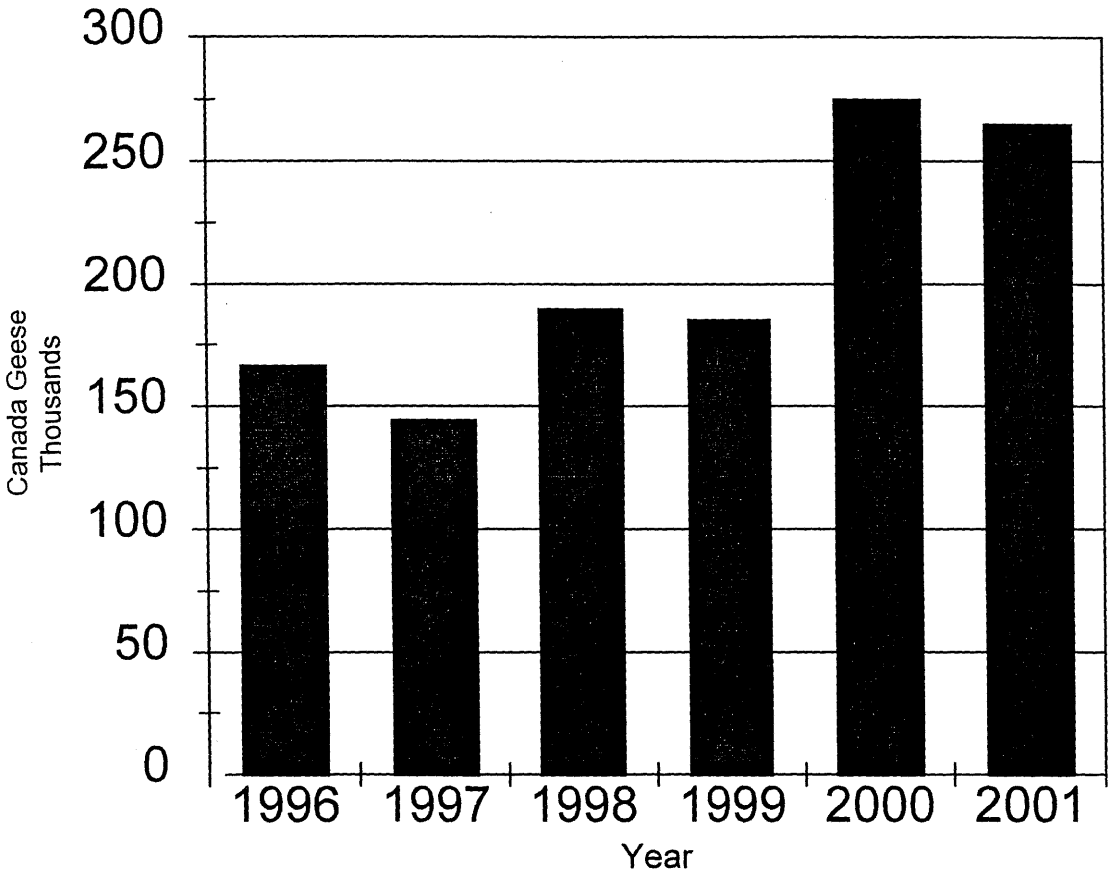

Figure32. Estimated number of Canada geese in 9 goose management blocks (GMB) from a fixed wing aerial survey during May in Minnesota, 1996-2000. Does not include Metro or Northeast GMBs. 2001 data are from a helicopter survey during April in Minnesota. Does not include Metro GMB or Lake and Cook counties in the Northeast.

Table 33. Estimated number of May ponds (adjusted for visibility) in Prairie Canada (portions of Alberta, Saskatchewan and Manitoba) 1961-2001 and north-central U.S. (North Dakota, South Dakota and Montana) 1974-2001. (from: U.S. Fish and Wildlife Service/Canadian Wildlife Service, 2001. Waterfowl population status, 2001. July 2001. 48pp).

Year	Ponds (thousands) Prairie Canada	North Central U.S.[a]
1961	1,977	--
1962	2,369	--
1963	2,482	--
1964	3,371	--
1965	4,379	--
1966	4,555	--
1967	4,691	--
1968	1,986	--
1969	3,548	--
1970	4,875	--
1971	4,053	--
1972	4,009	--
1973	2,950	--
1974	6,390	1,841
1975	5,320	1,911
1976	4,599	1,392
1977	2,278	771
1978	3,622	1,590
1979	4,859	1,522
1980	2,141	761
1981	1,443	683
1982	3,185	1,458
1983	3,906	1,259
1984	2,473	1,766
1985	4,283	1,327
1986	4,025	1,735
1987	2,524	1,348
1988	2,110	791
1989	1,693	1,290
1990	2,817	691
1991	2,494	706
1992	2,784	825
1993	2,261	1,351
1994	3,769	2,216
1995	3,893	2,443
1996	5,003	2,480
1997	5,061	2,397
1998	2,522	2,065
1999	3,862	2,842
2000	2,422	1,524
2001	2,744	1,893
Average	3,408	1,531
2001	2,747	1,893
% Change in 2001 from:		
2000	+ 13	+ 24
Long term Average	- 0	+ 1

[a] No comparable survey data available for the north-central U.S.during 1961-73.

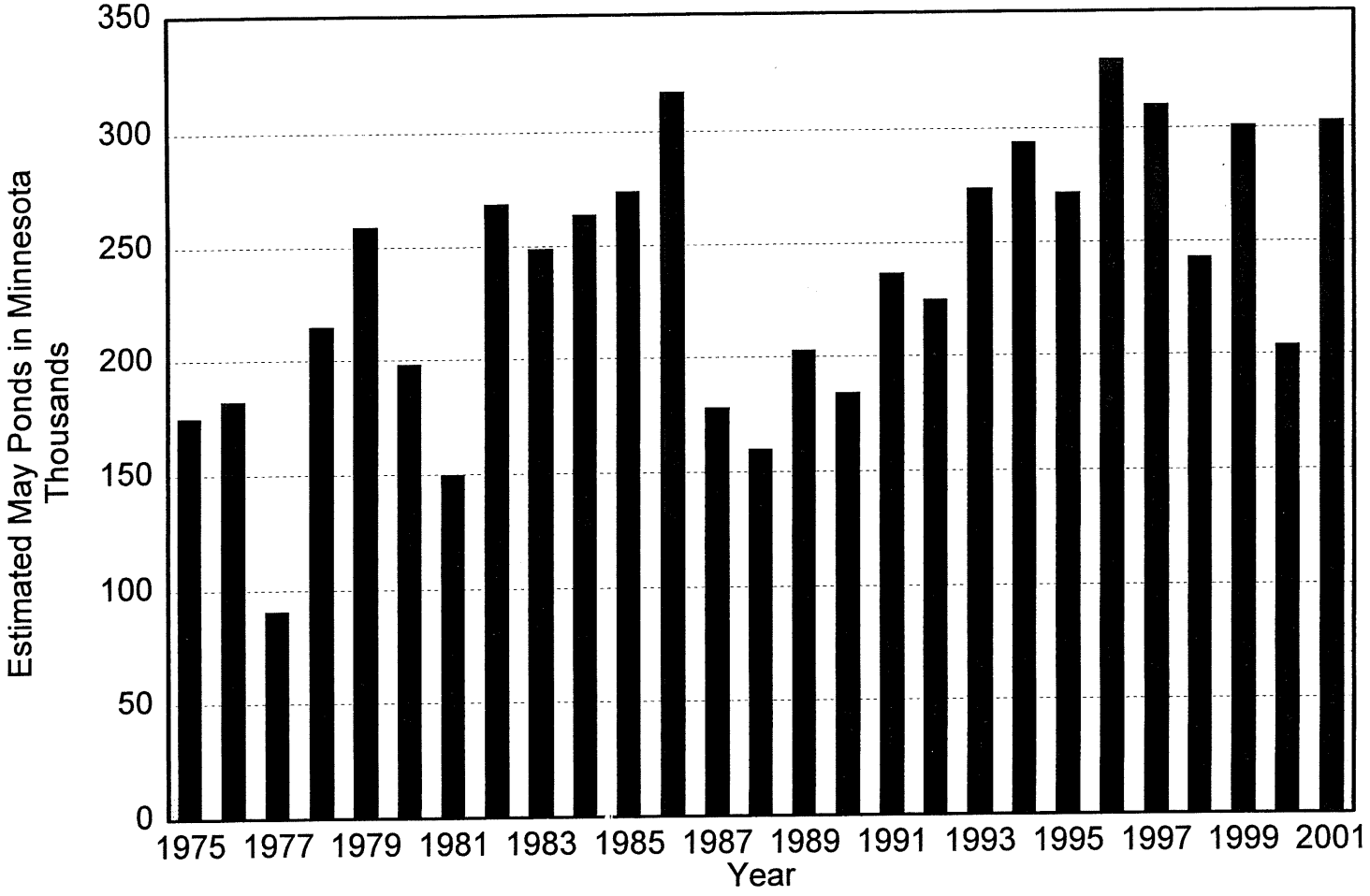

Figure 33. Estimated number of May ponds for Minnesota, 1975-2001.

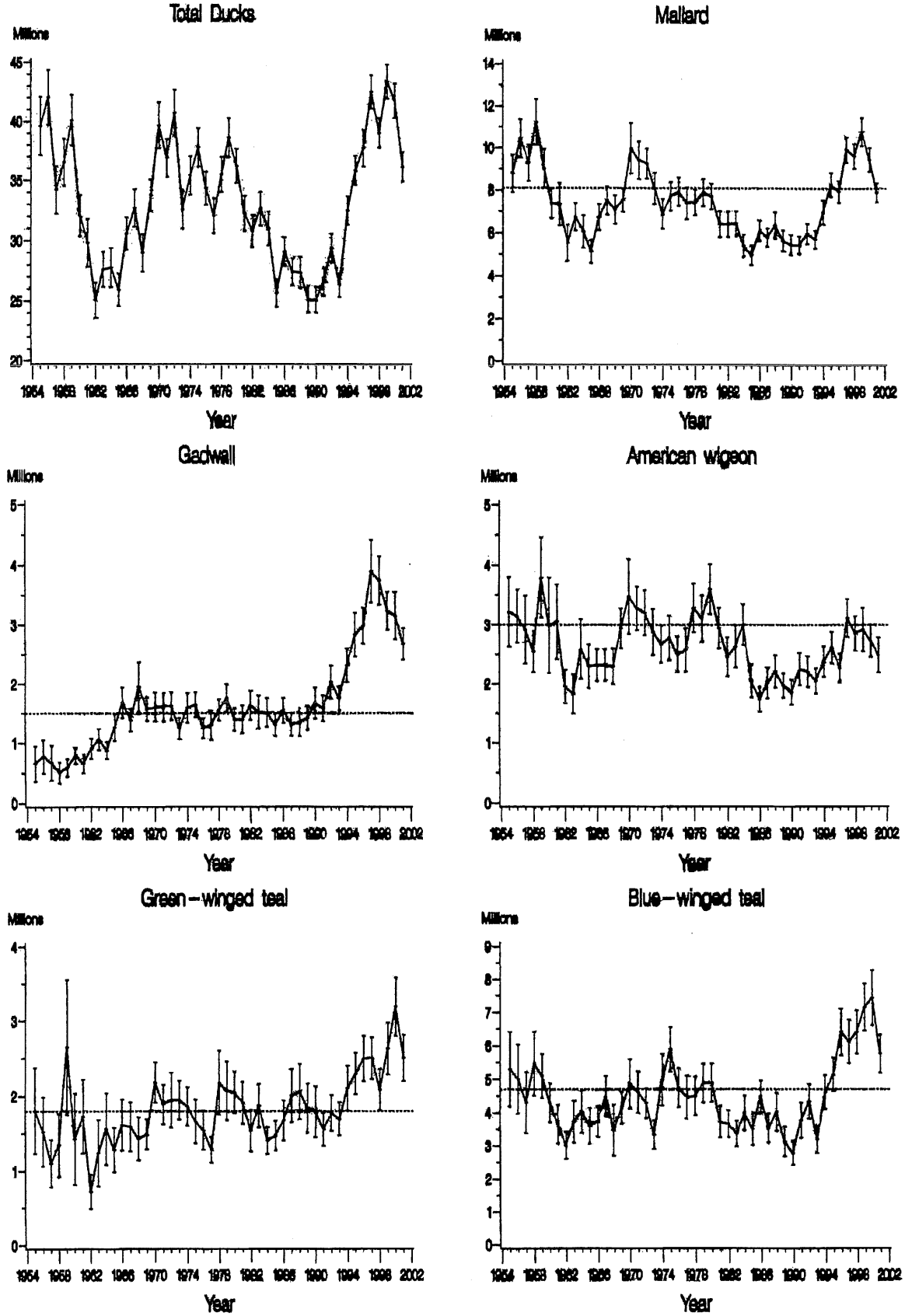

Figure 34. Estimates of North American breeding populations of selected ducks and number of water areas in May in Prairie Canada and Northcentral U.S. (from: U.S. Fish and Wildlife Service/Canadian Wildlife Service 2001. Waterfowl population status, 2001 July 2001. 48 pp).

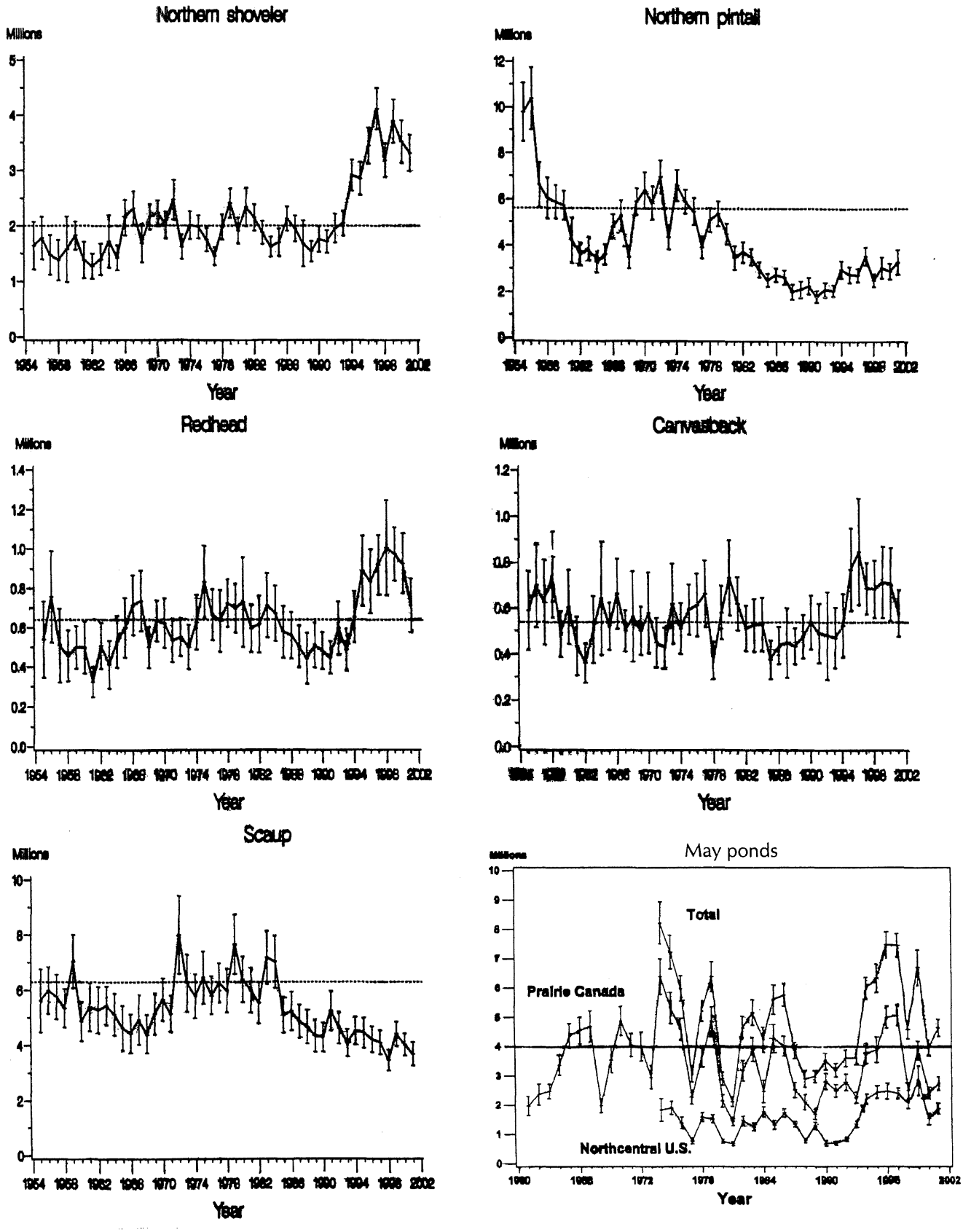

Figure 34. (continued)

Table 34. North American breeding population estimates for 10 species of ducks. 1955-2001. (from: U.S. Fish and Wildlife Service/ Canadian Wildlife Service, 2001. Waterfowl Population status, 2001. July 2001. 48 pp). In thousands. All duck indexes adjusted for visibility bias.

	Mallard		Gadwall		American Widgeon		Green-wingedTeal		Blue-winged Teal		Northern Shoveler		Northern Pintail		Redhead		Canvasback		Scaup	
Year	N	SE	N	SE	N	SE	N	SE	N	SE	N	SE	N	SE	N	SE	N	SE	N	SE
1955	8777.3	457.1	651.5	149.5	3216.8	297.8	1807.2	291.5	5305.2	567.6	1642.8	218.7	9775.1	656.1	539.9	98.9	589.3	87.8	5620.1	582.1
1956	10452.7	461.8	772.6	142.4	3145.0	227.8	1525.3	236.2	4997.6	527.6	1781.4	196.4	10372.8	694.4	757.3	119.3	698.5	93.3	5994.1	434.0
1957	9296.9	443.5	666.8	148.2	2919.8	291.5	1102.9	161.2	4299.5	467.3	1476.1	181.8	6606.9	493.4	509.1	95.7	626.1	94.7	5766.9	411.7
1958	11234.2	555.6	502.0	89.6	2551.7	177.9	1347.4	212.2	5456.6	483.7	1383.8	185.1	5037.9	447.9	457.1	66.2	746.8	96.1	5350.4	355.1
1959	9024.3	466.6	590.0	72.7	3787.7	339.2	2653.4	459.3	5099.3	332.7	1577.6	301.1	5872.7	371.6	498.8	55.5	488.7	50.6	7037.6	492.3
1960	7371.7	354.1	784.1	68.4	2987.6	407.0	1426.9	311.0	4293.0	294.3	1824.5	130.1	5722.2	323.2	497.8	67.0	605.7	82.4	4868.6	362.5
1961	7330.0	510.5	654.8	77.5	3048.3	319.9	1729.3	251.5	3655.3	398.7	1383.0	166.5	4218.2	496.2	323.3	38.8	435.3	65.7	5380.0	442.2
1962	5535.9	426.9	905.1	87.0	1958.7	145.4	722.9	117.6	3011.1	209.8	1269.0	113.9	3623.5	243.1	507.5	60.0	360.2	43.8	5286.1	426.4
1963	6748.8	326.8	1055.3	89.5	1830.8	169.9	1242.3	226.9	3723.6	323.0	1398.4	143.8	3846.0	255.6	413.4	61.9	506.2	74.9	5438.4	357.9
1964	6063.9	385.3	873.4	73.7	2589.6	259.7	1561.3	244.7	4020.6	320.4	1718.3	240.3	3291.2	239.4	528.1	67.3	643.6	126.9	5131.8	386.1
1965	5131.7	274.8	1260.3	114.8	2301.1	189.4	1282.0	151.0	3594.5	270.4	1423.7	114.1	2591.9	221.9	599.3	77.7	522.1	52.8	4640.0	411.2
1966	6731.9	311.4	1680.4	132.4	2318.4	139.2	1617.3	173.6	3733.2	233.6	2147.0	163.9	4811.9	265.6	713.1	77.6	663.1	78.0	4439.2	356.2
1967	7509.5	338.2	1384.6	97.8	2325.5	136.2	1593.7	165.7	4491.5	305.7	2314.7	154.6	5277.7	341.9	735.7	79.0	502.6	45.4	4927.7	456.1
1968	7089.2	340.8	1949.0	213.9	2298.6	156.1	1430.9	146.6	3462.5	389.1	1684.5	176.8	3489.4	244.6	499.4	53.6	563.7	101.3	4412.7	351.8
1969	7531.6	280.2	1573.4	100.2	2941.4	168.6	1491.0	103.5	4138.6	239.5	2156.8	117.2	5903.9	296.2	633.2	53.6	503.5	53.7	5139.8	378.5
1970	9985.9	617.2	1608.1	123.5	3469.9	318.5	2182.5	137.7	4861.8	372.3	2230.4	117.4	6392.0	396.7	622.3	64.3	580.1	90.4	5662.5	391.4
1971	9416.4	459.5	1605.6	123.0	3272.9	186.2	1889.3	132.9	4610.2	322.8	2011.4	122.7	5847.2	368.1	534.4	57.0	450.7	55.2	5143.3	333.8
1972	9265.5	363.9	1622.9	120.1	3200.1	194.1	1948.2	185.8	4278.5	230.5	2466.5	182.8	6979.0	364.5	550.9	49.4	425.9	46.0	7997.0	718.0
1973	8079.2	377.5	1245.6	90.3	2877.9	197.4	1949.2	131.9	3332.5	220.3	1619.0	112.2	4356.2	267.0	500.8	57.7	620.5	89.1	6257.4	523.1
1974	6880.2	351.8	1592.4	128.2	2672.0	159.3	1864.5	131.2	4976.2	394.6	2011.3	129.9	6598.2	345.8	626.3	70.8	512.8	56.8	5780.5	409.8
1975	7726.9	344.1	1643.9	109.0	2778.3	192.0	1664.8	148.1	5885.4	337.4	1980.8	106.7	5900.4	267.3	831.9	93.5	595.1	56.1	6460.0	486.0
1976	7933.6	337.4	1244.8	85.7	2505.2	152.7	1547.5	134.0	4744.7	294.5	1748.1	106.9	5475.6	299.2	665.9	66.3	614.4	70.1	5818.7	348.7
1977	7397.1	381.8	1299.0	126.4	2575.1	185.9	1285.8	87.9	4462.8	328.4	1451.8	82.1	3926.1	246.8	634.0	79.9	664.0	74.9	6260.2	362.8
1978	7425.0	307.0	1558.0	92.2	3282.4	208.0	2174.2	219.1	4498.6	293.3	1975.3	115.6	5108.2	267.8	724.6	62.2	373.2	41.5	5984.4	403.0
1979	7883.4	327.0	1757.9	121.0	3106.5	198.2	2071.7	198.5	4875.9	297.6	2406.5	135.6	5376.1	274.4	697.5	63.8	582.0	59.8	7657.9	548.6
1980	7706.5	307.2	1392.9	98.8	3595.5	213.2	2049.9	140.7	4895.1	295.6	1908.2	119.9	4508.1	228.6	728.4	116.7	734.6	83.8	6381.7	421.2
1981	6409.7	308.4	1395.4	120.0	2946.0	173.0	1910.5	141.7	3720.6	242.1	2333.6	177.4	3479.5	260.5	594.9	62.0	620.8	59.1	5990.9	414.2
1982	6408.5	302.2	1633.8	126.2	2458.7	167.3	1535.7	140.2	3657.6	203.7	2147.6	121.7	3708.8	226.6	616.9	74.2	513.3	50.9	5532.0	380.9
1983	6456.0	286.9	1519.2	144.3	2636.2	181.4	1875.0	148.0	3366.5	197.2	1875.7	105.3	3510.6	178.1	711.9	83.3	526.6	58.9	7173.8	494.9
1984	5415.3	258.4	1515.0	125.0	3002.2	174.2	1408.2	91.5	3979.3	267.6	1618.2	91.9	2964.8	166.8	671.3	72.0	530.1	60.1	7024.3	484.7
1985	4960.9	234.7	1303.0	98.2	2050.7	143.7	1475.4	100.3	3502.4	246.3	1702.1	125.7	2515.5	143.0	578.2	67.1	375.9	42.9	5098.0	333.1
1986	6124.2	241.6	1547.1	107.5	1736.5	109.9	1674.9	136.1	4478.8	237.1	2128.2	112.0	2739.7	152.1	559.6	60.5	438.3	41.5	5235.3	355.5
1987	5789.9	217.9	1305.6	97.1	2012.5	134.3	2006.2	180.4	3528.7	220.2	1950.2	118.4	2628.3	159.4	502.4	54.9	450.1	77.9	4862.7	303.8
1988	6369.3	310.3	1349.9	121.1	2211.1	139.1	2060.8	188.3	4011.1	290.4	1680.9	210.4	2005.5	164.0	441.9	66.2	435.0	40.2	4671.4	309.5
1989	5645.4	244.1	1414.6	106.6	1972.9	106.0	1841.7	166.4	3125.3	229.8	1538.3	95.9	2111.9	181.3	510.7	58.5	477.4	48.4	4342.1	291.3
1990	5452.1	238.6	1672.1	135.8	1860.1	108.3	1789.5	172.7	2776.4	178.7	1759.3	118.6	2256.6	183.3	480.9	48.2	539.3	60.3	4293.1	264.9
1991	5444.6	205.6	1583.7	111.8	2254.0	139.5	1557.8	111.3	3763.7	270.8	1716.2	104.6	1803.4	131.3	445.6	42.1	491.2	66.4	5254.9	364.9
1992	5976.1	241.0	2032.8	143.4	2208.4	131.9	1773.1	123.7	4333.1	263.2	1954.4	132.1	2098.1	161.0	595.6	69.7	481.5	97.3	4639.2	291.9
1993	5708.3	208.9	1755.2	107.9	2053.0	109.3	1694.5	112.7	3192.9	205.6	2046.5	114.3	2053.4	124.2	485.4	53.1	472.1	67.6	4080.1	249.4
1994	6980.1	282.8	2318.3	145.2	2382.3	130.3	2108.4	152.2	4616.2	259.2	2912.0	141.4	2972.3	188.0	653.5	66.7	525.6	71.1	4529.0	253.6
1995	8269.4	287.5	2835.7	187.5	2614.5	136.3	2300.6	140.3	5140.0	253.3	2854.9	150.3	2757.9	177.6	888.5	90.6	770.6	92.2	4446.4	277.6
1996	7941.3	262.9	2984.0	152.5	2271.7	125.4	2499.5	153.4	6407.4	353.9	3449.0	165.7	2735.9	147.5	834.2	83.1	848.5	118.3	4217.4	234.5
1997	9939.7	308.5	3897.2	264.9	3117.6	161.6	2506.6	142.5	6124.3	330.7	4120.4	194.0	3558.0	194.2	918.3	77.2	688.8	57.2	4112.3	224.2
1998	9640.4	301.6	3742.2	205.6	2857.7	145.3	2087.3	138.9	6398.8	332.3	3183.2	156.5	2520.6	136.8	1005.1	122.9	685.9	63.8	3471.9	191.2
1999	10805.7	344.5	3235.5	163.8	2920.1	185.5	2631.0	174.6	7149.5	364.5	3889.5	202.1	3057.9	230.5	973.4	69.5	716.0	79.1	4411.7	227.9
2000	9470.2	290.2	3158.4	200.7	2733.1	138.8	3193.5	200.1	7431.4	425.0	3520.7	197.9	2907.6	170.5	926.3	78.1	706.8	81.0	4026.3	205.3
2001	7904	226.9	2679.2	136.1	2493.5	149.6	2508.7	156.4	5757	288.8	3313.5	166.8	3296	266.6	712.0	70.2	579.8	52.7	3694	214.9
1955-00 Avg.	7,494		1,610		2,649		1,806		4,465		2,073		4,246		624		563		5,353	
% change in 2001 from:																				
2000	-17		-15		-9		-21		-23		-6		13		-23		-18		-8	
1955-00 Avg.	5		40		-6		28		22		37		-29		12		3		-45	

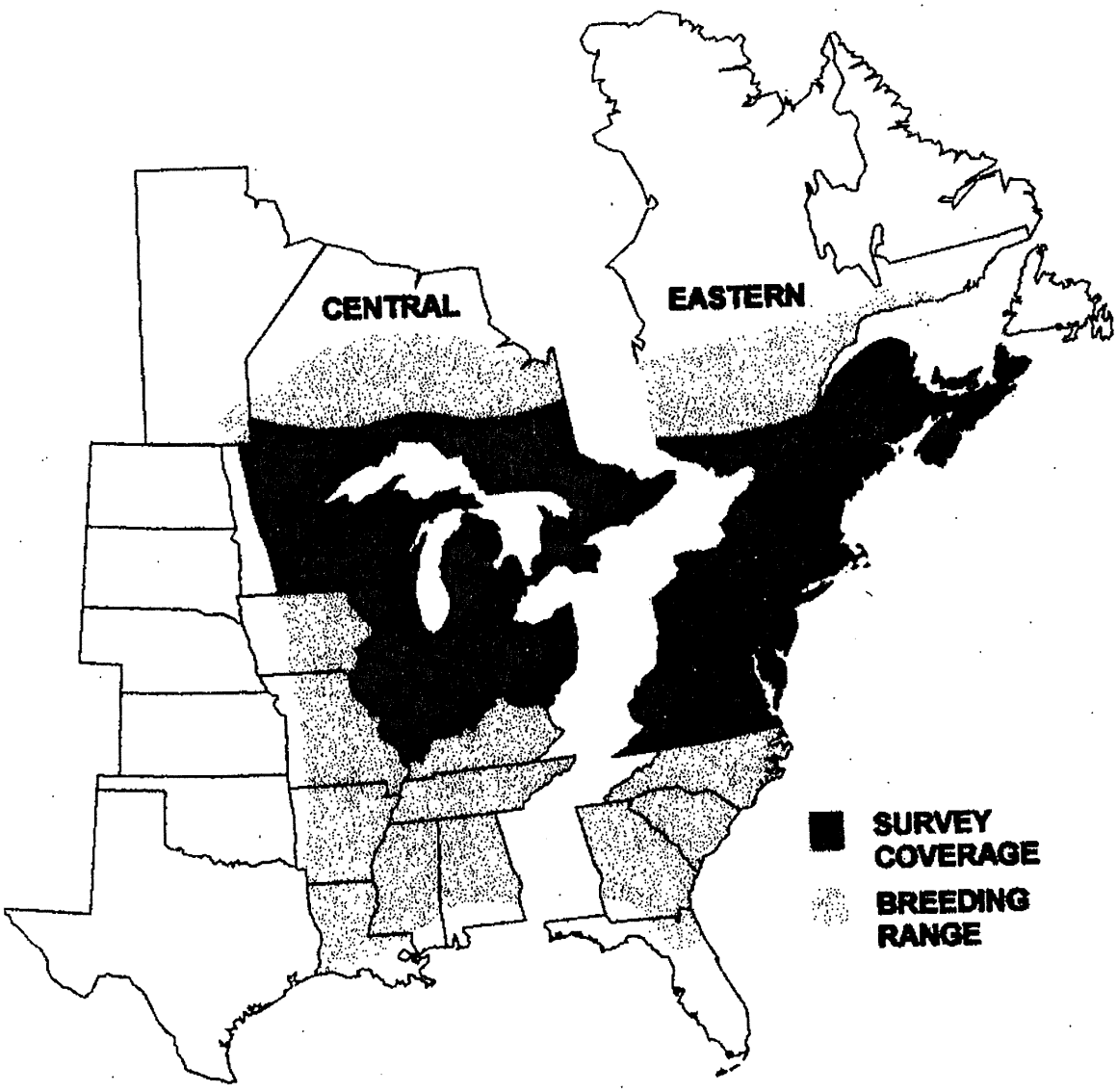

Figure 35. Woodcock management regions, breeding range, singing-ground survey coverage, (from: Kelley, J.R., Jr., 2001. American woodcock population status, 2001. U.S. Fish and Wildlife Service, Laurel, MD. 15pp.)

Table 35. Trends (% change per year[a]) in number of American woodcock heard in singing-ground survey as determined by the estimating equations technique(Link and Sauer, 1994) (from: Kelley, J.R., Jr., 2001. American woodcock population status, 2001. U.S. Fish and Wildlife Service, Office of Migratory Bird Management, Laurel, MD. 15pp).

Management Unit/State	2 year N[b]	(2000-01) % Change	Routes Run[c]	10 year N	(1991-01) % Change	33 year N	(1968-01) % Change
CENTRAL	159	- 12.9**[d]	364	421	-2.5***	605	- 1.6***
IL			13	6	7.6	23	26.1
IN			23	8	- 8.0	38	- 6.2*
MB[e]	10	- 26.3**	21	18	- 3.6	18	- 3.7
MI	49	- 16.5	86	114	- 2.9***	141	- 1.5***
MN	42	- 14.0**	75	77	- 2.0**	97	- 1.1**
OH	10	- 24.3	31	29	- 6.5	54	- 6.4***
ON	12	2.8	46	97	- 3.1**	135	- 1.4***
WI	34	- 7.0	69	72	- 1.5*	99	- 1.7***

[a] Mean of weighted route trends within each State, Province, or Region. To estimate the total percent change over several years, use: $100(\%\ change/100+1)^{y}-100$ where y is the number of years. Note: extrapolating the estimated trend statistic (% change per year) over time (e.g., 30 years) may exaggerate the total change over the period.

[b] Total number of routes surveyed in 2001 for which data were received by 31 May.

[c] Number of comparable routes with at least 2 non-zero counts.

[d] Indicates slope is significantly different from zero: * $P \leq 0.10$; ** $P \leq 0.05$; *** $P \leq 0.01$; significance levels are approximate for states where $N < 10$.

[e] Manitoba began participating in the Singing-ground survey in 1990.

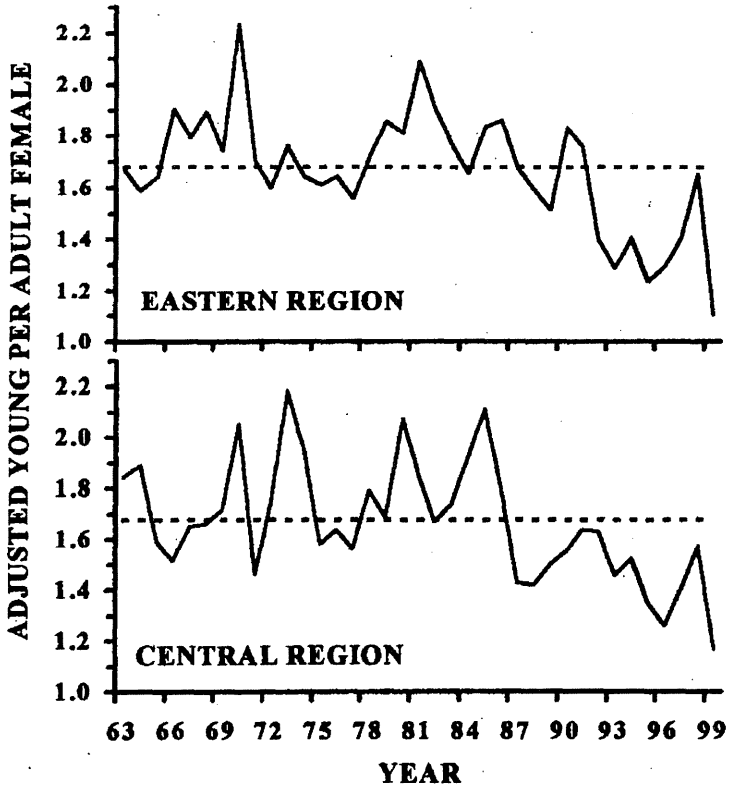

Figure 36. Adjusted index of American woodcock recruitment, 1963-99. Dashed line is the index based on all 1963-98 average. (from: Kelley, J.R., Jr. 2000. American woodcock population status, 2000. U.S. Fish and Wildlife Service, Laurel, MD. 15pp).

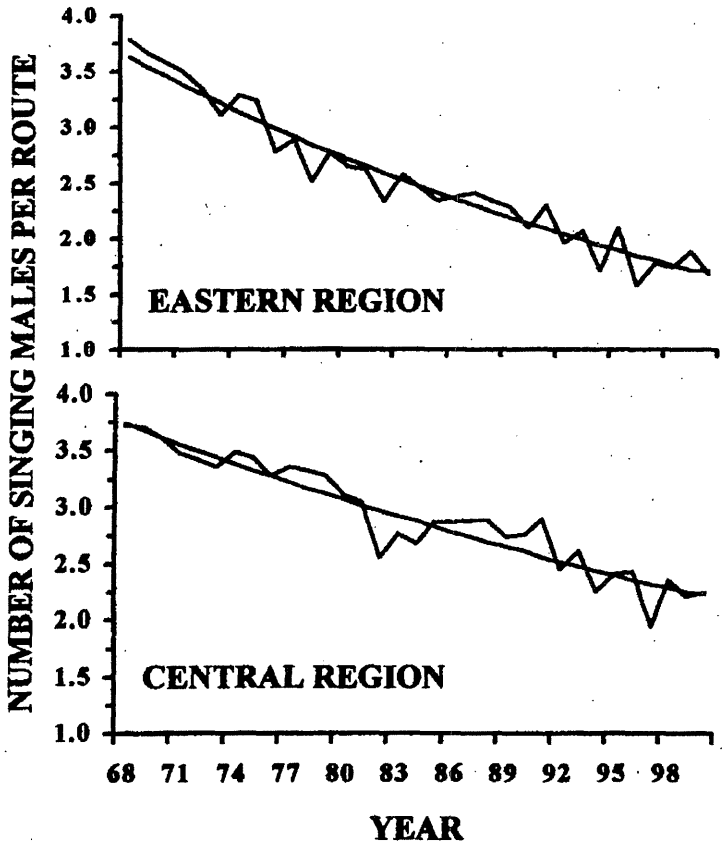

Figure 37. American woodcock singing ground survey long term trends and annual indices, 1968-00. (from: Kelley, J.R., Jr. 2000. American woodcock population status, 2000. U.S. Fish and Wildlife Service, Laurel, MD. 15pp)

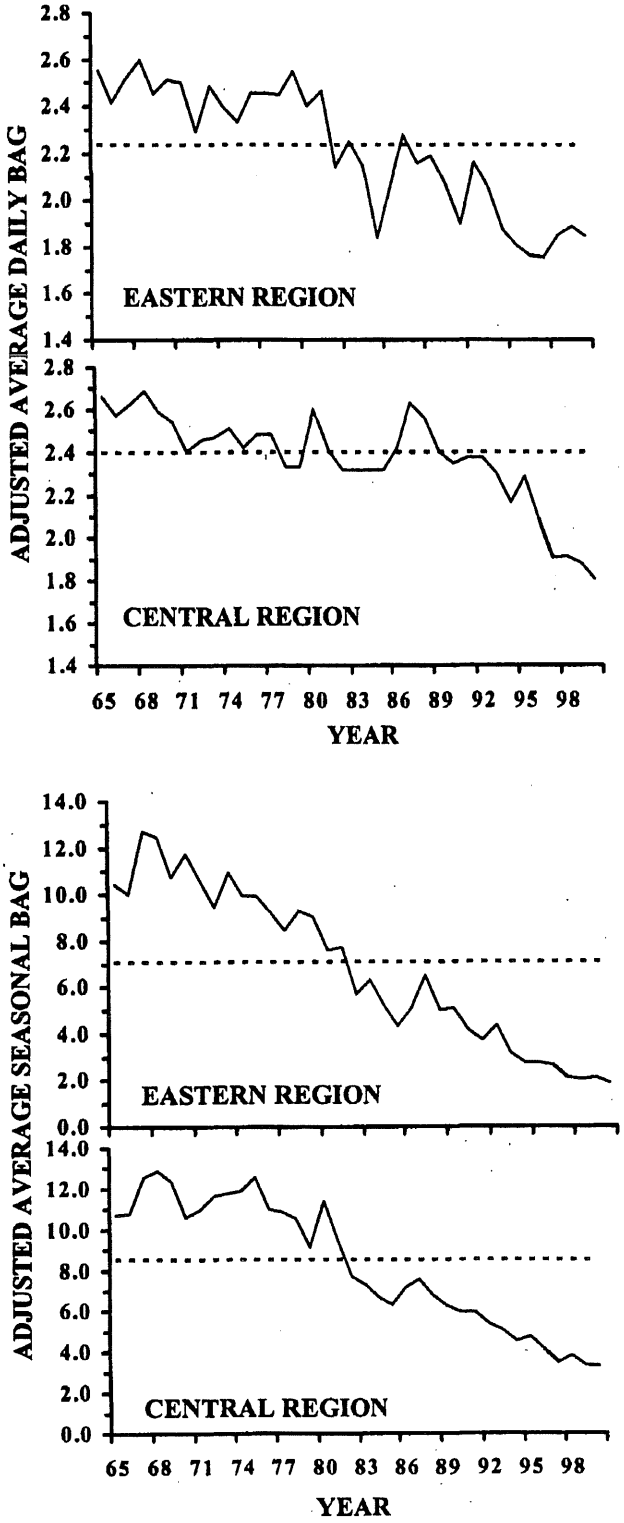

Figure 38. Adjusted indices of daily and seasonal hunting success of American woodcock, 1965-00, Base year is 1969. Dashed line is 1965-00 average. (from: Kelley, J.R., Jr. 2001. American woodcock population status, 2001. U.S. Fish and Wildlife Service, Laurel, MD. 15pp).

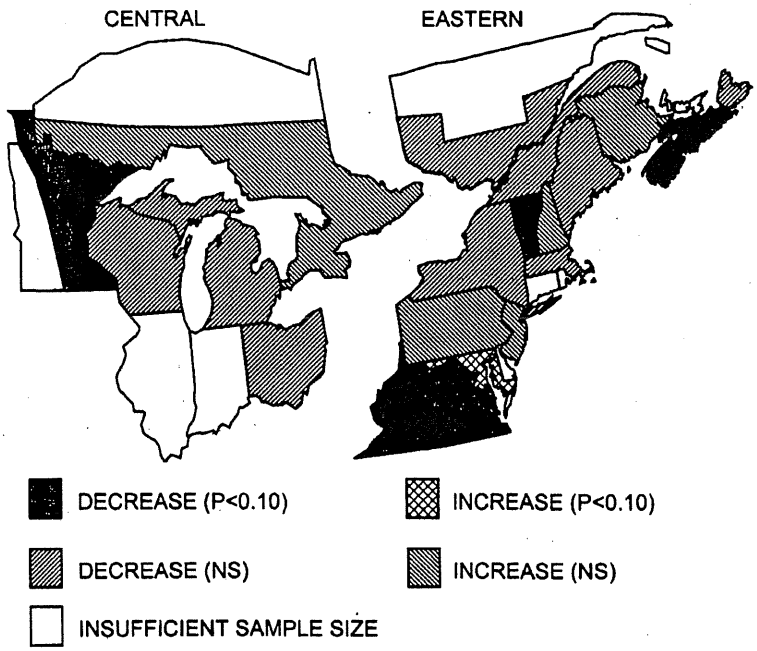

Figure 39. Short-term trends in number of American woodcock heard on the Singing-ground Survey; 2000-01. (from: Kelley, J.R., Jr. 2001. American woodcock population status, 2001. U.S. Fish and Wildlife Service, Laurel, MD. 15pp)

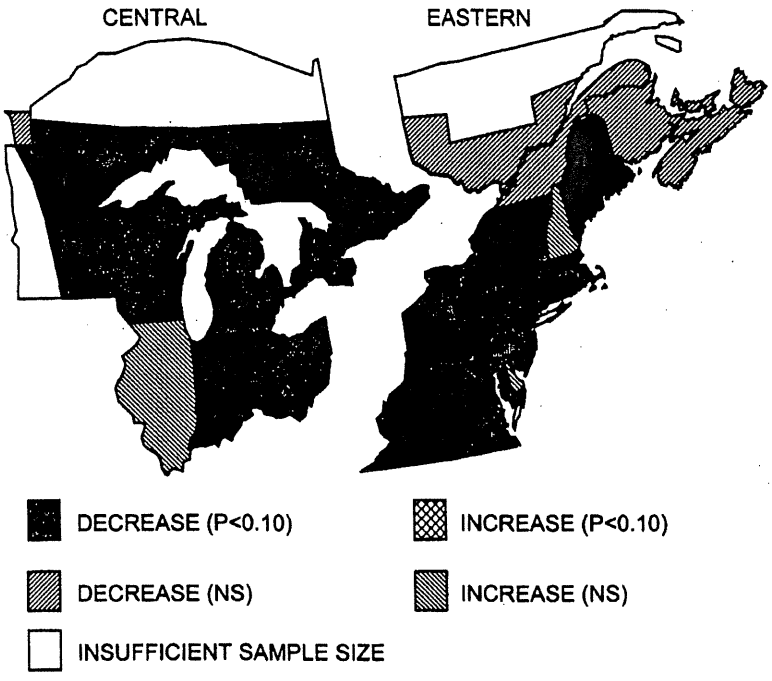

Figure 40. Long-term trends in number of American woodcock heard on the Singing-ground Survey; 1968-01 (from: Kelley, J.R., Jr. 2001. American woodcock population status, 2001. U.S. Fish and Wildlife Service, Laurel, MD. 15pp)

A HISTORY OF MINNESOTA WATERFOWL REGULATIONS, 1915-2001

Wetland Wildlife Populations and Research
102 23rd Street
Bemidji, MN 56601
(218) 755-2973

Table 36. Minnesota Waterfowl Hunting Regulations 1915-2001.

DUCK SEASON																									
Dates					Shooting Hours			Last Day	Aqua	Ducks			Bag Limits											Mergansers		Coot
													Species Restrictions											Daily	Inc. no more	Daily
Year	Open	Day	Close	Length	Opener	Start	End	4 P.M.	Fowl	Daily	Poss.	Bonus	MAL	Mal F	BLK	PIN	WDK	CAN	RED	RUD	BUF	SCAUP		Bag	hooded	Bag
1915	07-Sep	Tues	01-Dec	86		sunrise	sunset		10+15duck	15	45						closed								
1916	07-Sep	Thur	01-Dec	86		sunrise	sunset		10+15duck	15	45						closed								
1917	16-Sep	Sun	01-Dec	77		sunrise	sunset		10+15duck	15	45						closed								
1918	07-Sep	Sat	01-Dec	86		sunrise	sunset		10+15duck	15	45						closed								
1919	16-Sep	Tues	31-Dec	107		sunrise	sunset		15	15	45						closed								15
1920	16-Sep	Thur	31-Dec	107		sunrise	sunset		15	15	45						closed								15
1921	16-Sep	Fri	31-Dec	107		sunrise	sunset		15	15	45						closed								15
1922	16-Sep	Sat	31-Dec	107		sunrise	sunset		15	15	45						closed								15
1923	16-Sep	Sun	31-Dec	107		1/2 hr before	sunset		15	15	45						closed								15
1924	16-Sep	Tues	31-Dec	107		1/2 hr before	sunset		15	15	45						closed								15
1925	16-Sep	Wed	31-Dec	107		1/2 hr before	sunset			12	36						closed								12
1926	16-Sep	Thur	31-Dec	107		1/2 hr before	sunset			12	36						closed								12
1927	16-Sep	Fri	31-Dec	107		1/2 hr before	sunset			12	36						closed								12
1928	16-Sep	Sun	31-Dec	107		1/2 hr before	sunset			12	36						closed								12
1929	16-Sep	Mon	31-Dec	107		1/2 hr before	sunset			12	36						closed								12
1930	16-Sep	Tues	31-Dec	107		1/2 hr before	sunset			12	30						closed								12
1931	01-Oct	Thur	31-Dec	92	noon	1/2 hr before	sunset			12	30						closed								12
1932	01-Oct	Sat	30-Nov	61	noon	1/2 hr before	sunset			12	30						closed	10	10	closed	closed				12
1933	01-Oct	Sun	30-Nov	61	noon	1/2 hr before	sunset			12	24						closed	8	8	closed	closed				12
1934	03-Oct	Wed	11-Nov	40	noon	sunrise	sunset			12	24						closed	5	5	closed	closed				12
1935	21-Oct	Mon	19-Nov	30	noon	7 am	4 pm			10	10						closed			closed	closed				10
1936	10-Oct	Sat	08-Nov	30	noon	7 am	4 pm			10	10						closed	closed	closed	closed	closed				10
1937	09-Oct	Sat	07-Nov	30		7 am	4 pm			10	10						closed	closed	closed	closed	closed				12
1938	01-Oct	Sat	14-Nov	45		7 am	4 pm			10	20						closed	3	3						12
1939	01-Oct	Sun	14-Nov	45		7 am	4 pm			10	20						closed	3	3						15
1940	01-Oct	Tues	29-Nov	60		sunrise	4 pm			10	20						closed	3	3						15
1941	01-Oct	Wed	29-Nov	60		sunrise	4 pm			10	20						closed		3						25
1942	26-Sep	Sat	04-Dec	70		sunrise	sunset			10	20						1		3						25
1943	25-Sep	Sat	03-Dec	70		1/2 hr before	sunset			10	20						1		3						25
1944	20-Sep	Wed	08-Dec	80		1/2 hr before	sunset			10	20						1								25
1945	20-Sep	Thur	08-Dec	80		sunrise	sunset			10	20						1							25		25
1946	05-Oct	Sat	18-Nov	45		1/2 hr before	1/2 hr before			7	14						1							25		25
1947	07-Oct	Tues	05-Nov	30	noon	sunrise	1 hr before			4	8						1							25		25
1948	08-Oct	Fri	06-Nov	30	noon	1/2 hr before	1 hr before			4	8						1							25		15
1949	07-Oct	Fri	15-Nov	40	noon	1/2 hr before	1 hr before			4	8						1							25		10
1950	06-Oct	Fri	09-Nov	35	noon	1/2 hr before	1 hr before			4	8						1							25		10
1951	05-Oct	Fri	18-Nov	45	noon	1/2 hr before	1 hr before			4	8						1							25		10
1952	01-Oct	Wed	24-Nov	55	noon	1/2 hr before	1 hr before			4	8						1							25		10
1953	03-Oct	Sat	26-Nov	55	noon	1/2 hr before	sunset			4	8						closed							25	1	10
1954	02-Oct	Sat	25-Nov	55	noon	1/2 hr before	sunset			4	8						closed								1	10
1955	08-Oct	Sat	16-Dec	70	noon	1/2 hr before	1/2 hr before			4	8						closed								1	10
1956	06-Oct	Sat	29-Nov	55	noon	1/2 hr before	1/2 hr before			5	10						closed								1	10
1957	05-Oct	Sat	13-Dec	70	noon	1/2 hr before	sunset			4	8						closed							5	1	10
1958	04-Oct	Sat	12-Dec	70	noon	1/2 hr before	sunset			4	8						closed	2	2					5	1	10
1959	07-Oct	Wed	25-Nov	50	noon	sunrise	sunset			3	6						1	or 1	or 1					5	1	3
1960	08-Oct	Sat	16-Nov	40	noon	1/2 hr before	sunset			4	8						1	closed	closed					5	1	6
1961	14-Oct	Sat	12-Nov	30	noon	sunrise	sunset			2	4						1	closed	closed					5	1	6
1962	13-Oct	Sat	06-Nov	25	noon	sunrise	sunset			2	4	2/4 ls	1		or1		2	closed	closed					5	1	6/6
1963	05-Oct	Sat	08-Nov	35	noon	sunrise	sunset			3	6		2		or 2		2	closed	closed					5	2	8/16
1964	03-Oct	Sat	11-Nov	40	noon	sunrise	sunset			4	8		2/4				2/2	2/2	or 2/2					5/10	1/2	10/20
1965	09-Oct	Sat	17-Nov	40	noon	sunrise	sunset			4	8	early teal	1/2			1/2	2/2	2/2	or 2/2					5/10	1/2	10/20

Table 36. (Continued)

DUCK SEASON																									
Dates					Shooting Hours			Last Day	Aqua	Bag Limits													Mergansers		Coot
										Ducks			Species Restrictions										Daily	Inc. no more	Daily
Year	Open	Day	Close	Length	Opener	Start	End	4 P.M.	Fowl	Daily	Poss.	Bonus	MAL	Mal F	BLK	PIN	WDK	CAN	RED	RUD	BUF	SCAUP	Bag	hooded	Bag
1966	08-Oct	Sat	21-Nov	45	noon	1/2 hr before	sunset			4	8	2/4 m,ls	2/4				2/4	2/2					5/10	1/2	10/20
1967	07-Oct	Sat	15-Nov	40	noon	1/2 hr before	sunset			4	8		2/4				1/2	1/1					5/10	1/2	10/20
1968	05-Oct	Sat	13-Oct	9	noon	1/2 hr before	sunset			3	6		1/2		2/2		2/4	1/1	or 1/1				5/10	1/2	10/20
	26-Oct	Sat	12-Nov	18																					
1969	04-Oct	Sat	12-Nov	40	noon	sunrise	sunset			4	8	2/4 bt,ls	1/2				2/4	1/1	or 1/1				5/10	1/2	10/20
1970	03-Oct	Sat	16-Nov	45	noon	1/2 hr before	sunset			4	8	2/4 bt,ls					2/4	1/1	or 1/1				5/10	1/2	15/30
1971	02-Oct	Sat	20-Nov	50	noon	1/2 hr before	sunset			4	8	2/4 bt,ls					2/4	1/1	or 1/1				5/10	1/2	15/30
1972	01-Oct	Sun	19-Nov	50	noon	1/2 hr before	sunset			4	8	2/4 bt,ls					2/4	closed	closed				5/10	1/2	15/30
1973	01-Oct	Mon	10-Oct	10	noon	1/2 hr before	4 pm			4	8			1/2			2/4	closed	closed				5/10	1/2	15/30
	20-Oct	Sat	18-Nov	30																					
1974	02-Oct	Wed	15-Nov	45	noon	1/2 hr before	4 pm			4	8		2/4		or 2/2		2/4	1/1	or 1/1				5/10	1/2	15/30
1975	01-Oct	Wed	19-Nov	50	noon	1/2 hr before	4 pm			4	8		2/4		or 2/2		2/4	1/1	or 1/1				4/8	1/2	15/30
1976	02-Oct	Sat	20-Nov	50	noon	1/2 hr before	4 pm			5	10		3/6	1/2	inc 2/4		2/4	1/1	or 1/1				5/10	1/2	15/30
	23-Oct	Sat	11-Dec	50	NORTHERN 40 COUNTIES DELAYED DUE TO FIRE DANGER																				
1977	01-Oct	Sat	14-Nov	45	noon	1/2 hr before	sunset	29-Oct		5	10		2/4		or 2/4		2/4	1/1	or 1/1				5/10	1/2	15/30
1978	01-Oct	Sun	19-Nov	50	9 am	1/2 hr before	sunset	20-Oct		5	10		2/4		or 2/4		2/4	1/1	or 1/1				5/10	1/2	15/30
1979	29-Sep	Sat	17-Nov	50	noon	1/2 hr before	sunset	19-Oct		5	10		3/6	2/4	1/2		2/4	1/1	or 1/1				5/10	1/2	15/30
1980	04-Oct	Sat	22-Nov	50	noon	1/2 hr before	sunset	17-Oct		5	10		3/6	2/4	1/2		2/4	1/2	1/2				5/10	1/2	15/30
1981	03-Oct	Sat	21-Nov	50	noon	1/2 hr before	sunset	16-Oct		5	10		3/6	2/4	1/2		2/4	1/2	1/2				5/10	1/2	15/30
1982	02-Oct	Sat	20-Nov	50	noon	1/2 hr before	sunset	22-Oct		5	10		3/6	2/4	1/2		2/4	1/2	1/2				5/10	1/2	15/30
1983	01-Oct	Sat	19-Nov	50	noon	1/2 hr before	sunset	21-Oct		5	10		3/6	2/4	1/2		2/4	1/2	1/2				5/10	1/2	15/30
1984	29-Sep	Sat	17-Nov	50	noon	1/2 hr before	sunset	19-Oct		5	10		3/6	2/4	1/2		2/4	1/2	1/2				5/10	1/2	15/30
1985	05-Oct	Sat	13-Nov	40	noon	1/2 hr before	sunset	18-Oct		4	8		2/4	1/2	1/2	2/4	2/4	1/2	1/2				5/10	1/2	15/30
1986	04-Oct	Sat	12-Nov	40	noon	1/2 hr before	sunset	17-Oct		4	8		2/4	1/2	1/2	2/4	2/4	closed	1/2				5/10	1/2	15/30
1987	03-Oct	Sat	11-Nov	40	noon	1/2 hr before	sunset	16-Oct		4	8		2/4	1/2	1/2	2/4	2/4	closed	1/2				5/10	1/2	15/30
1988	08-Oct	Sat	06-Nov	30	noon	sunrise	sunset	21-Oct		3	6		2/4	1/2	1/2	1/2	2/4	closed	1/2				5/10	1/2	15/30
1989	07-Oct	Sat	05-Nov	30	noon	sunrise	sunset	20-Oct		3	6		2/4	1/2	1/2	1/2	2/4	closed	1/2				5/10	1/2	15/30
1990	06-Oct	Sat	04-Nov	30	noon	sunrise	sunset	19-Oct		3	6		2/4	1/2	1/2	1/2	2/4	closed	1/2				5/10	1/2	15/30
1991	05-Oct	Sat	13-Oct	30	noon	1/2 hr before	sunset	18-Oct		3	6		2/4	1/2	1/2	1/2	2/4	closed	1/2				5/10	1/2	15/30
	17-Oct	Thur	03-Nov																						
	08-Nov	Fri	10-Nov																						
1992	03-Oct	Sat	11-Oct	30	noon	1/2 hr before	sunset	16-Oct		3	6		2/4	1/2	1/2	1/2	2/4	closed	1/2				5/10	1/2	15/30
	15-Oct	Thur	01-Nov																						
	06-Nov	Fri	08-Nov																						
1993	02-Oct	Sat	10-Oct	30	noon	1/2 hr before	sunset	22-Oct		3	6		2/4	1/2	1/2	1/2	2/4	closed	1/2				5/10	1/2	15/30
	14-Oct	Thur	31-Oct																						
	05-Nov	Fri	07-Nov																						
1994	01-Oct	Sat	09-Nov	40	noon	1/2 hr before	sunset	21-Oct		3	6		2/4	1/2	1/2	1/2	2/4	1/2	1/2				5/10	1/2	15/30
1995	30-Sep	Sat	18-Nov	50	noon	1/2 hr before	sunset	20-Oct		5	10		4/8	1/2	1/2	1/2	2/4	1/2	1/2				5/10	1/2	15/30
1996	28-Sep	Sat	16-Nov	50	noon	1/2 hr before	sunset	18-Oct		5	10		4/8	1/2	1/2	1/2	2/4	1/2	2/4				5/10	1/2	15/30
1997	04-Oct	Sat	02-Dec	60	noon	1/2 hr before	sunset	11-Oct		6	12		4/8	2/4	1/2	3/6	2/4	1/2	2/4				5/10	1/2	15/30
1998	03-Oct	Sat	01-Dec	60	noon	1/2 hr before	sunset	10-Oct		6	12		4/8	2/4	1/2	1/2	2/4	1/2	2/4				5/10	1/2	15/30
1999	02-Oct	Sat	30-Nov	60	noon	1/2 hr before	sunset	09-Oct		6	12		4/8	2/4	1/2	1/2	2/4	1/2	2/4			3/6	5/10	1/2	15/30
2000	30-Sep	Sat	28-Nov	60	noon	1/2 hr before	sunset	07-Oct		6	12		4/8	2/4	1/2	1/2	2/4	1/2	2/4			3/6	5/10	1/2	15/30
2001	29-Sep	Sat	27-Nov	60	noon	1/2 hr before	sunset	06-Oct		6	12		4/8	2/4	1/2	1/2	2/4	1/2/C	2/4			3/6	5/10	1/2	15/30

Table 36. (Continued)

Goose Season																									
Statewide Regulations (excluding special zones)									Southeast Zone				West & Northwest Zone				WC or LQP Zone				Lac qui Parle			
	Overall			Snow&Blue Goose		Bag Limit / Poss.						Cago				Cago				Cago	Harvest	Date Quota		
Year	Open	Close	Days	Open	Close	Aggr.	Canada	W-F	Open	Close	Days	Bag	Open	Close	Days	Bag	Open	Close	Days	Bag	Quota	Index	Reached	Days
1915	07-Sep	01-Dec	86			10/30																		
1916	07-Sep	01-Dec	86			10/30																		
1917	16-Sep	01-Dec	77			5/30																		
1918	07-Sep	01-Dec	86			5/5																		
1919	16-Sep	31-Dec	107			5/5																		
1920	16-Sep	31-Dec	107			5/5																		
1921	16-Sep	31-Dec	107			5/5																		
1922	16-Sep	31-Dec	107			5/5																		
1923	16-Sep	31-Dec	107			5/5																		
1924	16-Sep	31-Dec	107			5/5																		
1925	16-Sep	31-Dec	107			5/5																		
1926	16-Sep	31-Dec	107			5/5																		
1927	16-Sep	31-Dec	107			5/5																		
1928	16-Sep	31-Dec	107			5/5																		
1929	16-Sep	31-Dec	107			5/5																		
1930	16-Sep	31-Dec	107			4/5																		
1931	01-Oct	31-Dec	92			4/5																		
1932	01-Oct	30-Nov	61			4/5																		
1933	01-Oct	30-Nov	61			4/5																		
1934	03-Oct	11-Nov	40			4/5																		
1935	21-Oct	19-Nov	30			4/4																		
1936	10-Oct	08-Nov	30			4/4																		
1937	05-Oct	07-Nov	34			4/5																		
1938	01-Oct	14-Nov	45			4/5																		
1939	01-Oct	14-Nov	45			4/8																		
1940	01-Oct	29-Nov	60			3/6																		
1941	01-Oct	29-Nov	60			3/6																		
1942	26-Sep	04-Dec	70			6/6	2	2																
1943	25-Sep	03-Dec	70			6/6	2	2																
1944	20-Sep	08-Dec	80			6/12	2	2																
1945	20-Sep	08-Dec	80			6/12	2	2																
1946	05-Oct	18-Nov	45			4/4	2	2																
1947	07-Oct	05-Nov	30			4/4	1	or 1																
1948	08-Oct	06-Nov	30			4/4	2	or 2																
1949	07-Oct	06-Nov	31			4/4	2	or 2																
1950	06-Oct	09-Nov	35			4/4	2	or 2																
1951	05-Oct	18-Nov	45			5/5	2	or 2																
1952	01-Oct	24-Nov	55			5/5	2	or 2																
1953	03-Oct	26-Nov	55			5/5	2	or 2																
1954	02-Oct	25-Nov	55			5/5	2	or 2																
1955	08-Oct	16-Dec	70			5/5	2	or 2																
1956	06-Oct	29-Nov	55			5/5	2	or 2																
1957	05-Oct	13-Dec	70			5/5	2	or 2																

Table 36. (Continued)

Goose Season																										
Statewide Regulations (excluding special zones)									Southeast Zone				West & Northwest Zone				WC or LQP Zone				Lac qui Parle			
	Overall			Snow&Blue Goose		Bag Limit / Poss.						Cago				Cago				Cago	Harvest		Date Quota	
Year	Open	Close	Days	Open	Close	Aggr.	Canada	W-F	Open	Close	Days	Bag	Open	Close	Days	Bag	Open	Close	Days	Bag	Quota	Index	Reached	Days
1958	04-Oct	12-Dec	70			5/5	2	or 2																
1959	07-Oct	15-Dec	70			5/5	2	or 2																
1960	08-Oct	16-Dec	70			5/5	2	or 2																
1961	01-Oct	29-Nov	60			5/5	2	or 2																
1962	06-Oct	04-Dec	60			5/5	2	or 2																
1963	05-Oct	13-Dec	70			5/5	2	or 2																
1964	03-Oct	11-Dec	70			5/5	2	or 2																
1965	02-Oct	10-Dec	70			5/5	2	or 2																
1966	01-Oct	09-Dec	70			5/5	2	or 2																
1967	30-Sep	08-Dec	70			5/5	2	or 2																
1968	28-Sep	06-Dec	70			5/5	2	or 2																
1969	04-Oct	12-Dec	70			5/5	2	or 2																
1970	03-Oct	16-Nov	45			5/5	1	or 2																
1971	02-Oct	10-Oct	9			5/5	1	or 2	02-Oct	10-Dec	70	1												
1972	01-Oct	12-Oct	12	01-Oct	09-Dec	5/5	1/1	or 2/2	01-Oct	09-Dec	70	1												
1973	01-Oct	21-Oct	21	01-Oct	18-Nov	5/5	1/1	or 2/2	01-Oct	09-Dec	70	1												
1974	02-Oct	31-Oct	30	02-Oct	15-Nov	5/5	1/2	or 2/2	02-Oct	10-Dec	70	1												
1975	01-Oct	14-Nov	45			5/5	1/2	or 2/2	01-Oct	04-Dec	65	1									4000			
1976	02-Oct 23-Oct	15-Nov 06-Dec	45			5/5	1/2	or 2/2	02-Oct	10-Dec	70	1	Southern counties only Northern 40 counties only								8000	7813	not reached	45
1977	01-Oct	14-Nov	45			5/5	1/2	or 2/2	01-Oct	09-Dec	70	1									5000	5799	02-Nov	33
1978	01-Oct	14-Nov	45			5/5	2/4	or 2/2	01-Oct	09-Dec	70	2/4								1/4	7000	6238	not reached	45
1979	29-Sep	17-Nov	50			5/5	2/4	or 2/2	29-Sep	07-Dec	70	2/4								1/4	7000	4988	not reached	50
1980	04-Oct	22-Nov	50			5/10	2/4	2/4	04-Oct	12-Dec	70	2/4								1/4	5500	5700	22-Nov	50
1981	03-Oct	21-Nov	50			5/10	2/4	2/4	03-Oct	11-Dec	70	2/4								1/4	5500	5560	09-Nov	37
1982	02-Oct	20-Nov	50			5/10	2/4	2/4	02-Oct	10-Dec	70	2/4								1/4	5500	5479	not reached	50
1983	01-Oct	19-Nov	50			5/10	1/2	2/4	01-Oct	09-Dec	70	2/4					01-Oct	19-Nov	50	1/2	4500	2392	not reached	50
1984	29-Sep	17-Nov	50			5/10	1/2	2/4	29-Sep	07-Dec	70	2/4					29-Sep	17-Nov	50	1/2	4500	4628	06-Nov	39
1985	28-Sep	16-Nov	50			5/10	1/2	2/4	28-Sep	06-Dec	70	2/4					28-Sep	16-Nov	50	1/2	4500	4592	07-Nov	41
1986	04-Oct	22-Nov	50			5/10	1/2	2/4	04-Oct	12-Dec	70	2/4					04-Oct	22-Nov	50	1/2	4500	4598	09-Nov	37
1987	03-Oct	11-Nov	40			5/10	1/2	2/4	03-Oct	11-Dec	70	2/4					03-Oct	01-Nov	30	1/2	4000	3910	not reached	30
1988	01-Oct	09-Nov	40			5/10	1/2	2/4	01-Oct	09-Dec	70	2/4					08-Oct	06-Nov	30	1/2	4000	4959	23-Oct	16
1989	30-Sep	08-Nov	40	30-Sep	16-Dec	7/14	1/2	2/4	30-Sep	08-Dec	70	2/4					30-Sep	29-Oct	30	1/2	4000	4303	19-Oct	20
1990	29-Sep	17-Nov	50	29-Sep	17-Dec	7/14	2/4	2/4	29-Sep	07-Dec	70	2/4					29-Sep	07-Nov	40	1/2	6000	4832	not reached	40
1991	28-Sep	16-Nov	50	28-Sep	16-Dec	7/14	2/4	2/4	28-Sep	06-Dec	70	2/4					28-Sep	06-Nov	40	1/2	6000	4799	not reached	40
1992	03-Oct	21-Nov	50	03-Oct	21-Dec	7/14	2/4	2/4	03-Oct	11-Dec	70	2/4					03-Oct	11-Nov	40	1/2	6000	3558	not reached	40
1993	02-Oct	20-Nov	50	02-Oct	20-Dec	7/14	2/4	2/4	02-Oct	10-Dec	70	2/4	02-Oct	10-Nov	40	1/2	02-Oct 16-Oct	10-Oct 05-Nov	9 21	1/2	1750 4000	3832	not reached	30
1994	01-Oct	19-Nov	50	01-Oct	19-Dec	7/14	2/4	2/4	01-Oct	09-Dec	70	2/4	01-Oct	09-Nov	40	1/2	01-Oct 15-Oct	09-Oct 04-Nov	9 21	1/2	1750 4000	2876	not reached	30
1995	30-Sep	18-Nov	50	30-Sep	18-Dec	7/14	2/4	2/4	30-Sep	08-Dec	70	2/4	30-Sep	08-Nov	40	1/2	30-Sep 14-Oct	08-Oct 03-Nov	9 21	1/2	7000 16000	12513	not reached	30

Table 36. (Continued)

	Goose Season																							
	White Geese				Canada Geese																			
				Bag/	Remainder of State				Northeast Zone				West Zone & Northwest Zones					WC and LQP Zone				Lac qui Parle Harvest Index			
Year	Open	Close	Days	Poss.	Open	Close	Days	Bag	Open	Close	Days	Bag	Zone	Open	Close	Days	Bag	Open	Close	Days	Bag	Index	Harvest	Date close	Days
1996	28-Sep	16-Dec	80	7/14	28-Sep	06-Dec	70	2/4	est. in 1998				Both	28-Sep	06-Nov	40	1/2	05-Oct	13-Oct	9	1/2	7000 for the first 9 days			
																		17-Oct	06-Nov	21		16000	9768	not reached	30
1997	04-Oct	22-Dec	80	10/20	04-Oct	12-Dec	70	2/4					Both	04-Oct	12-Nov	40	1/2	11-Oct	09-Nov	30	1/2	16000	7716	not reached	30
1998	03-Oct	21-Dec	80	10/20	03-Oct	01-Nov	30	1/2	03-Oct	11-Dec	70	2/4	NW	03-Oct	22-Oct	20	1/2	15-Oct	03-Nov	20	1/2	10000	7188	not reached	20
					02-Nov	11-Dec	40	2/4					W	03-Oct	27-Oct	25	1/2								
1999	02-Oct	20-Dec	80	10/20	02-Oct	10-Dec	70	2/4	incorporated into remainder of state				Both	02-Oct	10-Nov	40	1/2	09-Oct	07-Nov	30	1/2	16000	10336	not reached	30
2000	30-Sep	24-Dec	80	20/40	30-Sep	08-Dec	70	2/4					Both	30-Sep	08-Nov	40	1/2	07-Oct	05-Nov	30	1/2	16000	2684	not reached	
2001	29-Sep	23-Dec	80	20/40	29-Sep	07-Dec	70	2/4					Both	29-Sep	07-Nov	40	1/2	06-Oct	14-Nov	40	1/2	12000			

Table 36. (Continued)

Year	Other Regulations
pre-1915	No possession past 5 days after close of season.
1915	Ducks separated from other aquatic fowl limits, only use shotgun discharged from shoulder, law prohibited hunting aquatic fowl on open water. No possession past 5 days after season. Only geese could be taken by rifle. Poss = 50.
1916	No change from 1915.
1917	The 1915 law was amended so that wounded aquatic fowl could be pursued and killed on open water.
1918	Migratory Bird Treaty Act became law July 3, giving primary responsibility for the management of waterfowl to the fed. government. In Nov. the fed. government issued first annual pamphlet on waterfowl regulations for the country.
1919	Dates set by fed. reg. Gun limit to ten gauge to take waterfowl. Aid of a dog and decoys allowed. Limit inc. ducks, coots, rails, gallinules, snipe, yellowlegs.
1920	No change.
1921	No change.
1922	No change.
1923	Season limit of 135 ducks.
1924	No change.
1925	Not over 12 game birds (inc. waterfowl) were allowed in one day. Possession limit: 36 aquatic fowl. Season limit: 120 ducks. State law limited to 6 the number of decoys which could be used at any one blind.
1926	No change.
1927	No change.
1928	No change.
1929	Congress passed the Migratory Bird Conservation Act.
1930	Season limit for ducks 120.
1931	No change.
1932	Daily limit not >12 in aggregate of MAL, PIN, WIG, MERG, COOT, and >10 of in aggregate of SCP, GWT, BWT, Cin. Teal, CAN, RED, RNK, SHOV and GAD. Season limit of 120 ducks.
1933	Daily limit 15 mig. game birds of which not more than 12 can be a mixed bag of ducks and coots, and not > 8 in aggregate of SCP, GWT, BWT, Cin. Teal, CAN, RED, RNK, SHOV, OR GAD. season limit 120 ducks.
1934	No hunting on Mon. and Thur. of each week. Fed. duck stamp required. Not >5 CAN, RHD, SCP, RED, BWT, Cin. teal, SHOV, GAD.
1935	Daily and possession limit of 10 is for all migratory game birds and includes 4 geese. Baiting and the use of live decoys were outlawed in 1935. Not over 15 game birds of all kinds may be taken by in any one day.
1936	Daily and possession limit not over 10 migratory birds in aggregate of all kinds, of which not more than 4 can be geese. Not over 15 birds of all kinds may be taken in any one day.
1937	Daily limit of mig. birds 15 in aggregate of all kinds of which not more than 10 shall be ducks; 4 geese; 12 Coots; 12 Jacksnipe; 12 Rails and Gallinules.
1938	Season limit of 120 ducks. Daily limit-15 mig. game birds.
1939	Daily limit-15 mig. game birds.
1940	Daily limit-15 mig. game birds.
1941	Same as 1940 except no retrictions on Ruddy Duck and Canvasback.
1942	Only 3 of any one or 3 combined of RED and BUF. Four Blue Geese allowed in addition to the 2 geese of regular daily bag. Daily and possession limit of Blue Geese only is 6.
1943	Only 3 of any one or 3 combined of RED and BUF. Four Blue Geese allowed in addition to the 2 geese of regular daily bag. Daily and possession limit of Blue Geese only is 6.
1944	Daily duck limit 15 provided 5 are MAL, PIN, WIG (poss. limit 30). Daily snow/blue goose limit of 4 is in addition to 2 other goose limit.
1945	Daily snow/blue goose limit of 4 in addition to 2 other goose limit. 1st year Merg limit different than duck.
1946	Two snow/blue geese in addition to 2 of some other kind.
1947	White-Fronted goose bags combined with Canada Goose bag.
1948	Management by Flyways was commenced in 1948.
1949	No change.
1950	No change.
1951	No change.
1952	No change.
1953	No change.
1954	Mergs included in duck bag.
1955	No change.

Table 36. (Continued)

Year	Other Regulations
1956	No change.
1957	Red-breasted and Common Merganser, 5 daily and, 10 possession which must be included in limit with other ducks. Goose limit may include 2 Canada, 2 W-F, or 1 of each.
1958	Mergs no longer included in duck bag.
1959	No change.
1960	No change.
1961	Shooting hours noon for both duck (14 Oct) and goose (1 Oct) openers.
1962	Shooting hours begin at noon on both duck (13 Oct) and goose (6 Oct) openers. Bonus scaup from Oct. 20 to Nov. 6, inclusive.
1963	No change.
1964	Shooting hours for geese sunrise to noon in Olmstead, Nobles, Cottonwood, Jackson and Murray counties. No goose hunting permitted in these areas Oct. 3. 2 Redheads or Canvasbacks or 1 of each.
1965	Teal: 11-13 SEP. Geese hours: sunrise to noon (noon to sunset on opening) in above mentioned counties and portions of Big Stone, Murray, and Nobles. 1st time Home included in mer limit. Coot season 9-Oct-17 Nov.
1966	Geese hours 1/2 hour before to noon (closed Oct. 8) in counties noted in 1965 comment. Bonus Rndu & Scaup from 1-21 Nov.
1967	Shooting hours 1/2 hour before sunrise to noon for geese in Cottonwood, Jackson, Traverse and portions of Murray and Nobles counties. Coots combined with Moorhens (gallinules).
1968	Shooting hours 1/2 hour before sunrise to noon for geese in Cottonwood, Jackson, and Traverse counties and portions of Murray and Nobles counties. Coot season 26-Oct to 12-Nov.
1969	Shooting hours 1/2 hour before sunrise to noon for geese in Jackson, Traverse, and portions of Cottonwood, Murray and Nobles counties. BONUS DUCKS: 2 BWT (4-12 Oct), 2 SCP (1-12 Nov).
1970	Shooting hours 1/2 hour before sunrise to noon for geese in Jackson and Traverse counties. BONUS DUCKS: 2 BWT (3-11 Oct), 2 SCP (31 Oct-16 Nov).
1971	Shooting hours 1/2 hour before sunrise to noon for geese in Jackson and Traverse counties. BONUS DUCKS: 2 BWT (2-10 Oct), 2 SCP (1-20 Nov).
1972	BONUS DUCKS: 2 BWT (1-19 Oct), 2 SCP (1-19 Nov).
1973	First hen MAL restriction, Season for all geese in SE Zone extends until 9 Dec.
1974	Closed areas for CAN and RED in effect.
1975	Closed areas for CAN and RED in effect.
1976	Closed areas for CAN and RED in effect.
	NORTHERN SEASON CHANGED DUE TO FIRE DANGER: in northern 2/3 of state (40 cos.) began 23 Oct, duck end 11 Dec, goose end 6 Dec., LQP quota inc. to 8,000.
1977	Closed areas for CAN and RED in effect. Steel shot required on WPA, NWR, & WMA.
1978	Closed areas for CAN and RED in effect.
1979	Closed areas for CAN and RED in effect.
1980	Closed areas for CAN and RED in effect. White-fronted goose bag separated from Canada goose bag.
1981	Closed areas for CAN and RED in effect.
1982	Closed areas for CAN and RED in effect.
1983	Closed SE area for CANV in effect.
1984	Closed SE area for CANV in effect.
1985	Closed SE area for CANV in effect. Noon shooting hours on both goose and duck opener. Pintail restrictions initiated.
1986	CANV season closed statewide
1987	STEEL SHOT REQUIRED STATEWIDE. Special Canada goose hunts: 1-10 Sept in TCGZ (no hunting within 100 yards of surface water); 18-27 Dec in TCGZ and OCGZ.
1988	WCGZ established. Special Canada goose hunts: 1-10 Sep in TCGZ, 16-25 Dec in TCGZ and OCGZ.
1989	Special Canada Goose Hunts: 1-10 Sep in TCGZ, FFGZ, and SWBGZ; 15-24 Dec in TCGZ and OCGZ.
1990	Special Canada Goose Hunts: 1-10 Sep in TCGZ, FFGZ, and SWBGZ; 15-24 Dec in TCGZ and OCGZ; West Central (inc. LQP) Goose Permit required.
1991	Special Canada Goose Hunts: 1-10 Sep in TCGZ, FFGZ, and SWBGZ; 14-23 Dec in TCGZ and OCGZ.
1992	Special Canada Goose Hunts: 1-10 Sep in TCGZ, FFGZ, and SWBGZ; 15-24 Dec in TCGZ and OCGZ.
1993	Waterfowl must be transported with wing and head; orange requirement dropped for waterfowl hunters; NW & W Goose Zones added; SCGH: 4-13 Sep in TC, FF, & SW; 15-24 Dec in TC & OC, 11-20 Dec in FFGZ.
1994	Canvasback season opened except for Heron Lk complex & Lk Christina. SCGH: 3-12 Sep in TC, FF, & SW ; 15-24 Dec in TC & OC, 10-19 Dec in FFGZ.
1995	Lake Christina open to Canv hunting; Bismuth-Tin shot approved; WC goose permit dropped. SCGH: 2-11 Sep in TC, FF, & SW; 15-24 Dec in TC & OC, 9-18 Dec in FFGZ. LQP harvest index adjusted.
1996	Youth waterfowl hunting day 21 Sep. (youth 15 & under accompanied by adult, ducks, mergansers, coots, & moorhens), Special Canada goose hunt 7-15 Sep. statewide except N.W., bag limit 5 Metro, 4 SW, & 2 in remainder Late CG Dec 14-23 in TCGZ, FFGZ, OCGZ, 2 daily bag. White goose (Snow/Blue & Ross) limits separated from other geese. WF & brant seasons same as CG, 2 each/day, W zone boundary changed. SE goose zone dropped.
1997	Youth waterfowl hunting day 20 Sep. Special canada goose hunt 6-15 Sep. statewide except NW, bag limit 5 in Metro & SW, 2 in remainder;Late CG Dec 13-22 in TCGZ, FF/AGZ, OCGZ, bag limit 2. 4 P.M. shooting hour period reduced to first 8 days by legislature.; Heron Lake complex open to canvasback hunting; Geese may be transported with wing only instead of head and wing.
1998	Youth waterfowl hunting day 19 Sep. (1 goose added to bag); Special canada goose hunt 5-15 Sep. statewide except NW, Bag limit 5 except 2 E of I-35 & S. of TCGZ, Over water hunting in W goose zone (inc. WC & LQP) beginning 2nd Saturday of Sept. season; Late CG Dec 12-21 in TCGZ, FF/AGZ, OCGZ, bag limit 2. Reductions in regular goose season due to EPP status, New NE Goose Zone
1999	Youth waterfowl hunting day 18 Sep inc. 1 CGoose except 5 CG in W Zone (inc LQP and WCZ); Sept. Canada goose hunt extended, 4-22 Sep. statewide except NW; first NW season = Sept. 4-15, bag limit 2 CG; Late CG season expanded statewide except LQP and WC, daily bag limit 5 except new SE Zone limit 2. NE Goose Zone dropped. WF & brant season lengthed to 80 days, brant limit 1. Scaup restrictions initiated.
2000	Youth waterfowl hunting day 16 Sep inc. 1 CGoose except 5 CG in W Zone (inc LQP and WCZ); Sept. Canada goose hunt 2-22 Sep. statewide except NW Sept. 2-15, bag limit 5 CG except 2 in NW & SE Late CG season statewide (Dec. 9-18) except LQP and WC, daily bag limit 5 except new SE Zone (Dec 15-24)limit 2. WF & brant season lengthed to 86 days, brant limit 1.
2001	Youth waterfowl hunting day 15 Sep inc. 1 CGoose except 5 CG in W Zone (inc LQP and WCZ); Sept. Canada goose hunt 1-22 Sep. statewide except NW Sept. 1-15, bag limit 5 CG except 2 in NW & SE Canvasback season 20 days, Oct. 13-Nov. 1. Longer season and lower quota in LQP and WC goose zones. Late CG season statewide (Dec. 8-17) exc. LQP and WC, bag 5, SE Zone (Dec 14-23) bag 2.

HUNTING HARVEST STATISTICS
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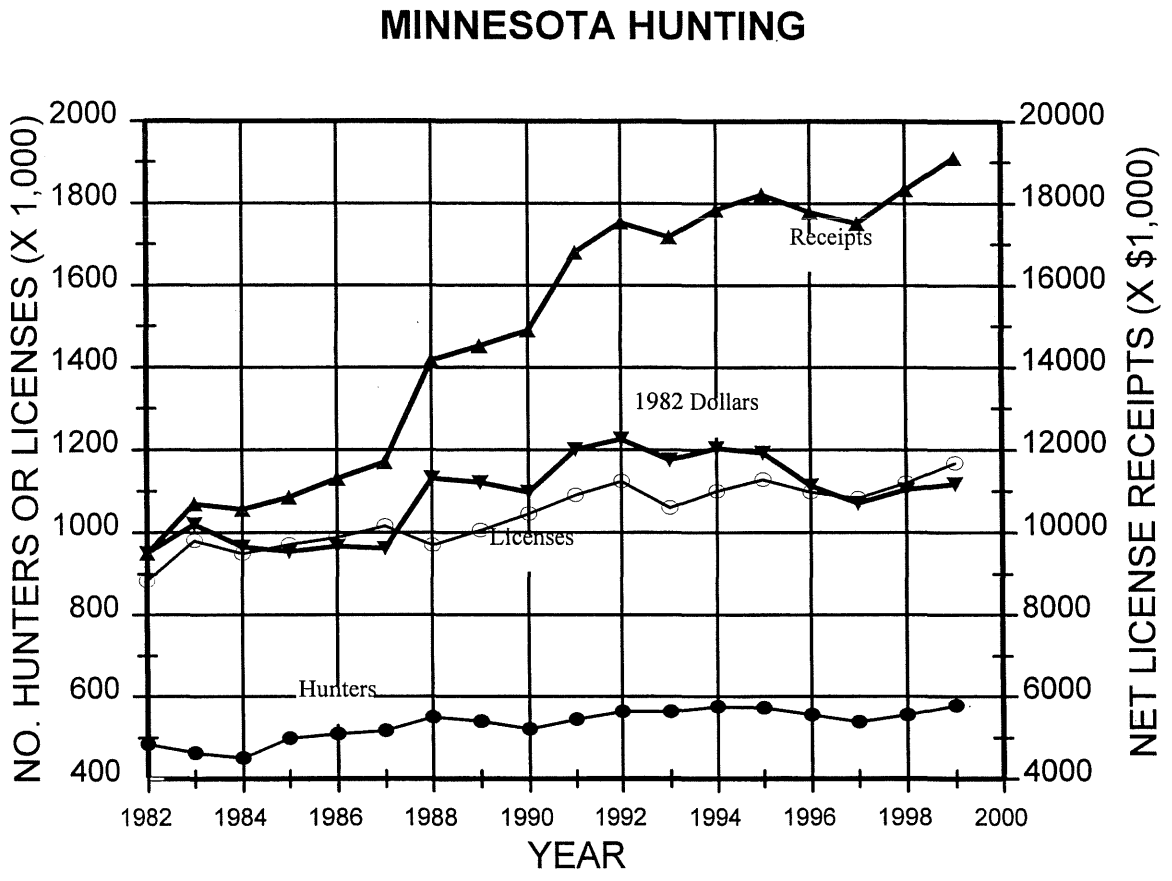

Figure 41. Minnesota hunting trends, 1982-99.

YEAR = license year (March -February)

● HUNTERS are paid license holders. A hunter is one individual regardless of the number of licenses purchased. Source: USFWS Division of Federal Aid.

○ LICENSES are the totals of hunting licenses, stamps and permits sold through the License Bureau, including duplicates but excluding trapping licenses and special goose hunt permits. Source: License Bureau.

▲ RECEIPTS to the Game and Fish Fund are for all LICENSES except that bear, moose and turkey lottery licenses are also excluded because there is no good financial record for them over the entire period starting in 1982. Portion of receipts considered hunting licenses is 52.6% for individual sportsmen and 41.1% for combination sportsmen. Source: License Bureau.

▼ 1982 DOLLARS are RECEIPTS expressed in constant 1982 dollars, which were calculated with Gross Domestic Product chain-weighted price indexes of state and local government purchases. Sources: *Survey of Current Business, January/February 1996, August 1996, July 1998, February 2000, and February 2001*, U.S. Dept. of Commerce.

Table 37. Small game hunter response to mail surveys, 1979 - 80 through 2000 - 01.

Year	Number mailed	Number not delivered	Delivered questionnaires completed and returned	
			Number	Percent
1979 - 80	5,696	443	4,504	85.7
1980 - 81	6,434	385	4,963	82.0
1981 - 82	6,656	399	5,419	86.6
1982 - 83	5,963	266	4,792	84.1
1983 - 84	4,551	269	3,325	77.7
1984 - 85	4,096	127	3,280	82.6
1985 - 86	3,370	157	2,574	80.1
1986 - 87	4,668	208	3,623	81.2
1987 - 88	5,513	248	4,191	79.6
1988 - 89	15,388	857	11,431	78.7
1989 - 90[a]	10,893	735	7,790	76.7
1990 - 91[a]	5,000	394	3,467	75.3
1991 - 92[a]	5,050	387	3,541	75.9
1992 - 93[a]	5,000	288	3,625	76.9
1993 - 94[a]	5,011	282	3,320	70.2
1994 - 95[a]	5,000	387	3,353	72.7
1995 - 96[a]	5,000	321	3,293	70.4
1996 - 97[a]	5,000	170	3,334	69.0
1997 - 98[a]	5,000	198	3,234	67.3
1998 - 99[a]	5,000	200	3,153	65.7
1999 - 00[a]	5,001	180	3,349	69.5
2000 - 01[a]	5,000	184	3,001	62.3

[a] Includes resident and non-resident licenses, and excludes duplicate licenses.

Table 38. Use of small game hunter licenses, 1989-90 through 2000-2001.

		Returns from mail survey	Projections from license sales
1989-90	Hunted	6,924 (88.9%)	272,307
	Did not hunt	866 (11.1%)	34,000
		7,790 (100.0%)	306,307
1990-91	Hunted	2,798 (88.5%)	275,327
	Did not hunt	363 (11.5%)	35,777
		3,161 (100.0%)	311,104
1991-92	Hunted	3,004 (85.3%)	270,972
	Did not hunt	519 (14.7%)	46,697
		3,523 (100.0%)	317,669
1992-93	Hunted	3,008 (83.9%)	249,973
	Did not hunt	576 (16.1%)	47,968
		3,584 (100.0%)	297,941
1993-94	Hunted	2,787 (84.0%)	232,365
	Did not hunt	533 (16.0%)	44,260
		3,320 (100.0%)	276,625
1994-95	Hunted	2,826 (84.6%)	244,654
	Did not hunt	516 (15.4%)	44,535
		3,342 (100.0%)	289,189
1995-96	Hunted	2,714 (84.6%)	252,775
	Did not hunt	494 (15.4%)	46,014
		3,208 (100.0%)	298,789
1996-97	Hunted	2,631 (79.6%)	237,476
	Did not hunt	674 (20.4%)	60,861
		3,305(100.0%)	298,337
1997-98	Hunted	2,604 (80.7%)	246,285
	Did not hunt	622 (19.3%)	58,901
		3,226 (100.0%)	305,186
1998-99	Hunted	2,612 (82.8%)	265,215
	Did not hunt	541 (17.2%)	55,093
		3,153 (100.0%)	320,308
1999-00	Hunted	2,689 (80.7%)	264,237
	Did not hunt	644 (19.3%)	63,194
		3,333 (100.0%)	327,431
2000-01	Hunted	2,254 (78.7%)	252,518
	Did not hunt	610 (21.3%)	68,344
		2,864 (100.0%)	320,862

Includes resident and non-resident information. Excludes duplicates.

Table 39. Estimated number of hunters (thousands) for various species, 1987-88 through 2000-01.

	Estimated number of hunters (thousands)													
	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
Ducks	114	77	84	88	100	107	109	118	119	114	122	117	122	109
Canada goose	56	47	50	56	56	61	62	70	73	75	79	77	80	77
Other geese	9	5	7	6	6	6	9	7	10	6	5	6	5	7
American coot	8	3	4	5	5	5	6	7	9	6	7	5	6	4
Common snipe	6	4	5	5	4	3	2	2	2	2	2	2	2	2
Rails / gallinules	1	1	1	<1	<1	<1	1	1	1	<1	<1	<1	<1	<1
Crow *			9	13	12	11	10	12	15	13	11	11	14	14
American woodcock	27	26	30	30	27	21	17	21	21	18	17	19	19	16
Ring-necked pheasant	86	84	90	105	122	105	88	92	96	88	80	88	93	100
Ruffed grouse	132	139	163	163	146	124	102	107	116	118	127	142	139	121
Spruce grouse	16	15	20	19	16	13	11	12	14	11	11	11	11	9
Sharp-tailed grouse	10	12	14	14	14	10	8	7	8	7	8	8	8	10
Gray partridge	25	23	24	31	27	17	15	14	12	11	8	10	10	8
Gray squirrel	40	37	36	41	36	32	32	35	35	33	27	30	31	27
Fox squirrel	26	26	23	29	23	22	23	24	23	20	16	18	20	17
Eastern cottontail	26	27	24	32	31	24	21	21	23	19	14	19	18	20
White-tailed jackrabbit	5	5	6	7	6	5	4	4	5	4	3	3	3	2
Snowshoe hare	10	9	10	15	12	8	5	6	5	4	4	7	7	5
Raccoon (Sept 00 - Feb 01)	13	9	7	10	10	9	9	10	10	10	9	9	6	6
Raccoon‡ (March 00-Aug 00)								3	5	4	3	4	3	5
Red fox (Sept 00-Feb 01)	13	13	9	16	22	19	16	15	15	11	9	9	8	10
Red fox‡ (March 00-Aug 00)								3	4	3	2	3	2	2
Gray fox	3	3	2	3	4	3	3	2	3	n.a.	2	2	2	1
Coyote	5	6	4	9	13	14	14	11	15	13	10	11	11	16
Badger	1	1	<1	1	<1	1	1	1	<1	1	1	<1	<1	1

*Crow season added in 1989.

‡ Raccoon and red fox season changed to year round beginning May 1994.

Table 40. Estimated take per hunter, for respondants reporting that they hunted a particular species, 1986-87 through 2000-01.

	Estimated take per hunter													
	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
Ducks	8.2	6.9	6.5	7.0	8.0	8.1	7.6	8.1	9.7	9.6	9.9	9.5	8.4	8.9
Canada geese	1.9	2.4	2.1	2.3	2.6	2.5	2.5	2.4	2.5	3.2	2.9	2.8	3.5	3.9
Other geese	1.1	0.9	1.2	1.2	1.0	0.9	1.1	0.8	0.9	1.4	2.3	1.0	1.2	2.2
American coot	3.6	2.6	2.5	3.6	2.7	4.7	2.7	3.2	3.1	3.8	4.1	4.7	4.0	2.7
Common snipe	3.4	3.3	2.5	3.0	3.7	2.9	1.9	1.3	1.6	2.8	2.6	2.9	1.6	1.3
Rails/gallinules	3.6	1.8	4.2	1.0	7.6	1.7	1.5	1.3	2.3	1.0	0.7	0.5	0.2	3.7
Crow *			5.9	5.5	7.6	6.2	5.0	9.4	8.5	7.3	6.6	9.3	4.4	6.9
American woodcock	4.5	4.0	3.9	3.9	3.5	4.7	4.0	3.5	3.9	3.2	3.4	3.3	2.8	2.8
Ring-necked pheasant	3.2	3.9	3.6	4.6	4.6	3.9	3.8	3.5	4.2	3.9	3.1	3.5	3.7	3.7
Ruffed grouse	6.3	6.6	7.5	7.1	6.6	4.4	2.8	3.5	3.9	4.5	5.2	6.7	4.9	5.1
Spruce grouse	2.3	2.6	2.7	2.4	2.0	1.7	1.2	1.9	1.8	1.4	2.3	2.4	1.8	2.5
Sharp-tailed grouse	2.4	2.5	2.5	2.4	2.4	2.0	1.4	1.2	1.3	1.2	1.7	2.6	1.6	1.6
Gray partridge	3.8	4.6	3.7	3.7	3.8	2.9	2.4	1.8	2.2	2.2	1.9	2.5	1.9	2.1
Gray squirrel	5.6	5.8	5.5	5.8	4.9	4.6	5.5	5.4	4.9	4.9	4.9	5.0	4.3	5.3
Fox squirrel	4.7	5.2	5.0	5.1	4.6	4.2	4.5	4.2	4.6	3.8	4.4	3.3	3.5	3.9
Eastern cottontail	4.0	4.3	3.8	4.3	4.1	3.1	3.6	3.6	4.3	3.4	4.5	4.6	3.2	3.9
White-tailed jackrabbit	2.2	1.8	2.2	1.3	1.7	2.1	2.4	1.5	1.5	2.6	1.6	2.5	1.9	2.8
Snowshoe hare	2.6	3.7	4.8	4.6	5.9	3.2	3.2	3.2	2.0	2.3	2.0	3.5	3.1	5.2
Raccoon (Sept 00 - Feb 01)	13.1	11.4	7.6	9.6	7.5	8.6	8.9	15.9	14.7	21.3	13.8	16.6	10.9	7.6
Raccoon‡ (March 00-Aug 00)								8.0	11.3	24.4	5.1	5.8	6.4	7.8
Red fox (Sept 00-Feb 01)	2.5	3.3	2.1	3.4	3.6	3.3	3.6	2.8	3.1	3.0	1.4	1.3	1.2	1.9
Red fox‡ (March 00-Aug 00)								1.4	1.5	1.3	0.8	1.2	0.6	0.9
Gray fox	1.3	0.9	1.2	1.4	1.0	1.3	0.8	0.6	1.0	n.a.	1.3	0.9	0.9	0.7
Coyote	1.1	1.2	1.7	1.6	2.1	1.5	1.3	1.1	1.8	2.3	1.6	1.3	1.3	1.8
Badger	1.6	1.5	1.3	1.4	2.2	0.9	0.7	1.4	1.4	2.1	0.9	4.3	1.1	0.8

*Crow season added in 1989.

‡ Raccoon and red fox season changed to year round beginning May 1994.

Table 41. Mean Harvest for successful hunters and hunter success rates (%), 1990 - 91 through 2000 - 01.

	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01
Ducks	7.9 (88.8)	8.7 (89.7)	9.1 (89.0)	8.7 (87.3)	9.2 (88.5)	11.0 (88.2)	10.7 (90.2)	11.1 (88.4)	10.8 (87.8)	9.7 (86.2)	10.2 (84.9)
Canada geese	3.2 (71.6)	3.6 (72.2)	3.4 (72.7)	3.4 (74.3)	3.3 (71.9)	3.4 (72.2)	4.3 (75.1)	4.1 (71.2)	4.0 (70.9	4.7 (74.7)	5.3 (74.2)
Other geese	3.1 (37.9)	2.2 (47.8)	2.5 (33.3)	2.1 (50.0)	2.3 (32.1)	2.4 (39.0)	2.6 (52.2)	4.8 (47.2)	2.3 (44.6)	2.8 (38.2)	4.0 (54.1)
American coot	4.9 (73.1)	3.8 (70.9)	6.0 (77.6)	3.8 (71.6)	4.1 (77.5)	4.4 (69.4)	5.1 (75.0)	4.6 (89.2)	6.0 (78.8)	5.5 (73.0)	4.2 (64.7)
Common snipe	3.3 (90.7)	3.9 (93.8)	3.5 (83.3)	2.9 (65.2)	2.2 (61.9)	2.5 (65.2)	3.2 (89.5)	3.1 (83.3)	3.5 (83.3)	2.3 (66.7)	1.5 (85.0)
Rails / gallinules	2.5 (40.0)	7.6 (100.0)	2.5 (66.7)	2.4 (62.5)	2.2 (60.0)	4.7 (50.0)	2.0 (50.0)	2.0 (33.3)	1.0 (50.0)	1.0 (20.0)	3.7 (100.0)
Crow	6.3 (87.3)	9.1 (83.3)	7.0 (88.8)	5.7 (87.1)	10.5 (89.4)	9.0 (93.9)	7.9 (91.8)	7.1 (93.2)	10.6 (87.6)	5.2 (85.5)	8.2 (84.0)
American woodcock	4.4 (87.9)	4.1 (85.0)	5.8 (80.5)	5.4 (73.9)	4.7 (74.5)	5.0 (76.8)	4.3 (73.5)	4.6 (73.5)	3.7 (87.3)	3.8 (74.6)	3.6 (80.3)
Ring-necked pheasant	5.9 (78.6)	5.8 (79.2)	5.4 (73.1)	5.3 (70.6)	5.0 (68.9)	5.7 (73.6)	5.4 (71.2)	4.5 (68.6)	5.0 (70.9)	5.2 (69.8)	5.2 (71.9)
Ruffed grouse	8.3 (85.1)	8.2 (80.3)	6.0 (72.8)	4.3 (64.7)	4.9 (70.9)	5.3 (74.0)	6.0 (75.4)	6.6 (77.9)	8.0 (82.9)	6.3 (78.9)	6.4 (80.7)
Spruce grouse	3.6 (66.2)	3.0 (68.3)	2.8 (59.1)	2.4 (48.4)	3.3 (56.6)	3.2 (57.0)	2.4 (59.1)	3.4 (67.8)	3.4 (68.8)	2.9 (62.7)	4.1 (60.7)
Sharp-tailed grouse	3.8 (62.6)	3.7 (64.5)	3.3 (60.2)	3.0 (46.7)	3.5 (34.5)	2.7 (47.1)	3.1 (39.7)	3.5 (48.2)	4.4 (60.2)	3.4 (48.2)	3.1 (52.9)
Gray partridge	4.7 (78.2)	4.9 (78.0)	4.0 (71.5)	4.0 (59.7)	3.2 (54.8)	3.4 (62.9)	3.3 (66.7)	3.3 (57.5)	3.8 (64.2)	3.1 (62.4)	3.7 (58.6)
Gray squirrel	6.3 (91.6)	5.7 (86.1)	5.5 (83.8)	6.4 (86.9)	6.2 (87.1)	5.6 (87.9)	5.8 (84.3)	5.8 (84.0)	5.8 (86.9)	5.1 (84.7)	6.7 (84.9)
Fox squirrel	5.7 (89.6)	5.5 (84.7)	4.9 (85.3)	5.1 (88.5)	5.1 (82.6)	5.5 (83.8)	4.7 (80.1)	5.3 (82.9)	3.9 (82.7)	4.5 (79.0)	4.8 (80.5)
Eastern cottontail	5.0 (87.1)	4.9 (83.7)	3.9 (78.0)	4.5 (79.9)	4.5 (79.1)	5.2 (83.5)	4.3 (79.9)	5.7 (80.0)	5.6 (83.1)	4.0 (80.0)	4.8 (82.5)
White-tailed jackrabbit	2.0 (65.8)	2.4 (70.3)	3.0 (71.0)	3.9 (62.8)	2.4 (61.5)	2.5 (59.3)	4.0 (65.1)	2.5 (65.5)	3.2 (78.6)	2.6 (72.7)	4.1 (68.2)
Snowshoe hare	5.2 (88.6)	6.9 (85.7)	4.8 (65.6)	4.4 (73.8)	5.4 (59.7)	3.4 (59.3)	3.7 (60.4)	2.8 (70.5)	4.7 (75.4)	3.9 (79.4)	6.3 (82.6)
Raccoon (Sept 00-Feb 01)	10.4 (92.6)	8.4 (89.2)	9.3 (91.7)	9.3 (95.3)	16.3 (97.5)	16.0 (92.0)	22.5 (94.4)	14.8 (92.6)	18.1 (91.8)	11.4 (95.1)	8.0 (94.8)
Raccoon‡ (March 00-Aug 00)					9.1 (88.6)	12.2 (92.5)	29.6 (82.2)	6.3 (80.0)	6.2 (92.5)	6.6 (96.2)	8.2 (95.1)
Red fox (Sept 00-Feb 01)	5.0 (68.0)	4.9 (73.6)	5.6 (58.9)	5.4 (67.5)	4.4 (64.7)	4.8 (64.5)	5.3 (57.1)	2.4 (59.8)	2.6 (52.7)	2.4 (51.9)	3.4 (56.7)
Red fox‡ (March 00-Aug 00)					3.0 (46.9)	2.3 (65.1)	2.4 (51.6)	1.6 (52.2)	1.8 (65.4)	1.3 (47.4)	1.9 (47.1)
Gray fox	3.3 (44.4)	2.4 (40.0)	3.1 (41.5)	3.1 (26.7)	2.5 (23.1)	1.8 (58.1)	n.a.	2.0 (62.5)	1.6 (53.3)	2.3 (40.0)	2.0 (33.3)
Coyote	2.6 (62.1)	3.7 (56.6)	3.1 (50.0)	2.3 (57.1)	2.4 (48.1)	2.9 (61.1)	4.1 (55.9)	2.8 (57.0)	2.9 (45.0)	2.5 (49.1)	3.4 (53.9)
Badger	1.9 (77.8)	2.2 (100.0)	1.2 (71.4)	1.0 (71.4)	1.7 (85.7)	1.8 (80.0)	2.1 (100.0)	1.0 (85.7)	6.5 (66.7)	1.3 (87.5)	1.0 (83.3)

‡ Raccoon and red fox season changed to year round beginning May 1994.

Table 42. Statewide small game hunting license sales and estimated hunter harvest, 1988-89 through 2000-01.

	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
Small game license sales[a]	285,685	306,307	311,104	317,669	297,941	276,625	289,189	298,425	298,337	305,186	320,308	327,431	320,862
Federal duck stamp sales	92.772	97,939	103,971	110,197	108,332	110,738	149,428	132,546	132,738	138,331	134,098	134,138	129,330
State duck stamp sales	89,228	97,659	102,151	104,051	104,064	104,839	116,346	122,092	122,634	126,009	126,488	128,245	121,709
Pheasant stamp sales	100,478	108,124	122,260	133,384	117,934	94,443	104,621	105,093	95,866	85,093	99,664	106,945	114,440
Estimated harvest[b] (thousands)													
Ducks[c]	531	544	619	784	864	824	955	1,162	1,098	1,206	1,119	1,021	969
Canada goose[c]	114	103	128	144	150	156	166	180	241	230	218	285	301
Other geese[c]	5	9	7	6	5	9	6	9	8	11	6	6	15
American coot[c]	9	10	17	13	23	15	22	28	23	29	25	25	10
Common snipe	13	12	14	16	9	4	2	3	5	4	5	3	3
Rails/gallinules	1	3	<1	3	<1	1	1	1	<1	<1	<1	<1	1
Crow		54	70	94	69	51	114	130	96	74	106	60	96
American woodcock	104	118	116	94	100	68	74	82	58	58	63	54	45
Ring-necked pheasant	332	325	483	565	411	332	319	398	341	248	309	339	375
Ruffed grouse	917	1,218	1,153	963	543	288	371	457	533	654	946	685	619
Spruce grouse	39	55	46	34	21	12	23	25	16	25	27	19	23
Sharp-tailed grouse	29	36	33	33	20	11	9	10	8	13	22	14	16
Gray partridge	95	86	115	102	49	35	26	26	24	16	24	19	17
Gray squirrel	217	194	234	174	147	178	187	169	158	131	149	132	140
Fox squirrel	134	113	115	109	92	105	99	105	75	68	57	71	65
Eastern cottontail	118	92	139	128	73	75	77	100	65	65	89	59	78
White-tailed jack rabbit	10	12	9	10	11	9	7	7	10	4	7	6	7
Snowshoe hare	32	48	69	70	24	16	19	11	10	8	25	21	27
Raccoon (Sept 00-Feb 01)	102	52	93	74	77	79	163	155	207	124	143	65	49
Raccoon[d] (May 00- Aug 00)							24	55	99	17	2	16	36
Red fox (Sept 00- Feb 01)	43	19	54	78	63	63	42	48	33	13	13	10	19
Red fox[d] (May 00- Aug 00)							4	6	4	2	3	1	2
Gray fox	2	3	5	4	4	2	1	3	n.a.	3	1	2	1
Coyote	7	6	14	27	21	18	13	26	30	16	14	13	29
Badger	2	<1	1	1	<1	<1	1	1	1	1	1	1	1

Harvest estimates in this table, and the number of hunters and mean take per hunter in Table 37, are calculated from different questions on the survey form. The sample used in calculations differs from one estimator to the next. This is because some respondents give specific answers to one question but not to a related one. A formula is used to calculate the total estimated take for each species which appears in this table. In most years the formula produces results rather close to those obtained by multiplying the average take per hunter times the number of hunters. However, in other years (e.g., 1985) results of the two methods are quite divergent, perhaps as a result of an unusual sample. This is being investigated further, and as a result, numbers may change somewhat in future reports. The most current report of survey findings will have the best data available at that time. Beginning in 1989-90 this table was changed from Resident harvest estimates to Statewide harvest estimates, which includes non-resident harvest estimates.

[a] Duplicate licenses not included.

[b] Estimates based upon response of hunters to questionnaires.

[c] U.S. Fish and Wildlife Service harvest estimates for 2000 are:

Ducks . . . . . 491,722 American coot 6,370

Canada geese . . . . . 165,153 Other geese 0

[d] Raccoon and red fox seasons changed to year round beginning May,1994.

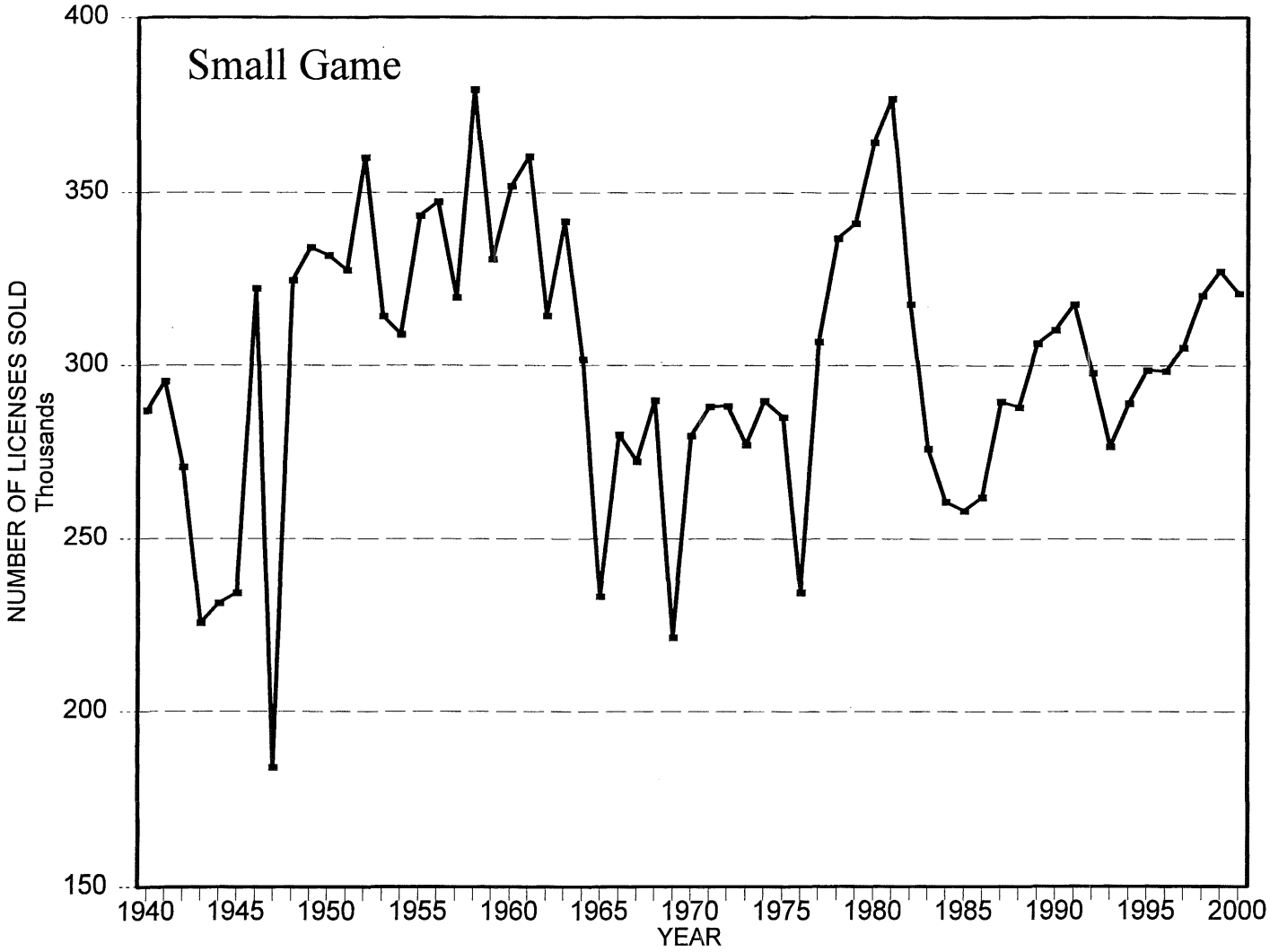

Figure 42. Numbers of Minnesota small game licenses sold, 1940 - 2000.

Table 43. Mail survey results of nonresident small game hunters, 1988-89 through 2000-01.

	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
Nonresident licenses issued	3,462	4,624	4,932	4,852	4,718	3,809	4,435	4,993	5,488	6,361	7,155	7,572	7001
Questionnaires:													
Number mailed	436	553	82	114	170	229	182	205	51	269	200	199	98
Number not delivered	33	52	7	8	8	21	7	14	4	18	17	16	6
Number (percent) returned	327 (81)	396 (79)	54 (72)	89 (83)	32 (82)	149 (72)	128 (73)	140 (73)	32 (68)	183 (73)	117 (64)	136 (74)	56 (61)
Estimated nonresidents and (percent) of all nonresidents													
Ducks	1,130 (33)	1,521 (33)	1,342 (27)	1,308 (27)	1,751 (37)	1,789 (47)	1,975 (45)	2,354 (47)	1,209 (19)	2,331 (37)	2,874 (40)	2,505 (33)	2,375 (34)
Canada goose	700 (20)	866 (19)	1,074 (22)	491 (10)	1,101 (21)	792 (21)	1,005 (23)	1,248 (25)	686 (13)	1,113 (17)	1,468 (20)	1,225 (16)	1,500 (21)
Ruffed grouse	1,960 (57)	2,610 (56)	1,789 (36)	2,017 (42)	1,465 (31)	895 (24)	1,421 (32)	1,534 (31)	2,744 (50)	2,157 (34)	3,608 (50)	3,508 (46)	3,000 (43)
Ring-necked pheasant	690 (20)	1,042 (23)	895 (18)	1,743 (36)	894 (19)	741 (20)	832 (19)	820 (16)	515 (9)	731 (11)	612 (8)	947 (13)	625 (9)
Raccoon [b]	42 (1)	59 (1)	0 (0) [c]	55 (1)	0 (0) [c]	26 (1)	0 (0) [c] *	107 (2) *	172 (3)	35 (1)	0 (0) [c]	56 (1)	250 (4)
Estimated nonresident take:													
Ducks	8,000	9,901	5,816	11,340	17,442	13,574	15,696	26,713	6,346	15,967	26,663	26,391	18,253
Canada goose	1,500	1,744	4,205	1,363	3,610	2,122	2,287	4,173	1,544	4,905	4,587	6,960	5,001
Ruffed grouse	12,300	20,739	14,852	18,100	10,758	4,985	7,242	9,415	23,153	16,072	27,886	23,384	24,003
Ring-necked pheasant	2,600	4,424	3,221	6,324	4,110	3,042	4,366	3,638	1,887	2,505	1,712	4,844	4,001
Raccoon	700	667	0	327	0	26	0	3,638	8,061	70	0	724	3,375

[a] Excludes duplicate licenses and nonresident shooting preserve licenses.
[b] Nonresident raccoon hunters were required to purchase a nonresident raccoon hunting license for the first time in 1979 in addition to the nonresident small game license. The initial season bag limit of 8 was increased to 12 in 1983 and to 20 in 1985.
[c] In 1990, 1992, 1994 and 1998 small game hunter survey no non-residents reported hunting/harvesting raccoons. * Non-resident raccoon hunting license was not required for 1994 and 1995.

Raccoon take per hunter

	Resident	Nonresident	Number of nonresident raccoon licenses
1987	13	15	145
1988	11	17	73
1989	8	11	41
1990[c]	11	0	20
1991	8	6	21
1992[c]	9	0	20
1993	9	1	24
1994[c]	16	0	*
1995	12	34	*
1996	23	47	52
1997	15	2	58
1998[c]	18	0	56
1999	11	13	48
2000	8	13	51

Mississippi Flyway

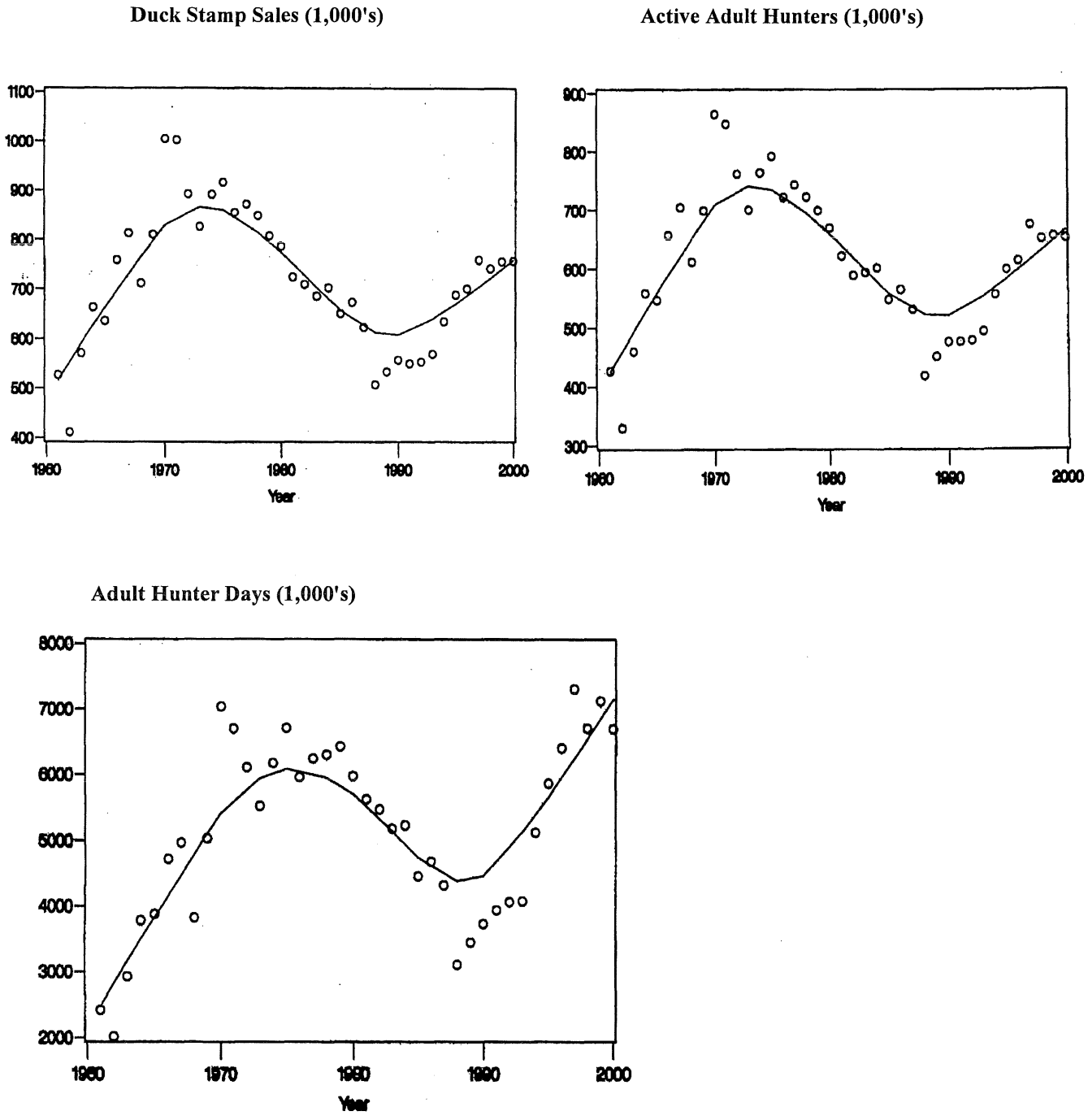

Figure 43. Federal duck stamp sales; Active adult hunters; Adult hunter days, (in 1,000's) for the Mississippi flyway. The 1961 through 1999 data are final, but the 2000 numbers are preliminary pending final duck stamp sales. The curves (locally weighted regression [lowess] lines; Cleveland and Devlin 1988, J. Am. Stat. Assoc.) fit a pattern to the majority of the estimates and identify estimates that deviate from that pattern (from Martin, E. M., and P.I. Padding. 2001. Preliminary estimates of waterfowl harvest and hunter activity in the United States during the 2000 hunting season. U.S. Fish and Wildlife Service Adm. Rep. Office of Migratory Bird Management, Laurel, MD. July 2001. 33pp.).

Mississippi Flyway

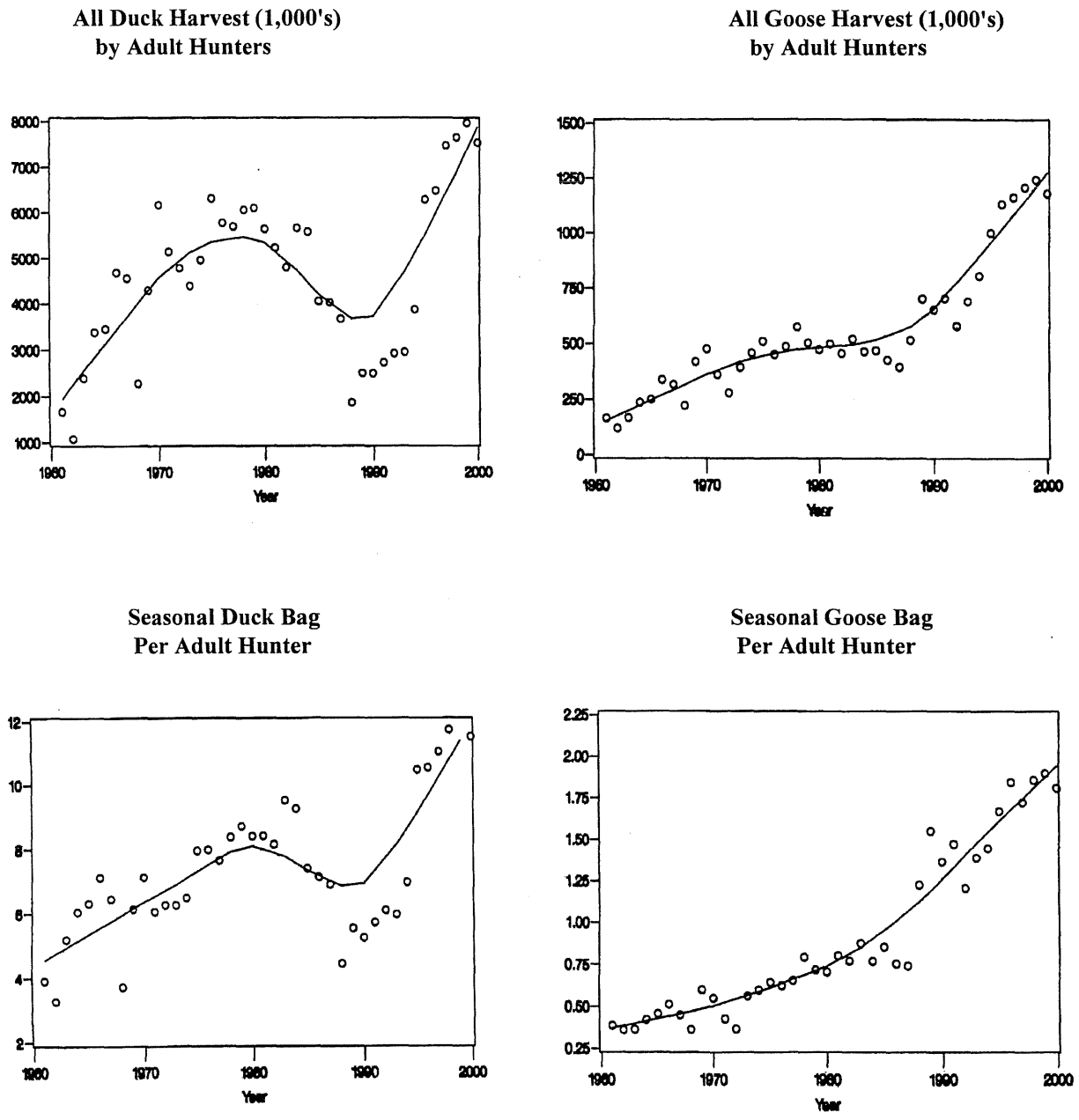

Figure 44. All duck harvest (1,000's) by adult hunters; all goose harvest (1,000's) by adult hunters; seasonal duck bag; and seasonal goose bag per adult hunters in the Mississippi flyway. The 1961 through 1999 data are final, but the 2000 numbers are preliminary pending final duck stamp sales. The curves (locally weighted regression [lowess] lines; Cleveland and Devlin 1988, J. Am. Stat. Assoc.) fit a pattern to the majority of the estimates and identify estimates that deviate from that pattern (from Martin, E. M., and P.I. Padding. 2001. Preliminary estimates of waterfowl harvest and hunter activity in the United States during the 2000 hunting season. U.S. Fish and Wildlife Service Adm. Rep. Office of Migratory Bird Management, Laurel, MD. July 2001. 33pp.).

Table 46. Ranking of the Six Most Numerically Important Species in Minnesota regular season duck harvest, 1961-2000.

	Rank Position / % of Harvest												Combined %
Year	1	%	2	%	3	%	4	%	5	%	6	%	of Total Harvest
1961	Mallard	46.31	L. Scaup	13.57	GW Teal	11.16	Ringneck	7.55	Wigeon	5.56	Wood Duck	4.40	88.55
1962	Mallard	39.50	Ringneck	18.23	L. Scaup	8.03	BW Teal	7.90	Wood Dk	6.61	GW Teal	5.91	86.18
1963	Mallard	39.87	BW Teal	13.59	Wood Dk	12.58	Ringneck	10.72	GW Teal	6.43	Wigeon	4.66	87.85
1964	Mallard	30.53	Ringneck	18.48	BW Teal	9.50	GW Teal	7.91	Wood Dk	7.79	Wigeon	6.62	80.83
1965	Mallard	25.30	Ringneck	23.95	L. Scaup	11.99	Wood Dk	8.16	BW Teal	5.64	Wigeon	5.29	80.33
1966	Mallard	30.25	Ringneck	16.68	Wood Dk	9.44	BW Teal	7.79	L. Scaup	7.73	GW Teal	7.23	79.12
1967	Mallard	33.69	BW Teal	11.82	GW Teal	10.95	Ringneck	10.18	Wood Dk	7.89	L. Scaup	5.82	80.35
1968	Mallard	27.42	Ringneck	14.68	Wood Dk	11.94	GW Teal	11.53	BW Teal	8.13	Wigeon	6.32	80.02
1969	Mallard	20.71	L. Scaup	15.76	Ringneck	12.82	BW Teal	12.40	Wood Dk	10.36	GW Teal	7.18	79.23
1970	Mallard	31.43	Ringneck	11.39	BW Teal	10.63	Wood Dk	10.54	L. Scaup	9.86	GW Teal	7.50	81.35
1971	Mallard	26.32	BW Teal	16.93	Ringneck	13.92	L. Scaup	11.49	Wood Dk	7.19	GW Teal	6.15	82.00
1972	Mallard	36.92	L. Scaup	16.82	Ringneck	9.56	Wood Dk	8.94	BW Teal	7.41	GW Teal	5.69	85.34
1973	Mallard	27.75	BW Teal	15.18	Ringneck	14.63	Wood Dk	10.55	L. Scaup	9.26	GW Teal	7.85	85.22
1974	Mallard	33.12	Wood Dk	14.99	Ringneck	13.26	BW Teal	9.89	L. Scaup	7.72	GW Teal	7.53	86.51
1975	Mallard	28.13	Ringneck	16.07	BW Teal	15.76	Wood Dk	15.46	GW Teal	6.80	L. Scaup	5.37	87.59
1976	Mallard	27.73	Wood Dk	13.78	GW Teal	11.32	Ringneck	10.51	L. Scaup	10.48	BW Teal	8.20	82.02
1977	Mallard	29.04	Ringneck	12.91	Wood Dk	12.87	BW Teal	11.93	GW Teal	10.45	Wigeon	6.77	83.97
1978	Mallard	30.04	Ringneck	13.57	Wood Dk	12.23	BW Teal	11.25	GW Teal	6.86	Wigeon	5.61	79.56
1979	Mallard	31.35	Wood Dk	15.12	BW Teal	14.93	Ringneck	11.25	Wigeon	4.80	GW Teal	4.70	82.15
1980	Mallard	31.79	Ringneck	15.65	Wood Dk	15.49	GW Teal	6.02	L. Scaup	5.84	Wigeon	5.67	80.46
1981	Mallard	31.37	Wood Dk	13.34	L. Scaup	10.67	Ringneck	9.99	BW Teal	8.00	GW Teal	7.14	80.51
1982	Mallard	30.54	Wood Dk	14.76	BW Teal	14.36	Ringneck	8.83	L. Scaup	6.38	GW Teal	5.94	80.81
1983	Mallard	29.22	Wood Dk	17.06	BW Teal	13.28	Ringneck	11.60	GW Teal	6.74	L. Scaup	5.12	83.02
1984	Mallard	29.44	Wood Dk	18.00	BW Teal	11.90	Ringneck	9.95	GW Teal	8.23	L. Scaup	7.34	84.86
1985	Mallard	27.98	Ringneck	18.90	Wood Dk	12.78	L. Scaup	10.94	GW Teal	6.78	BW Teal	4.12	81.50
1986	Mallard	29.73	Wood Dk	17.18	Ringneck	16.52	L. Scaup	9.57	BW Teal	7.67	GW Teal	5.50	86.17
1987	Mallard	31.71	Wood Dk	18.73	Ringneck	14.47	GW Teal	10.28	L. Scaup	4.95	BW Teal	4.34	84.48
1988	Mallard	31.76	Wood Dk	14.56	L. Scaup	14.03	GW Teal	11.55	Ringneck	8.23	BW Teal	3.95	84.08
1989	Mallard	38.62	Wood Dk	15.72	GW Teal	11.48	Ringneck	8.67	L. Scaup	6.08	BW Teal	4.63	85.20
1990	Mallard	29.91	Wood Dk	17.16	Ringneck	11.51	GW Teal	11.23	BW Teal	7.16	L. Scaup	6.79	83.76
1991	Mallard	35.73	Wood Dk	19.47	Ringneck	9.75	GW Teal	6.73	L. Scaup	6.13	Wigeon	4.38	82.19
1992	Mallard	35.30	Wood Dk	17.28	Ringneck	12.95	L. Scaup	7.93	GW Teal	5.92	Wigeon	4.48	83.86
1993	Mallard	30.94	Ringneck	22.18	Wood Dk	18.77	L. Scaup	5.56	GW Teal	3.88	BW Teal	3.10	84.43
1994	Mallard	26.59	Wood Dk	21.51	Ringneck	14.68	L. Scaup	6.57	BW Teal	6.43	GW Teal	6.08	81.86
1995	Mallard	26.76	Wood Dk	20.90	BW Teal	12.45	Ringneck	11.27	L. Scaup	6.89	GW Teal	4.43	82.70
1996	Mallard	31.53	Wood Dk	19.35	BW Teal	14.06	GW Teal	7.03	Ringneck	6.56	L. Scaup	4.72	83.25
1997	Mallard	28.12	Ringneck	13.37	Wood Dk	13.05	BW Teal	8.90	GW Teal	8.42	L. Scaup	6.90	78.76
1998	Mallard	34.07	Wood Dk	17.20	Ringneck	12.21	GW Teal	8.90	BW Teal	7.53	L. Scaup	2.84	82.75
1999	Mallard	30.38	Wood Dk	18.89	Ringneck	10.89	GW Teal	9.15	BW Teal	9.09	Bufflehead	4.62	83.02
2000	Mallard	32.71	Wood Dk	15.57	BW Teal	13.70	Ringneck	12.40	GW Teal	7.52	Gadwall	3.23	85.13
Avg. % of Harvest		31.2		16.5		12.7		9.7		7.3		5.6	83.0
Range	20.71-46.31		11.39-23.95		8.03-18.77		5.56-15.46		3.88-10.48		2.84-8.20		

Number of years that species was ranked number:

Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	6
Mallard-40	Wood Dk-20	Ringneck-13	Ringneck-12	L. Scaup-11	GW Teal-14
	Ringneck-13	BW Teal- 10	GW Teal- 10	GW Teal- 11	Wigeon - 9
	BW Teal- 4	Wood Dk- 9	BW Teal- 7	BW Teal- 9	BW Teal- 6
	L. Scaup- 3	GW Teal- 4	L. Scaup- 6	Wood Dk- 5	L. Scaup- 8
		L. Scaup- 4	Wood Dk- 5	Wigeon - 2	Wood Dk- 1
				Ringneck- 2	Bufflehead- 1
					Gadwall- 1

Table 47. ESTIMATES OF REGULAR-SEASON DUCK HARVESTS IN MINNESOTA

	Mallard		Wood duck		Blue-winged teal		Green-winged teal		Gadwall		American wigeon		Northern pintail		American black duck		Ring-necked duck		Lesser scaup		Canvasback		Redhead		Common goldeneye		Bufflehead		TOTAL
YEAR	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
1961	175,000	46	16,600	4	10,600	3	42,200	11	4,800	1	21,000	6	12,900	3	1,700		28,500	8	51,300	14	0	0	0	0	2,100	1	4,400	1	378,000
1962	113,600	39	19,000	7	22,700	8	17,000	6	3,100	1	9,500	3	6,100	2	2,800	1	52,400	18	23,100	8	0	0	700	0	4,200	1	5,300	2	287,600
1963	228,300	40	72,000	13	77,800	14	36,800	6	6,100	1	26,700	5	19,400	3	3,900	1	61,400	11	14,500	3	0	0	1,400	0	2,900	1	3,100	1	572,500
1964	271,000	31	69,100	8	84,300	9	70,200	8	20,900	2	58,700	7	24,000	3	4,800	1	164,000	18	48,400	5	8,500	1	23,900	3	6,000	1	9,200	1	887,600
1965	162,300	25	52,300	8	176,800	28	35,600	6	8,500	1	34,000	5	8,600	1	6,300	1	153,700	24	76,900	12	9,600	1	25,400	4	7,800	1	12,900	2	641,600
1966	284,600	30	88,800	9	73,300	8	68,000	7	19,000	2	52,900	6	20,200	2	6,500	1	156,900	17	72,800	8	14,600	2	32,900	3	9,200	1	12,800	1	940,800
1967	329,600	34	77,100	8	115,600	12	107,100	11	22,700	2	53,300	5	21,700	2	3,300	0	99,600	10	57,000	6	6,200	1	37,500	4	8,300	1	11,300	1	978,200
1968	152,100	27	66,200	12	45,100	8	64,000	12	9,900	2	35,000	6	16,300	3	3,500	1	81,400	15	32,600	6	7,200	1	10,100	2	6,700	1	9,600	2	554,700
1969	223,800	21	112,000	10	134,000	12	77,600	7	20,400	2	52,600	5	17,600	2	2,500	0	138,600	13	170,300	16	7,800	1	50,000	5	19,600	2	24,300	2	1,080,600
1970	298,900	31	100,200	11	101,100	11	71,300	7	11,100	1	44,100	5	29,200	3	4,900	1	108,300	11	93,700	10	6,300	1	29,200	3	7,600	1	19,000	2	950,800
1971	278,800	26	76,200	7	179,400	17	65,100	6	21,100	2	38,700	4	18,100	2	5,500	1	147,500	14	121,700	11	9,700	1	38,600	4	12,100	1	14,500	1	1,059,300
1972	354,900	37	85,900	9	71,300	7	54,700	6	16,400	2	35,700	4	11,200	1	7,400	1	91,900	10	161,700	17	500	0	1,000	0	13,600	1	19,000	2	961,400
1973	165,000	28	62,700	11	90,300	15	46,700	8	8,100	1	30,200	5	13,900	2	2,800	0	87,000	15	55,100	9	200	0	400	0	6,300	1	9,100	2	594,400
1974	254,800	33	115,300	15	76,100	10	57,900	8	8,300	1	34,400	4	11,300	1	2,300	0	102,000	13	59,400	8	3,000	0	5,700	1	8,800	1	13,300	2	769,400
1975	285,300	28	156,900	15	159,900	16	69,000	7	11,800	1	37,000	4	13,800	1	1,100	0	163,000	16	54,500	5	4,500	0	13,600	1	12,300	1	16,400	2	1,014,400
1976	157,800	28	78,500	14	46,700	8	64,400	11	17,200	3	22,900	4	4,500	1	400	0	59,800	11	59,600	10	10,000	2	13,100	2	6,500	1	9,800	2	569,100
1977	193,100	29	85,600	13	79,300	12	69,500	10	19,100	3	45,000	7	7,900	1	2,500	0	85,800	13	34,500	5	5,200	1	10,900	2	2,100	0	9,700	1	664,900
1978	304,100	30	123,800	12	113,900	11	69,500	7	28,100	3	56,800	6	18,700	2	1,000	0	137,400	14	48,300	5	5,300	1	35,000	3	8,600	1	20,700	2	1,012,300
1979	346,100	31	167,000	15	164,900	15	51,900	5	23,100	2	53,000	5	18,900	2	1,000	0	124,200	11	48,300	4	11,400	1	38,600	3	8,400	1	13,300	1	1,104,100
1980	258,000	32	125,700	15	43,300	5	48,800	6	23,700	3	46,100	6	18,700	2	2,800	0	127,000	16	47,400	6	6,700	1	24,800	3	9,700	1	10,600	1	811,500
1981	253,000	31	107,600	13	64,500	8	57,600	7	23,400	3	42,500	5	19,500	2	1,900	0	80,600	10	86,100	11	5,400	1	20,100	2	7,100	1	9,700	1	806,500
1982	249,500	31	120,600	15	117,300	14	48,500	6	23,700	3	35,900	4	13,600	2	4,100	1	72,100	9	52,100	6	6,800	1	28,300	3	7,600	1	15,500	2	817,000
1983	259,700	29	151,600	17	118,000	13	59,900	7	15,900	2	37,400	4	19,200	2	1,900	0	103,100	12	45,500	5	9,700	1	28,500	3	2,400	0	6,800	1	888,600
1984	303,400	29	185,400	18	122,600	12	84,800	8	21,800	2	30,100	3	23,900	2	1,800	0	102,500	10	75,600	7	7,200	1	26,300	3	8,600	1	11,200	1	1,030,500
1985	184,900	28	84,400	13	27,200	4	44,800	7	13,100	2	20,000	3	8,600	1	2,000	0	124,900	19	72,300	11	10,200	2	16,900	3	6,000	1	23,500	4	660,900
1986	230,300	30	133,100	17	59,400	8	42,600	5	11,000	1	30,100	4	4,400	1	500	0	128,000	17	74,100	10	0	0	19,900	3	5,400	1	14,800	2	774,600
1987	181,000	32	106,900	19	24,800	4	58,700	10	8,900	2	22,600	4	4,200	1	600	0	82,600	14	28,300	5	0	0	18,300	3	5,800	1	13,600	2	570,900
1988	76,900	32	35,300	15	9,600	4	28,000	12	2,600	1	7,500	3	6,600	3	700	0	19,900	8	34,000	14	0	0	3,100	1	3,800	2	8,500	4	242,000
1989	122,100	39	49,700	16	14,600	5	36,300	11	4,100	1	12,500	4	7,300	2	300	0	27,400	9	19,200	6	300	0	3,500	1	4,300	1	8,800	3	316,300
1990	109,500	30	62,800	17	26,200	7	41,100	11	10,200	3	13,200	4	6,100	2	500	0	42,200	12	24,900	7	0	0	5,000	1	5,600	2	8,700	2	366,200
1991	173,200	36	94,400	19	20,400	4	32,600	7	17,000	4	21,300	4	5,200	1	700	0	47,300	10	29,700	6	0	0	11,300	2	4,300	1	10,900	2	484,800
1992	184,200	35	90,200	17	20,000	4	30,900	6	16,000	3	23,400	4	8,100	2	700	0	67,600	13	41,400	8	100	0	7,500	1	5,900	1	14,400	3	522,000
1993	150,100	31	91,000	19	15,000	3	18,800	4	6,600	1	13,300	3	5,600	1	1,100	0	107,600	22	27,000	6	100	0	11,600	2	10,500	2	14,000	3	485,100
1994	160,600	27	129,900	22	38,800	6	36,700	6	9,100	2	20,100	3	8,100	1	800	0	88,600	15	39,700	7	11,100	2	18,700	3	5,600	1	15,300	3	603,800
1995	203,900	27	159,200	21	94,840	12	33,700	4	7,200	1	17,500	2	7,700	1	500	0	85,900	11	52,500	7	18,000	2	19,600	3	18,100	2	16,700	2	761,800
1996	243,400	32	149,400	19	108,600	14	54,300	7	8,000	1	15,800	2	10,100	1	1,100	0	50,600	7	36,400	5	12,900	2	22,200	3	14,500	2	15,900	2	772,100
1997	231,600	28	107,500	13	73,300	9	69,400	8	21,300	3	22,700	3	11,400	1	400	0	110,200	13	56,800	7	18,400	2	26,200	3	10,200	1	23,200	3	823,700
1998	232,700	34	117,500	17	51,400	8	60,800	9	18,700	3	15,800	2	8,200	1	500	0	83,400	12	19,400	3	7,200	1	14,700	2	8,700	1	18,300	3	683,000
1999	199,800	30	124,300	19	59,800	9	60,200	9	12,500	2	12,800	2	6,100	1	200	0	71,600	11	18,200	3	8,600	1	17,000	3	6,800	1	30,400	5	657,700
2000*	160,800	33	76,600	16	67,400	14	37,000	8	15,900	3	10,400	2	9,600	2	500	0	61,000	12	12,300	3	5,700	1	9,700	2	3,800	1	5,600	1	491,700
% change	-20		-38		13		-39		27		-19		57		150		-15		-32		-34		-43		-44		-82		-25
AVERAGES:																													
61-65	190,040	34	45,800	8	74,440	13	40,360	7	8,680	2	29,980	5	14,200	3	3,900	1	92,000	17	42,840	8	3,620	1	10,280	2	4,600	1	6,980	1	553,460
66-70	257,800	29	88,860	10	93,820	10	77,600	9	16,620	2	47,580	5	21,000	2	4,140	0	116,960	13	85,280	9	8,420	1	31,940	4	10,280	1	15,400	2	901,020
71-75	267,760	30	99,400	11	115,400	13	58,680	7	13,140	1	35,200	4	13,660	2	3,820	0	118,280	13	90,480	10	3,580	0	11,860	1	10,620	1	14,460	2	879,780
76-80	251,820	30	116,120	14	89,620	11	60,820	7	22,240	3	44,760	5	13,740	2	1,540	0	106,840	13	47,620	6	7,720	1	24,480	3	7,060	1	12,820	2	832,380
81-85	250,100	30	129,920	15	89,920	11	59,120	7	19,580	2	33,180	4	16,960	2	2,340	0	96,640	11	66,320	8	7,860	1	24,020	3	6,340	1	13,340	2	840,700
86-90	143,960	32	77,560	17	26,920	6	41,340	9	7,360	2	17,180	4	5,720	1	520	0	60,020	13	36,100	8	60	0	9,960	2	4,980	1	10,880	2	454,000
91-95	174,400	31	112,940	20	37,808	7	30,540	5	11,180	2	19,120	3	6,940	1	760	0	79,400	14	38,060	7	5,860	1	13,740	2	8,880	2	14,260	2	571,500
96-00	213,660	31	115,060	17	72,100	11	56,340	8	15,280	2	15,500	2	9,080	1	540	0	75,360	11	28,620	4	10,560	2	17,960	3	8,800	1	18,680	3	685,640

* - PRELIMINARY

Table 50. ESTIMATES OF ALL-SEASON LESSER SCAUP HARVESTS IN THE MISSISSIPPI FLYWAY

YEAR	MN	WI	MI	IA	IL	IN	OH	MO	KY	AR	TN	LA	MS	AL	MF TOTAL
1961	51,300	12,000	8,400	5,500	10,500	600	1,500	5,400	400	100	600	59,400	3,900	1,900	161,500
1962	23,100	6,100	6,900	800	500	100	1,000	300	TR	0	100	10,000	0	400	49,300
1963	14,500	5,300	6,600	2,600	3,100	200	1,500	3,100	400	700	100	127,600	1,400	2,800	169,900
1964	48,400	23,400	23,500	3,200	6,800	500	3,300	8,400	700	1,500	800	100,600	2,700	3,000	226,800
1965	76,900	27,200	15,600	10,200	13,200	1,100	4,700	11,500	600	1,700	900	178,600	6,200	4,600	353,000
1966	72,800	49,900	31,500	10,600	11,800	1,100	7,400	9,700	1,000	2,900	1,400	80,200	3,300	3,400	287,000
1967	57,000	48,000	41,000	4,700	14,500	2,000	8,500	17,100	300	800	1,200	47,900	10,100	2,900	256,000
1968	32,600	16,600	16,700	2,000	6,500	500	2,900	10,100	TR	0	100	6,800	1,200	100	96,100
1969	170,300	30,100	47,200	7,600	7,500	5,200	5,600	4,800	0	900	400	14,500	3,400	2,600	300,100
1970	93,700	32,200	33,400	7,800	11,400	1,500	7,300	7,300	1,000	1,100	1,900	49,200	2,300	1,100	251,200
1971	121,700	28,600	29,300	17,300	11,800	1,200	3,400	11,600	500	0	3,800	61,100	3,400	3,900	297,600
1972	161,700	37,100	39,600	16,100	11,400	800	3,600	8,000	1,000	7,500	1,900	36,400	1,200	800	327,100
1973	55,100	17,900	36,000	5,000	7,900	800	4,200	4,700	500	10,900	2,900	265,100	11,000	12,100	434,100
1974	59,400	26,000	46,000	5,000	15,100	900	5,100	8,700	400	9,800	3,500	137,700	8,400	4,800	330,800
1975	54,500	27,100	30,300	7,700	17,900	1,600	4,600	20,000	1,100	4,300	800	74,900	3,500	2,100	250,400
1976	59,600	33,200	33,300	8,000	24,100	2,800	6,300	12,000	600	13,900	100	119,400	4,200	9,200	326,700
1977	34,500	19,800	16,200	4,200	17,000	2,500	3,900	11,700	2,500	28,700	2,900	187,700	20,400	12,400	364,400
1978	48,300	10,400	9,600	5,700	19,700	1,000	2,100	12,600	100	5,400	1,000	55,400	2,700	3,300	177,300
1979	48,300	17,500	12,500	7,300	17,900	4,700	3,600	6,900	800	3,600	800	19,100	1,200	400	144,600
1980	47,400	32,000	11,700	7,900	10,800	5,000	3,300	6,000	1,300	2,700	1,200	23,500	0	1,500	154,300
1981	86,100	55,000	14,900	6,000	21,200	1,900	4,400	7,800	900	2,300	1,400	101,000	9,500	12,800	325,200
1982	52,100	25,000	12,900	5,900	21,900	600	3,900	4,100	700	12,400	1,400	91,900	1,800	6,400	241,000
1983	45,500	18,200	11,000	7,300	15,200	1,900	3,000	5,300	100	4,300	3,000	35,700	2,000	2,000	154,500
1984	75,600	46,800	13,000	12,100	16,900	4,000	5,800	18,600	800	17,900	7,300	150,700	2,500	8,800	380,800
1985	72,300	39,500	9,300	5,300	14,300	3,900	4,700	13,100	700	6,000	1,100	119,600	4,300	11,700	305,800
1986	74,100	19,600	9,200	3,900	14,400	1,100	4,400	9,700	0	2,700	0	21,500	100	3,300	164,000
1987	28,300	13,500	5,900	2,900	5,900	800	2,600	8,200	100	5,000	200	22,400	500	800	97,100
1988	34,000	10,900	5,900	1,700	3,200	1,100	1,400	1,600	100	1,300	2,500	16,700	1,400	1,500	83,300
1989	19,200	11,600	9,600	1,600	3,200	400	2,400	4,700	200	2,000	500	11,800	600	1,400	69,200
1990	24,900	10,400	5,000	1,600	4,900	300	2,500	2,200	100	1,800	1,500	3,600	100	TR	58,900
1991	29,700	15,200	5,500	7,200	17,500	1,100	1,400	6,900	100	2,600	1,100	11,600	100	2,600	102,600
1992	41,400	8,900	7,400	3,200	7,100	1,100	1,500	3,000	300	1,200	2,300	49,800	1,200	3,900	132,300
1993	27,000	7,700	10,000	2,100	4,200	700	1,600	2,100	0	1,100	1,000	5,200	0	1,000	63,700
1994	39,700	8,500	12,700	3,300	6,700	300	400	5,800	600	4,400	800	16,500	400	2,000	102,100
1995	52,500	15,500	16,400	5,400	4,700	900	3,400	5,200	0	11,600	800	70,300	700	1,600	189,000
1996	36,400	11,900	9,600	4,300	4,600	1,200	3,700	2,200	6,000	27,500	2,900	169,200	6,600	7,700	293,800
1997	56,800	15,900	15,900	4,100	8,400	1,200	2,600	13,600	7,900	17,800	13,000	197,800	800	4,000	359,800
1998	19,400	5,400	9,600	4,300	20,000	0	4,300	5,400	2,600	30,300	2,300	207,800	4,400	3,500	319,300
1999	18,200	10,600	7,300	5,200	21,100	0	5,200	3,000	0	1,400	600	8,900	1,100	300	82,900
2000*	12,300	3,900	4,900	1,900	16,700	100	8,800	2,900	400	14,800	3,900	129,400	8,600	600	209,200
% change	-32	-63	-33	-63	-21	ERR	69	-3	ERR	957	550	1354	682	100	152
AVERAGES:															
61-65	42,840	14,800	12,200	4,460	6,820	500	2,400	5,740	420	800	500	95,240	2,840	2,540	192,100
66-70	85,280	35,360	33,960	6,540	10,340	2,060	6,340	9,800	460	1,140	1,000	39,720	4,060	2,020	238,080
71-75	90,480	27,340	36,240	10,220	12,820	1,060	4,180	10,600	700	6,500	2,580	115,040	5,500	4,740	328,000
76-80	47,620	22,580	16,660	6,620	17,900	3,200	3,840	9,840	1,060	10,860	1,200	81,020	5,700	5,360	233,460
81-85	66,320	36,900	12,220	7,320	17,900	2,460	4,360	9,780	640	8,580	2,840	99,780	4,020	8,340	281,460
86-90	36,100	13,200	7,120	2,340	6,320	740	2,660	5,280	100	2,560	940	15,200	540	1,400	94,500
91-95	38,060	11,160	10,400	4,240	8,040	820	1,660	4,600	200	4,180	1,200	30,680	480	2,220	117,940
96-00	28,620	9,540	9,460	3,960	14,160	500	4,920	5,420	3,380	18,360	4,540	142,620	4,300	3,220	253,000

* - PRELIMINARY

Table 51. ESTIMATES OF CANADA GOOSE HARVESTS IN THE MISSISSIPPI FLYWAY

YEAR	MN	WI	MI	IA	IL	IN	OH	MO	KY	AR	TN	LA	MS	AL	MF TOTAL
1962	5,200	19,100	9,700	6,600	11,500	2,000	1,100	22,700	1,100	0	1,800	0	400	1,700	82,900
1963	7,300	19,500	14,200	7,200	14,000	800	0	34,300	2,200	0	2,000	300	800	2,400	105,000
1964	7,300	42,900	11,900	4,300	27,500	2,500	2,200	33,600	1,900	0	3,100	300	100	4,300	141,900
1965	12,100	50,000	10,400	6,600	16,400	1,100	4,100	32,500	1,100	0	1,700	0	0	5,300	141,300
1966	20,000	27,900	9,500	7,200	28,000	3,100	3,500	40,300	3,700	0	2,800	800	0	5,400	152,200
1967	18,900	21,300	11,500	12,400	35,400	2,800	5,200	71,900	4,700	100	4,400	0	900	3,200	192,700
1968	10,100	25,300	19,400	10,600	21,200	3,100	6,200	47,200	4,900	0	7,200	700	0	2,200	158,100
1969	25,500	42,800	13,300	15,500	29,400	4,100	4,700	39,800	6,800	0	1,600	1,500	0	4,800	189,800
1970	22,000	28,600	25,100	12,600	37,700	1,600	9,100	33,500	11,200	0	9,500	1,600	0	400	192,900
1971	14,000	52,500	19,600	10,400	34,400	3,200	6,100	37,900	9,600	0	3,800	0	1,900	900	194,300
1972	17,600	35,800	16,400	5,000	33,800	3,000	5,200	41,000	4,400	0	1,900	0	0	1,600	165,700
1973	19,100	60,800	21,000	11,600	28,500	2,100	13,500	40,300	15,200	0	7,200	0	0	900	220,200
1974	31,500	77,000	26,500	7,700	47,100	4,100	9,200	64,400	12,600	0	7,100	0	800	1,000	289,000
1975	56,600	66,400	20,500	13,500	44,900	6,800	11,200	81,800	12,700	2,000	9,500	0	2,000	2,500	330,400
1976	56,100	45,700	27,500	9,300	53,700	3,400	8,500	59,900	15,000	8,700	29,800	0	18,000	5,000	340,600
1977	36,100	89,900	31,800	7,800	76,600	3,700	12,600	65,000	18,800	2,100	8,200	1,500	2,800	700	357,600
1978	53,600	85,700	23,300	11,900	118,700	2,300	10,700	68,300	23,400	4,100	16,500	0	3,900	3,400	425,800
1979	59,400	62,200	33,200	10,000	69,000	3,600	12,900	57,400	9,800	0	5,200	0	0	2,600	325,300
1980	61,800	57,600	32,000	11,700	57,700	9,300	11,500	44,700	17,800	0	7,400	1,700	1,300	1,800	316,300
1981	82,700	39,800	30,400	10,200	51,500	8,100	12,600	45,000	19,200	0	5,800	0	2,300	1,300	308,900
1982	76,600	45,800	52,200	10,200	27,200	5,900	12,600	42,100	6,600	0	6,800	1,000	2,000	1,100	290,100
1983	50,100	33,500	53,600	11,500	38,900	8,100	8,200	34,500	25,800	0	20,800	0	2,200	1,600	288,800
1984	79,700	40,600	56,700	13,300	31,200	5,700	16,700	41,500	11,600	400	12,200	0	500	300	310,400
1985	67,800	44,600	64,600	10,400	38,900	14,100	19,800	36,900	16,100	300	17,800	700	1,400	2,700	336,100
1986	67,200	49,600	61,100	17,200	49,400	12,000	17,200	30,000	17,900	0	11,400	0	0	4,000	337,000
1987	66,000	39,600	61,800	15,100	44,900	10,400	18,800	26,500	17,200	200	16,400	500	0	2,300	319,700
1988	81,800	67,700	70,600	12,100	91,000	16,800	27,500	31,300	20,300	100	17,900	300	1,000	2,600	441,000
1989	75,000	85,300	100,200	20,200	97,400	28,400	34,500	33,300	41,700	1,500	55,100	0	2,100	5,400	580,100
1990	88,800	125,300	71,500	26,600	88,500	14,700	20,800	33,900	11,500	1,900	23,500	2,400	900	100	510,400
1991	99,000	122,400	73,700	29,300	91,300	17,400	36,000	29,900	16,900	2,900	21,900	600	500	1,800	543,600
1992	104,400	63,900	90,000	28,700	77,300	21,500	43,900	27,100	9,000	3,500	12,200	1,400	200	1,200	484,300
1993	108,600	74,900	105,800	17,300	101,300	31,000	51,300	43,100	33,000	3,700	23,300	500	1,400	3,700	598,900
1994	145,800	76,900	150,600	26,100	79,500	31,000	47,000	39,400	15,300	9,500	17,400	2,900	1,600	1,400	644,400
1995	125,300	102,500	148,300	41,400	110,800	47,200	56,600	46,700	33,600	19,800	33,000	2,500	1,300	2,800	771,800
1996	161,900	80,400	140,200	59,500	108,300	34,400	74,100	53,200	30,700	21,500	35,000	3,600	3,800	8,200	814,800
1997	158,600	78,900	183,800	52,200	87,800	52,200	86,200	38,700	25,100	19,900	31,900	6,300	8,100	3,700	833,400
1998	159,300	45,000	134,700	33,200	72,200	44,300	81,600	24,700	52,400	19,100	31,700	5,000	24,400	11,300	738,900
1999	231,000	95,300	103,400	33,000	119,600	38,500	74,000	35,500	24,500	23,100	18,100	0	10,400	7,000	813,400
2000*	159,400	86,500	125,700	67,200	134,500	52,500	100,400	47,100	35,500	42,200	32,200	3,400	12,200	5,600	904,400
% change	-31	-9	22	104	12	36	36	33	45	83	78	ERR	17	-20	11
AVERAGES:															
62-65	7,975	32,875	11,550	6,175	17,350	1,600	1,850	30,775	1,575	0	2,150	150	325	3,425	117,775
66-70	19,300	29,180	15,760	11,660	30,340	2,940	5,740	46,540	6,260	20	5,100	920	180	3,200	177,140
71-75	27,760	58,500	20,800	9,640	37,740	3,840	9,040	53,080	10,900	400	5,900	0	940	1,380	239,920
76-80	53,400	68,220	29,560	10,140	75,140	4,460	11,240	59,060	16,960	2,980	13,420	640	5,200	2,700	353,120
81-85	71,380	40,860	51,500	11,120	37,540	8,380	13,980	40,000	15,860	140	12,680	340	1,680	1,400	306,860
86-90	75,760	73,500	73,040	18,240	74,240	16,460	23,760	31,000	21,720	740	24,860	640	800	2,880	437,640
91-95	116,620	88,120	113,680	28,560	92,040	29,620	46,960	37,240	21,560	7,880	21,560	1,580	1,000	2,180	608,600
96-00	174,040	77,220	137,560	49,020	104,480	44,380	83,260	39,840	33,640	25,160	29,780	3,660	11,780	7,160	820,980

* - PRELIMINARY

Table 52. ESTIMATES OF ACTIVE ADULT WATERFOWL HUNTERS IN THE MISSISSIPPI FLYWAY

YEAR	MN	%	WI	MI	IA	IL	IN	OH	MO	KY	AR	TN	LA	MS	AL	MF TOT
1961	74,100	17	73,400	50,900	33,500	52,400	15,100	20,800	32,400	5,200	14,800	12,600	32,300	5,200	4,100	426,800
1962	66,500	20	58,600	38,700	24,000	34,100	11,900	16,300	22,300	3,700	8,000	6,600	28,200	5,900	5,000	329,800
1963	98,100	21	76,000	53,900	29,700	40,100	12,100	19,200	27,100	4,600	14,400	12,400	53,000	10,500	9,100	460,200
1964	116,400	21	86,600	63,600	30,900	42,700	13,900	20,300	32,400	6,200	30,000	18,900	72,600	12,200	11,500	558,200
1965	110,400	20	92,400	63,000	34,000	48,100	14,100	22,200	30,900	6,100	19,100	14,400	69,700	11,100	11,200	546,700
1966	139,300	21	94,600	70,800	41,300	56,100	16,100	26,800	34,800	7,300	29,700	21,100	90,500	15,300	13,500	657,200
1967	145,200	21	94,700	79,000	44,300	64,300	18,200	26,200	46,100	7,900	33,500	21,700	92,400	16,800	14,400	704,700
1968	128,500	21	88,900	74,900	37,500	50,700	17,800	25,000	35,300	6,100	24,000	19,400	77,300	14,500	11,300	611,200
1969	130,900	19	107,100	87,300	47,500	59,000	20,800	30,600	43,500	6,600	29,600	20,200	86,200	17,300	12,400	699,000
1970	156,000	18	131,000	112,200	56,900	71,300	24,000	36,800	50,000	8,900	49,600	25,000	106,100	22,600	14,200	864,600
1971	161,000	19	135,500	94,000	58,700	66,800	26,700	37,600	49,400	9,800	47,600	29,300	97,500	23,500	10,100	847,500
1972	138,100	18	119,000	87,200	50,800	67,200	20,400	32,000	49,800	8,900	41,600	23,600	90,700	19,100	13,200	761,600
1973	110,600	16	105,800	86,900	48,700	62,700	20,800	31,500	45,700	9,000	38,100	27,200	83,100	19,400	10,500	700,000
1974	132,500	17	119,800	88,300	51,600	63,500	21,600	33,700	49,800	10,400	45,800	29,500	86,300	21,000	10,300	764,100
1975	147,200	19	129,700	88,100	49,700	53,600	20,000	34,100	52,400	11,200	51,300	23,600	93,300	26,300	11,700	792,200
1976	108,200	15	118,300	70,900	45,400	54,600	11,700	34,400	51,600	12,700	47,900	22,700	104,800	25,600	13,300	722,100
1977	135,400	18	122,300	59,400	46,200	55,100	12,300	32,000	53,100	12,400	46,800	25,600	103,700	25,500	13,400	743,200
1978	138,500	19	104,000	52,900	47,800	57,200	12,700	31,300	51,600	13,000	47,100	25,000	105,100	22,800	13,500	722,500
1979	143,100	20	89,300	53,400	44,400	57,700	13,500	32,300	45,100	13,100	43,500	24,000	107,100	22,600	10,200	699,300
1980	139,200	21	93,600	48,200	41,100	52,200	12,400	30,900	39,300	11,400	42,600	21,000	106,200	21,900	9,700	669,700
1981	126,200	20	85,000	42,100	35,900	51,100	12,500	30,400	41,200	11,700	35,900	20,700	98,600	20,700	9,500	621,500
1982	122,400	21	77,600	41,800	34,400	45,900	12,000	24,800	39,500	10,900	34,600	20,500	97,500	17,800	9,400	589,100
1983	121,700	20	77,800	42,600	34,000	45,400	11,800	23,500	37,700	10,900	32,000	20,300	106,900	19,900	9,500	594,000
1984	126,900	21	78,300	45,200	35,300	47,400	11,600	24,100	37,900	11,400	34,300	19,600	100,600	19,700	9,600	601,900
1985	116,500	21	74,600	44,600	27,900	42,600	11,000	23,500	32,500	10,300	34,400	19,200	86,700	15,200	8,900	547,900
1986	122,400	22	79,400	45,200	27,900	45,500	12,300	22,800	34,000	10,900	33,300	19,000	85,900	16,500	10,000	565,100
1987	111,000	21	75,200	46,500	25,500	43,900	11,900	21,400	31,000	10,600	30,500	19,000	81,100	13,500	9,100	530,200
1988	73,600	18	61,900	39,200	17,300	41,200	10,400	20,500	23,300	10,200	24,800	16,900	56,000	11,200	8,500	415,000
1989	81,100	18	71,300	44,200	16,600	45,900	10,700	21,500	24,500	11,400	23,300	18,500	56,500	12,200	8,800	446,500
1990	88,700	19	84,000	45,400	20,800	44,300	11,700	21,100	23,100	11,000	27,100	20,100	58,600	11,500	8,200	475,600
1991	95,200	20	79,600	45,200	21,400	43,800	11,700	21,400	23,200	11,100	30,100	18,400	57,600	10,900	7,800	477,400
1992	96,900	20	68,200	48,800	22,800	45,600	12,000	24,300	23,200	10,900	29,900	18,400	59,000	11,700	8,100	479,800
1993	99,299	20	73,249	54,042	21,092	44,220	12,919	26,059	22,453	10,737	33,643	18,671	59,642	11,527	7,754	495,307
1994	122,858	22	82,066	59,296	24,523	45,536	15,380	24,776	23,344	11,669	39,501	20,612	65,207	13,419	8,572	556,759
1995	119,900	20	87,400	65,100	30,500	47,100	14,400	24,200	27,500	13,900	44,600	24,300	78,100	16,000	10,200	603,200
1996	121,413	20	85,790	59,340	26,338	51,990	14,615	27,704	28,653	12,930	48,434	24,637	83,014	18,060	11,308	614,226
1997	131,561	19	94,431	62,073	30,737	59,900	15,995	30,481	33,965	13,660	52,515	27,697	90,532	19,323	12,359	675,229
1998	121,843	19	86,430	57,775	27,454	52,780	17,945	33,935	30,380	16,671	52,362	26,595	91,318	22,470	13,349	651,307
1999*	120,138	18	87,094	56,103	27,024	55,004	18,357	35,057	30,435	15,414	53,630	27,217	95,571	20,715	14,343	656,102
2000*	114,109	17	82,384	53,555	29,343	58,373	17,083	33,133	31,987	15,304	55,604	29,525	91,551	25,874	15,016	652,841
% change	-5	-5	-5	-5	9	6	-7	-5	5	-1	4	8	-4	25	5	-0
AVERAGES:																
61-65	93,100		77,400	54,020	30,420	43,480	13,420	19,760	29,020	5,160	17,260	12,980	51,160	8,980	8,180	464,340
66-70	139,980		103,260	84,840	45,500	60,280	19,380	29,080	41,940	7,360	33,280	21,480	90,500	17,300	13,160	707,340
71-75	137,880		121,960	88,900	51,900	62,760	21,900	33,780	49,420	9,860	44,880	26,640	90,180	21,860	11,160	773,080
76-80	132,880		105,500	56,960	44,980	55,360	12,520	32,180	48,140	12,520	45,580	23,660	105,380	23,680	12,020	711,360
81-85	122,740		78,660	43,260	33,500	46,480	11,780	25,260	37,760	11,040	34,240	20,060	98,060	18,660	9,380	590,880
86-90	95,360		74,360	44,100	21,620	44,160	11,400	21,460	27,180	10,820	27,800	18,700	67,620	12,980	8,920	486,480
91-95	106,831		78,103	54,488	24,063	45,251	13,280	24,147	23,939	11,661	35,549	20,077	63,910	12,709	8,485	522,493
96-00	121,813		87,226	57,769	28,179	55,609	16,799	32,062	31,084	14,796	52,509	27,134	90,397	21,288	13,275	649,941

* - PRELIMINARY

Table 53. AVG. SEASONAL BAG PER ACTIVE ADULT WATERFOWL HUNTER IN THE MISSISSIPPI FLYWAY

YEAR	MN	WI	MI	IA	IL	IN	OH	MO	KY	AR	TN	LA	MS	AL	MF AVG
1961	4.88	3.97	2.36	3.88	3.75	1.50	2.33	3.78	3.19	4.29	3.68	6.49	3.77	3.51	3.90
1962	4.20	3.24	2.49	2.09	2.32	1.07	2.36	1.20	1.55	6.35	1.83	6.53	5.34	4.27	3.27
1963	5.60	3.61	2.35	4.68	4.34	1.38	3.39	2.30	2.66	8.68	5.76	12.05	7.87	6.12	5.20
1964	7.34	4.52	3.00	6.21	4.20	2.62	3.14	3.30	4.10	9.19	5.56	12.06	5.35	3.83	6.10
1965	6.89	4.97	3.36	5.95	4.22	2.38	4.23	3.96	3.44	10.58	4.90	13.75	6.11	4.94	6.33
1966	6.63	5.52	4.13	7.37	6.57	3.07	3.96	4.39	3.36	11.23	6.75	14.60	6.61	5.49	7.18
1967	6.59	5.12	4.38	6.63	6.07	2.64	5.01	4.74	4.18	9.80	5.64	11.34	6.68	4.14	6.49
1968	4.40	3.13	2.50	2.61	2.93	2.23	3.29	2.89	2.10	5.89	3.45	6.35	4.86	3.17	3.79
1969	7.97	4.87	3.68	5.09	4.39	3.05	3.89	4.44	2.46	8.02	2.83	12.41	8.70	5.21	6.23
1970	5.95	4.19	3.19	5.97	6.09	3.66	4.02	5.70	5.17	11.60	8.16	18.25	10.40	5.56	7.18
1971	6.62	4.40	3.17	6.32	4.54	4.28	2.99	5.25	4.05	11.01	7.96	11.05	6.94	5.19	6.15
1972	6.74	4.37	4.41	6.35	5.35	4.17	3.83	4.02	5.13	8.17	6.64	12.23	7.85	4.60	6.28
1973	5.31	4.58	3.85	3.94	5.13	3.60	3.89	3.95	3.36	11.22	8.01	14.35	7.80	6.71	6.27
1974	5.76	5.18	4.53	4.29	4.37	4.16	3.33	4.92	4.28	11.60	8.52	12.85	10.24	5.31	6.46
1975	6.62	5.24	3.91	5.93	7.56	5.53	4.08	6.49	6.65	12.54	9.61	17.78	11.92	7.92	7.95
1976	5.38	5.14	6.14	4.95	5.96	7.10	4.34	4.16	4.57	13.01	8.54	17.38	13.82	9.36	8.03
1977	4.85	3.69	3.91	5.32	6.50	6.74	3.40	5.15	5.42	15.40	9.81	17.81	11.45	9.98	7.70
1978	7.59	4.72	5.08	6.70	7.33	6.35	3.55	4.92	4.68	12.02	9.93	18.03	9.01	8.24	8.42
1979	7.73	5.61	5.52	9.49	7.15	6.92	3.66	5.87	5.81	11.78	9.87	16.03	11.81	10.11	8.76
1980	6.06	5.35	5.62	6.58	6.44	6.02	3.82	5.47	4.17	14.71	10.01	16.47	13.00	10.92	8.45
1981	6.42	4.66	5.41	7.89	7.49	5.12	4.02	6.40	5.64	13.63	9.70	15.70	13.92	10.66	8.43
1982	6.44	4.88	6.09	9.60	6.66	5.35	4.32	5.89	4.03	10.23	9.11	15.33	8.80	7.64	8.10
1983	7.22	5.49	6.24	8.49	8.00	8.00	5.53	6.61	4.75	11.49	11.71	18.68	11.59	10.45	9.57
1984	8.07	5.92	7.01	7.54	6.76	6.96	4.83	6.84	5.05	13.04	8.06	18.04	9.90	7.77	9.29
1985	5.64	4.30	5.12	6.83	6.65	6.99	4.08	5.67	5.01	13.64	6.74	13.68	8.62	7.71	7.44
1986	6.30	4.03	4.78	7.29	6.23	4.70	3.88	5.28	4.16	10.85	7.22	13.98	8.21	6.88	7.20
1987	4.91	4.25	4.45	6.04	4.80	4.50	3.21	5.27	4.65	13.60	5.88	14.35	9.83	8.38	6.93
1988	3.14	2.73	3.43	4.33	3.18	3.66	2.63	3.12	2.69	9.35	5.08	8.29	6.83	6.56	4.46
1989	3.99	2.97	4.18	4.68	3.82	4.27	3.55	4.57	3.96	10.13	7.24	12.61	7.62	10.40	5.64
1990	4.06	2.73	3.97	4.90	4.39	3.78	3.41	4.70	4.11	11.00	7.52	10.80	6.20	6.21	5.34
1991	5.14	3.21	4.30	6.78	5.33	4.95	3.21	5.47	3.69	10.41	7.48	9.60	7.46	6.25	5.75
1992	5.33	3.64	3.91	5.12	4.96	4.01	3.88	4.72	3.40	10.05	7.44	12.62	8.74	6.74	6.10
1993	4.95	3.26	4.03	4.69	4.31	4.70	3.77	4.89	4.55	11.17	9.84	11.38	10.06	7.29	5.99
1994	5.04	3.58	4.38	5.97	4.99	4.17	3.58	6.40	5.49	15.29	9.13	14.90	11.75	6.39	6.98
1995	6.63	4.28	5.69	8.19	6.31	6.30	4.71	8.81	8.09	19.51	14.89	27.03	20.05	10.61	10.64
1996	6.85	4.63	5.31	7.91	6.90	5.72	4.72	8.89	10.38	20.80	16.46	24.38	17.42	12.50	10.76
1997	6.97	4.28	6.20	8.29	6.96	5.77	4.92	10.42	8.86	23.45	16.45	25.00	18.75	12.17	11.19
1998	6.57	4.03	5.94	9.93	9.64	5.45	4.92	13.87	11.59	21.86	18.15	25.84	16.65	14.04	11.82
1999	6.78	4.55	5.68	7.17	7.78	7.44	5.32	11.88	11.21	27.99	17.84	27.07	15.73	12.47	12.33
2000*	6.35	4.30	5.57	8.18	8.19	5.73	4.89	13.08	9.98	21.55	18.60	26.19	24.08	16.59	12.17
% change	-6	-5	-2	14	5	-23	-8	10	-11	-23	4	-3	53	33	-1
AVERAGES:															
61-65	5.78	4.06	2.71	4.56	3.77	1.79	3.09	2.91	2.99	7.82	4.35	10.18	5.69	4.53	4.96
66-70	6.31	4.57	3.58	5.53	5.21	2.93	4.03	4.43	3.45	9.31	5.37	12.59	7.45	4.71	6.17
71-75	6.21	4.75	3.97	5.37	5.39	4.35	3.62	4.93	4.69	10.91	8.15	13.65	8.95	5.95	6.62
76-80	6.32	4.90	5.25	6.61	6.68	6.63	3.75	5.11	4.93	13.38	9.63	17.14	11.82	9.72	8.27
81-85	6.76	5.05	5.97	8.07	7.11	6.48	4.56	6.28	4.89	12.41	9.06	16.28	10.56	8.85	8.57
86-90	4.48	3.34	4.16	5.45	4.48	4.18	3.34	4.59	3.91	10.99	6.59	12.01	7.74	7.69	5.91
91-95	5.42	3.59	4.46	6.15	5.18	4.83	3.83	6.06	5.04	13.29	9.76	15.11	11.61	7.46	7.09
96-00	6.70	4.36	5.74	8.30	7.89	6.02	4.95	11.63	10.40	23.13	17.50	25.70	18.53	13.55	11.65

* - PRELIMINARY

Table 54. Spring turkey hunting summary, 1978-01.

Year	Area of open hunt zone (mi^2)	Number of permit applicants	Number of permits available	Odds of drawing a permit[a]	Number of permits given	Number of persons hunting[b]	Registered turkey harvest	% success[c]
1978	389	10,740	420	25.6:1	411	398	94	23.6
1979	673	11,116	840	13.2:1	827	794	116	14.6
1980	858	9,613	1,200	8.0:1	1,191	1,072	98	9.1
1981	1,242	8,398	1,500	5.6:1	1,437	1,292	113	8.7
1982	1,490	7,223	2,000	3.6:1	1,992	1,625	106	6.5
1983	1,807	8,153	2,100	3.9:1	2,079	1,663	116	7.0
1984	2,061	7,123	3,000	2.4:1	2,837	2,270	178	7.8
1985	2,118	5,662	2,750	2.1:1	2,449	1,959	323	16.5
1986	1,897	5,715	2,500	2.3:1	2,251	1,801	333	18.5
1987	1,747	6,361	2,700	2.4:1	2,520	2,016	520	25.8
1988	1,781	8,402	3,000	2.8:1	2,994	2,395	674	28.1
1989	2,341	13,007	4,000	3.3:1	3,821	3,057	930	30.4
1990	3,819	14,326	6,600	2.2:1	6,126	5,513	1,709	31.0
1991	4,300	15,918	9,170	**	8,607	7,747	1,724	22.0
1992[d]	4,381	15,896	9,310	**	9,051	8,146	1,691	21.0
1993	4,921	17,224	9,625	**	9,265	8,339	2,082	25.0
1994	5,881	19,424	9,940	**	9,479	8,531	1,975	23.0
1995	7,740	20,849	9,975	**	9,550	8,600	2,339	27.0
1996	17,004‡	23,757	12,131	**	10,983	9,885	2,841	28.7
1997	20,118	25,958	12,530	**	11,610	10,449	3,302	31.6
1998	21,013	29,727	14,035	**	13,229	11,906	4,361	36.6
1999	25,119	35,957	18,360	**	16,387	14,748	5,132	34.8
2000	27,824	42,022	20,160	**	18,661	17,728	6,154	34.7
2001	29,876	41,048	22,936	**	21,404	20,334	6,383	31.4

[a] Calculated with total permits available to be given, and not adjusting for undersubscribed zones and time periods.
[b] For 1978-82, based on a post-hunt mail survey. Number actually hunting in 1983-89 was estimated at 80% (from last year survey results were tabulated). Beginning in 1991, number actually hunting was estimated at 90% (from preliminary results of 1991 survey), this was increased to 95% for 2000.
[c] Registered turkey harvest divided by number actually hunting, expressed as %.
[d] Legislation allows NON-RESIDENT hunters.
** Computerized preference drawing began Spring 1990.
‡ Open hunt zone area now calculated using deer permit zones.

Table 55. Spring Wild Turkey harvest in Minnesota, by permit area, 2001.

		Harvest					
Permit Area	Number of Permits Issued	Number of Adults	Number of Juveniles	Percent (%) Juveniles	Number of Unreported Age	Total	Hunter Success (%)
223	241	61	25	29.1		86	35.7
225	539	81	32	28.3		113	20.9
227	259	67	15	18.3		82	31.7
228	242	62	14	18.4		76	31.4
235	117	24	8	25.0		32	27.4
236	436	168	32	16.0		200	45.9
244/410	82	25	6	19.4		31	37.8
337	228	71	13	15.5	7	91	39.9
338	481	101	37	26.8	6	144	29.9
339	442	79	41	34.2	23	143	32.4
341	1,315	264	118	30.9	28	410	31.2
342	1,303	285	104	26.7	2	391	30.0
343	1,080	255	95	22.0	58	408	37.8
344	774	144	81	36.0	0	225	29.1
345	1,306	276	78	22.0	1	355	27.2
346	2,020	369	161	30.4	0	530	26.2
347	1,313	248	70	22.0	0	318	28.1
348	1,326	231	91	28.3	0	322	24.3
349	2,599	514	230	30.9	0	744	28.6
411	76	21	7	25.0	0	28	36.8
412	114	46	6	11.5	0	52	45.6
415	157	49	22	30.9	0	71	45.2
416	45	13	2	13.3	0	15	33.3
417	117	40	9	18.4	0	49	41.9
418	191	61	18	22.8	0	79	41.4
419	111	18	6	25.0	0	24	21.6
422	72	10	6	37.5	0	16	22.2
425/435	376	88	24	21.4	0	112	29.8
426	38	15	2	11.8	0	17	44.7
427	38	9	0	0	0	9	23.7
428	40	14	3	17.6	0	17	42.5
429	74	13	4	23.5	0	17	22.9
431	33	5	3	37.5	0	8	24.2
433/446/447	35	13	1	0.7	0	14	40.0
440	387	77	27	25.9	0	104	26.9

Table 55. (Continued)

		Harvest					
Permit Area	Number of Permits Issued	Number of Adults	Number of Juveniles	Percent (%) Juveniles	Number of Unreported Age	Total	Hunter Success (%)
442	1,142	267	84	23.9	0	351	30.7
443	458	112	42	27.3	0	154	33.6
448/449/451	56	36	2	0.5	0	38	67.9
450	36	9	0	0	0	9	25.0
454/455/456/458	41	8	0	0	0	8	19.5
457	38	7	2	22.2	0	9	23.7
459	84	15	1	0.6	0	16	19.0
461	481	77	61	44.2	2	140	29.1
462	431	99	37	27.2	2	138	32.0
463	145	11	10	47.6	0	21	14.5
464	147	17	7	29.2	0	24	16.3
465	147	22	14	38.9	0	36	24.5
466/467	373	84	22	20.8	0	106	28.4
Total	21,404	4,581	1,673	26.8	129	6,383	29.8

* (not adjusted for non-participants)

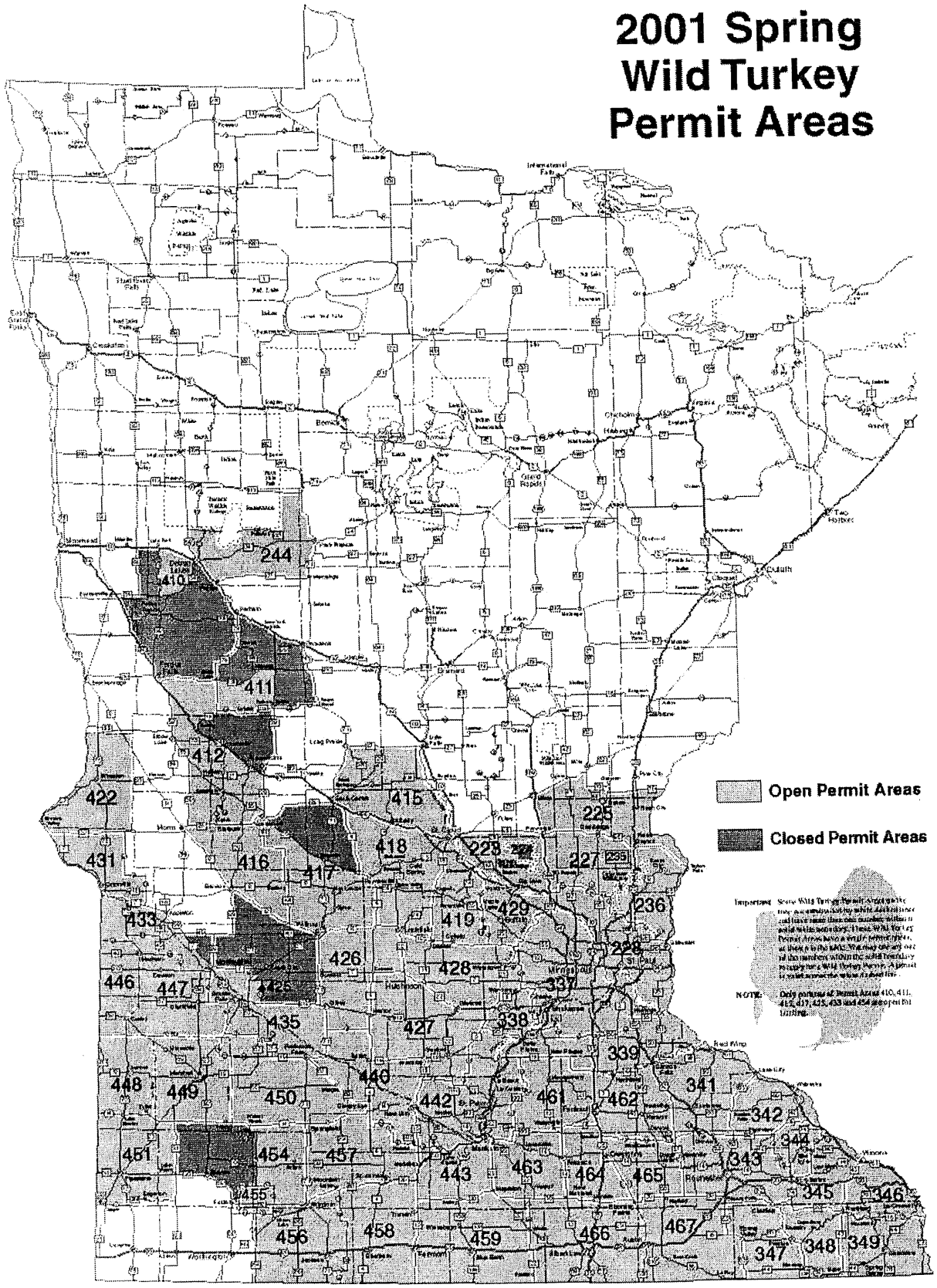

Figure 45.Spring wild turkey hunt permit areas, 2001.

Table 56. Fall turkey hunting summary, 1990-2000.

Year	Area of open hunt zone (mi^2)	Number of permit applicants	Number of permits available	Number of permits issued	Number of persons hunting [a]	Registered turkey harvest	% Success [b]
1990		4,522	1,000	951	856	326	38
1991		2,990	2,200	2,020	1,818	552	30
1992		2,750	2,200	2,028	1,825	588	32
1993		3,162	2,400	2,094	1,885	605	32
1994		3,124	2,500	2,106	1,895	601	32
1995		3,590	2,500	2,125	1,913	648	34
1996	7241 ‡	4,366	2,500	2,289	2,060	685	33
1997	7,241	4,574	2,580	2,378	2,140	698	33
1998	7,241	4,526	2,710	2,483	2,235	828	37
1999	9,179	5,354	2,890	2,644	2,380	865	36
2000	9,179	5,263	3,090	2,484	2,236	735	33

[a] Number hunting estimated at 90% of permits issued based on survey results.

[b] Registered turkey harvest divided by number actually hunting, expressed as %.

‡ Area of open hunt zone calculated from Deer Permit Zone information of area/$miles^2$.

Table 57. Fall wild turkey harvest by permit area, 2000.

Permit Area	Female		Male		Total
	Juvenile	Adult	Juvenile	Adult	
337	7	9	1	11	28
339	8	9	3	12	29
341	68	50	17	31	166
343	18	28	7	26	79
344	7	21	4	13	45
345	24	29	28	29	110
346	17	33	7	19	76
349	38	54	27	21	140
461	9	8	3	2	22
464	4	8	2	2	16
466	6	7	2	9	24
Total	206	253	101	175	735

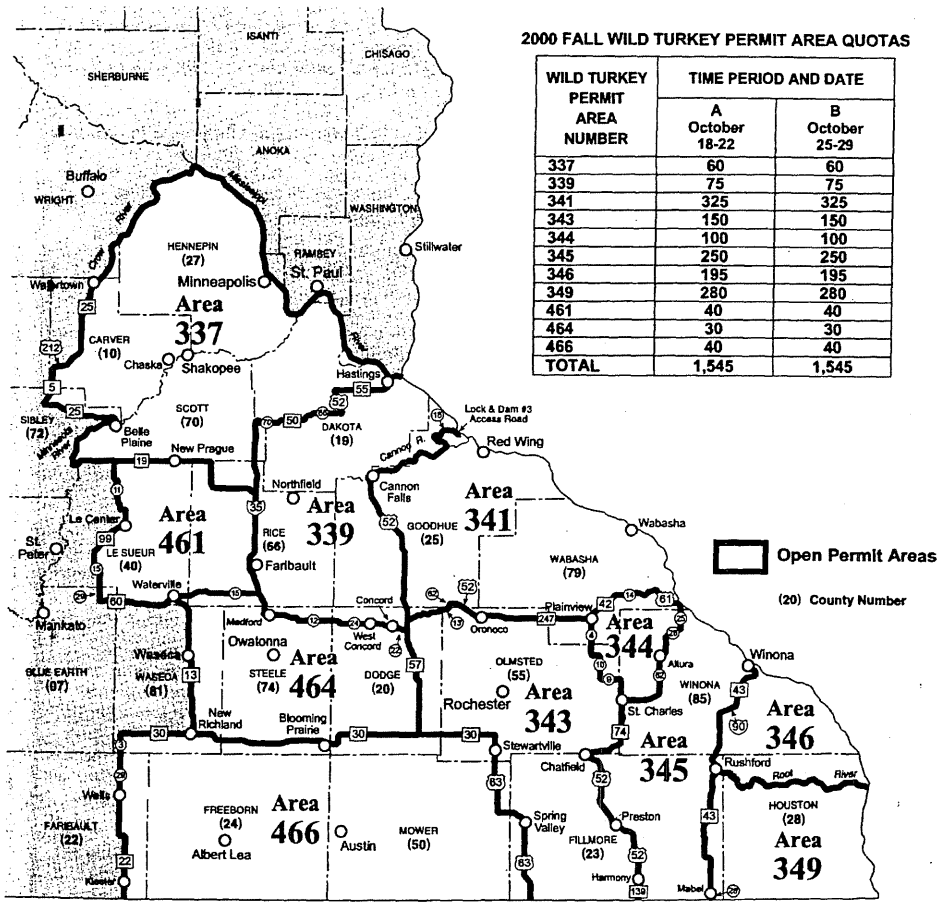

Figure 46. Fall wild turkey hunt zones, 2000

Table 58. Deer hunting license sales, 1957-2000[a].

Year	Firearms License Sales			Archery License Sales			Grand Total
	Resident	Non-resident	Total	Resident	Non-resident	Total	
1957	180,028	488	180,516	10,033	119	10,152	190,668
1958	203,430	552	203,982	10,968	118	11,086	215,068
1959	200,102	530	200,632	11,768	101	11,869	212,501
1960	233,593	621	234,214	11,834	122	11,956	246,170
1961	250,031	632	250,663	13,229	141	13,370	264,033
1962	244,166	676	244,842	11,776	150	11,926	256,768
1963	257,333	771	258,104	11,724	165	11,889	269,993
1964	278,032	1,021	279,053	13,472	193	13,665	292,718
1965	289,918	1,128	291,046	15,628	265	15,893	306,939
1966	284,195	1,287	285,482	17,203	277	17,480	302,962
1967	305,717	1,311	307,028	18,405	289	18,694	325,722
1968	302,216	1,442	303,658	20,188	292	20,480	324,138
1969	253,891	1,168	255,059	15,658	256	15,914	270,973
1970	188,166	334	188,500	12,277	220	12,497	200,997
1971	no firearms season			17,360	111	17,471	17,471
1972	257,998	959	258,957	21,985	326	22,311	281,268
1973	294,349	1,342	295,691	29,169	545	29,714	325,405
1974	296,248	1,747	297,995	30,701	644	31,345	329,340
1975	327,596	1,921	329,517	31,836	804	32,640	362,157
1976	263,868	1,029	264,897	21,773	263	22,036	286,933
1977	287,271	1,430	288,701	29,404	402	29,806	318,507
1978	307,910	1,776	309,686	32,546	476	33,022	342,708
1979	312,754	1,910	314,664	35,657	447	36,104	350,768
1980	344,516	2,378	346,894	41,328	634	41,962	388,856
1981	369,425	2,973	372,398	50,063	906	50,969	423,367
1982	369,018	3,038	372,056	54,084	848	54,932	426,988
1983	391,099	3,611	394,710	55,822	478	56,300	451,010
1984	396,074	4,307	400,381	61,576	583	62,159	462,540
1985	416,474	4,983	421,457	66,687	589	67,276	488,733
1986	413,542	4,476	418,018	68,689	547	69,236	487,254
1987	414,426	4,931	419,357	70,195	604	70,799	490,156
1988[b]	06,733	5,616	412,349	67,182	717	67,899	480,248
1989	405,469	6,141	411,610	66,992	714	67,706	479,316
1990	413,282	6,461	419,743	67,034	742	67,783	427,526
1991	424,576	6,854	431,430	71,168	800	71,968	503,398
1992	448,716	8,033	456,749	71,946	914	72,860	529,609
1993	443,931	8,521	452,452	70,053	1,142	71,195	523,647
1994	452,344	9,227	461,571	71,409	1,156	72,565	534,136
1995	451,164	9,401	460,565	72,477	1,180	72,477	533,042
1996	431,163	8,596	439,759	66,732	1,098	67,830	507,589
1997	369,190	7,830	377,020	63,499	980	64,479	441,499
1998	378,734	8,852	387,586	63,908	1,029	64,937	452,523
1999	399,008	9,894	408,902	66,733	1,084	67,817	476,719
2000	449,112	10,767	459,879	68,947	1,271	70,218	530,097

[a] Duplicate licenses not included. Leech Lake licenses are included during years they were issued.
[b] Bonus licenses not included beginning 1988.

Table 59. Registered deer harvest and hunter success rates, 1974-2000.

	Registered Harvest				Percent Success	
	Regular firearms	Archery	Special Muzzleloader season[a]	Total	Regular firearms and special muzzleloader seasons	Archery
1974	64,997	2,176	-	67,173	21.8	6.9
1975	63,604	2,265	-	65,869	19.3	6.9
1976	28,613	1,167	-	29,780	10.8	5.3
1977	45,918	2,609	32	48,559	15.9	8.8
1978	47,372	2,608	346	50,326	15.4	7.9
1979	44,340	2,577	318	47,235	14.2	7.1
1980	68,539	3,641	294	72,474	19.8	8.7
1981	93,027	5,535	385	98,947	25.1	10.9
1982	93,045	5,566	441	99,052	25.1	10.1
1983	132,457	5,977	652	139,086	33.6	10.6
1984	132,042	6,390	532	138,941	33.0	10.3
1985	138,065	7,575	563	146,203	33.4	11.3
1986	129,770	7,610	593	137,923	31.2	11.1
1987	135,003	7,535	535	143,073	32.4	10.9
1988	138,946	8,262	686	147,894	33.6	12.0
1989	129,551	9,307	622	139,480	31.4	13.5
1990	166,589	11,106	730	178,425	39.4	16.1
1991	206,275	12,964	961	220,200	46.9	17.5
1992	229,236	13,004	828	243,068	46.1	14.9
1993	188,109	13,722	1,097	202,928	40.0	16.1
1994	178,283	13,818	1,725	193,826	37.1	16.1
1995	198,193	14,521	2,452	215,166	40.1	16.8
1996	139,348	14,338	3,367	157,053	29.8	17.1
1997	126,905	13,258	3,164	143,327	27.8	16.2
1998	143,396	12,306	3,152	158,854	31.4	15.2
1999	164,265	13,376	2,928	180,569	34.8	15.8
2000	191,453	15,776	4,548	211,777	38.6	17.4

[a] No special muzzleloader seasons were held before 1977.

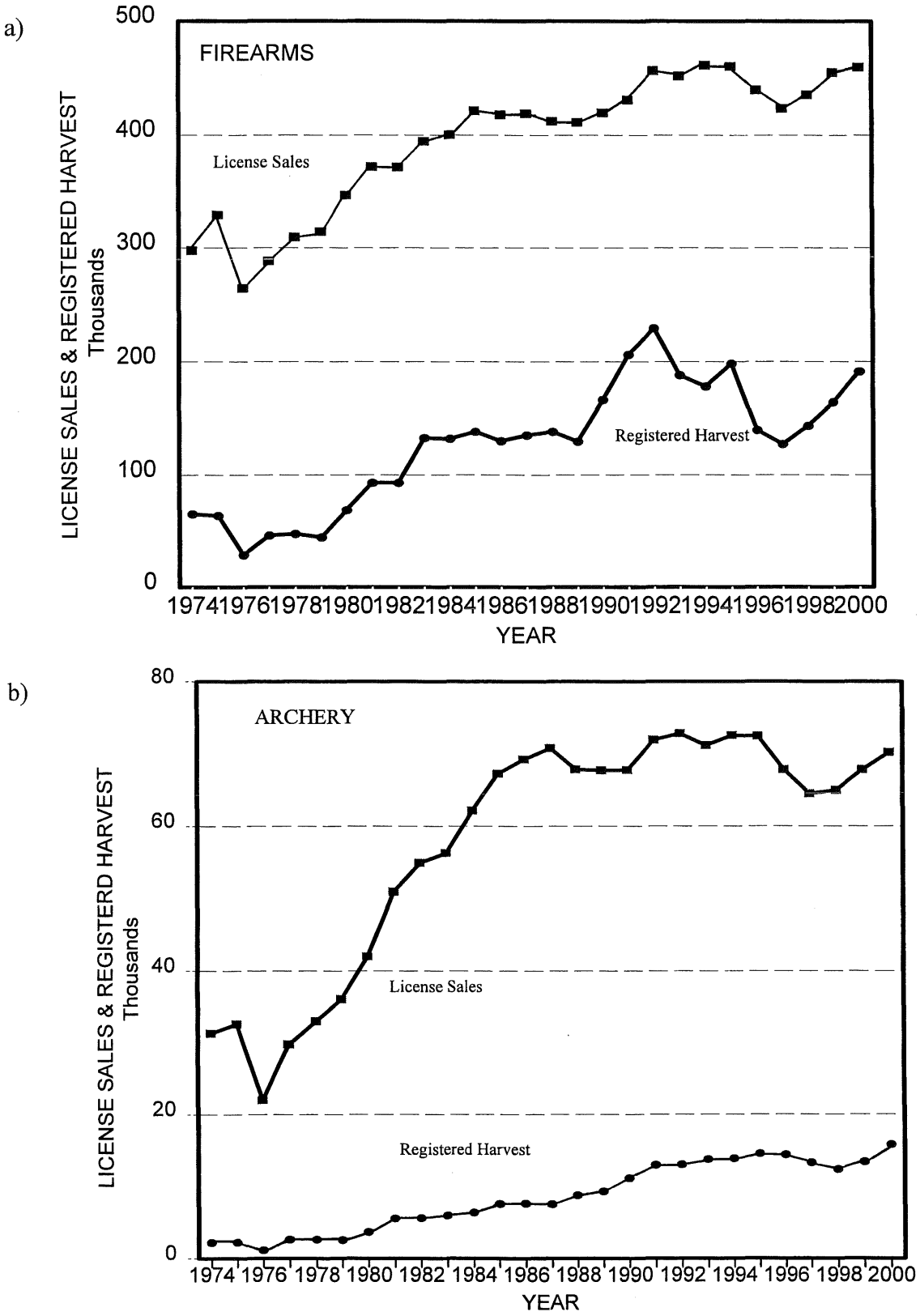

Figure 47. Numbers of Minnesota deer hunting licenses sold and registered harvest by a) firearm and b) archery hunters, 1974 - 2000.

Table 60. White-tailed deer harvest by Sub-DMU and permit area, 2000[a].

Sub-DMU	Permit Area	Antlerless Registered	Bucks Registered	Total Registered Harvest
Red River West	401A(B)	79 (82)	121 (147)	200 (229)
	402A(B)	220 (168)	211 (153)	431 (321)
	Total A(B)	299 (250)	332 (300)	631 (550)
Red River East	403 A(B)	120 (177)	145 (216)	265 (393)
	404 A(B)	248 (292)	316 (275)	564 (567)
	405 A(B)	277 (221)	271 (227)	548 (448)
	406 A(B)	280 (270)	270 (199)	550 (469)
	407 A(B)	250 (176)	360 (199)	610 (375)
	408 A(B)	201 (137)	265 (163)	466 (300)
	Total A(B)	1376 (1273)	1627 (1279)	3003 (2552)
Aggasiz	201	5	82	87
	202	174	220	394
	203	2	61	63
	204	569	703	1272
	205	780	893	1673
	206	391	436	827
	207	244	337	581
	208	141	288	429
	209	419	435	854
	210	666	613	1279
	Total	3391	4068	7459
Rainy River West	211	434	1289	1723
	213	0	0	0
	214	8	38	46
	Total	442	1327	1769
Rainy River Central	104	586	1224	1810
	110	446	480	926
	Total	1032	1704	2736
Rainy River East	107	886	1938	2824
Superior Wilderness	115	1121	2022	3143
	116	0	150	150
	Total	1121	2172	3293
Superior Central	122	130	407	537
Superior East	126	48	383	431
	127	1	80	81
	Total	49	463	512
Itasca North West	167	547	1020	1567
	168	994	1620	2614
	283	182	241	423
	Total	1723	2881	4604

Table 60 (con't.)

Sub-DMU	Permit Area	Antlerless Registered	Bucks Registered	Total Registered Harvest
Itasca North East	175	902	2095	2997
	178	990	2028	3018
	Total	1892	4123	6015
Itasca South East	180	284	1211	1495
	181	870	1877	2747
	183	842	1992	2834
	199	31	136	167
	Total	2027	5216	7243
Itasca South West	170	1739	3015	4754
	172	1882	2241	4123
	174	949	1407	2356
	Total	4570	6663	11,233
Leech Lake I.R.	197	210	1115	1325
Bemidji	284	2592	3505	6097
	285	348	404	752
	287	187	189	376
	Total	3127	4098	7225
Mille Lacs West	244	1666	2005	3671
	245	2206	2381	4587
	251	190	133	323
	Total	4062	4519	8581
Mille Lacs Central	243	1383	1146	2529
	246	2359	2191	4550
	247	1355	1961	3316
	248	456	416	872
	249	1172	1544	2716
	Total	6725	7258	13,983
Mille Lacs East	152	73	185	258
	154	2002	2227	4229
	156	1607	1998	3605
	157	3291	3164	6455
	159	2416	2285	4701
	Total	9389	9859	19,248
White Earth I.R.	297	69	167	236
	298	146	637	783
	Total	215	804	1019

Table 60 (con't.)

Sub-DMU	Permit Area	Antlerless Registered	Bucks Registered	Total Registered Harvest
Big Woods North	409 A(B)	1543 (970)	970 (351)	2513 (1321)
	410 A(B)	1611 (586)	1236 (444)	2847 (1030)
	411 A(B)	1558 (685)	1240 (420)	2798 (1105)
	412 A(B)	1069 (554)	997 (371)	2066 (925)
	413 A(B)	878 (448)	764 (318)	1642 (766)
	414 A(B)	1079 (518)	978 (359)	2057 (877)
	415 A(B)	640 (439)	605 (326)	1245 (765)
	416 A(B)	385 (358)	369 (172)	754 (530)
	417 A(B)	842 (482)	789 (355)	1631 (837)
	418 A(B)	631 (286)	541 (280)	1172 (566)
	419 A(B)	254 (197)	251 (160)	505 (357)
	429 A(B)	129 (73)	156 (88)	285 (161)
	Total A(B)	10,619 (5596)	8896 (3644)	19,515 (9240)
Big Woods Central	221	1206	1117	2323
	222	981	954	1935
	223	753	538	1291
	224	110	126	236
	225	1695	1499	3194
	Total	4745	4234	8979
Big Woods Metro North	227	850	896	1746
	228	270	265	535
	235	38	85	123
	236	707	876	1583
	Total	1865	2122	3987
Big Woods Metro South	337 A(B)	190 (123)	281 (55)	471 (178)
	338 A(B)	6 (246)	183 (82)	189 (328)
	339 A(B)	8 (239)	199 (65)	207 (304)
	Total A(B)	204 (608)	663 (202)	867 (810)
Big Woods Southeast	341 A(B)	2 (1288)	675 (311)	677 (1599)
	342 A(B)	2 (994)	498 (268)	500 (1262)
	343 A(B)	8 (1009)	652 (319)	660 (1328)
	344 A(B)	0 (550)	433 (151)	433 (701)
	345 A(B)	2 (875)	491 (238)	493 (1113)
	346 A(B)	15 (1322)	659 (347)	674 (1669)
	347 A(B)	4 (889)	498 (213)	502 (1102)
	348 A(B)	12 (1382)	652 (289)	664 (1671)
	349 A(B)	6 (1854)	1046 (422)	1052 (2276)
	Total A(B)	51 (10163)	5604 (2558)	5655 (12,721)

Table 60 (con't.)

Sub-DMU	Permit Area	Antlerless Registered	Bucks Registered	Total Registered Harvest
Prairie North	420 A(B)	198 (151)	193 (152)	391 (303)
	421 A(B)	176 (106)	187 (103)	363 (209)
	422 A(B)	227 (90)	208 (89)	435 (179)
	423 A(B)	167 (98)	203 (85)	370 (183)
	424 A(B)	203 (205)	308 (173)	511 (378)
	425 A(B)	57 (42)	98 (65)	155 (107)
	426 A(B)	97 (81)	167 (107)	264 (188)
	427 A(B)	80 (39)	159 (92)	239 (131)
	428 A(B)	123 (115)	216 (95)	339 (210)
	Total A(B)	1328 (927)	1739 (961)	3067 (1888)
Prairie River	431 A(B)	136 (135)	152 (85)	288 (220)
	433 A(B)	188 (172)	350 (133)	538 (305)
	435 A(B)	248 (154)	333 (137)	581 (291)
	440 A(B)	288 (135)	285 (81)	573 (216)
	442 A(B)	197 (161)	414 (170)	611 (331)
	443 A(B)	185 (127)	235 (91)	420 (218)
	Total A(B)	1242 (884)	1769 (697)	3011 (1581)
Prairie Southwest	446 A(B)	125 (97)	174 (89)	299 (186)
	447 A(B)	84 (50)	229 (90)	313 (140)
	448 A(B)	16 (10)	181 (115)	197 (125)
	449 A(B)	11 (5)	310 (101)	321 (106)
	450 A(B)	103 (69)	148 (77)	251 (146)
	451 A(B)	80 (90)	194 (167)	274 (257)
	452 A(B)	104 (131)	154 (128)	258 (259)
	453 A(B)	103 (94)	232 (136)	335 (230)
	454 A(B)	175 (143)	394 (200)	569 (343)
	455 A(B)	21 (29)	39 (35)	60 (64)
	456 A(B)	132 (113)	239 (173)	371 (286)
	457 A(B)	108 (119)	189 (88)	297 (207)
	458 A(B)	134 (134)	227 (111)	361 (245)
	459 A(B)	247 (225)	383 (164)	630 (389)
	Total A(B)	1443 (1309)	3093 (1674)	4536 (2983)
Prairie Southeast	461 A(B)	266 (235)	256 (104)	522 (339)
	462 A(B)	408 (244)	343 (139)	751 (383)
	463 A(B)	153 (83)	180 (53)	333 (136)
	464 A(B)	102 (84)	152 (80)	254 (164)
	465 A(B)	66 (103)	119 (84)	185 (187)
	466 A(B)	263 (238)	416 (222)	679 (460)
	467 A(B)	146 (211)	287 (204)	433 (415)
	Total A(B)	1404 (1198)	1753 (886)	3157 (2084)
Special Hunt Totals	--	717	212	929
GRAND TOTALS		88,492	102,860	191,352

Table 61. Archery deer harvest by Sub-DMU and permit areas, 1992-2000.

Sub-DMU	Permit Area	1992	1993	1994*	1995*	1996*	1997*	1998*	1999*	2000*
Red River West	401	95	79	97	159	131	103	63	30	54
	402	105	131	120	94	83	74	71	37	88
Red River East	403	37	55	79	121	49	46	43	17	64
	404	49	78	48	91	59	42	56	31	45
	405	38	27	40	20	18	28	32	5	33
	406	24	37	34	14	29	29	40	15	50
	407	140	145	114	98	53	82	27	8	44
	408	20	62	37	35	13	22	44	1	20
Agassiz	201	15	17	11	9	6	2	0	2	3
	202	16	7	16	21	17	6	2	12	14
	203	9	3	2	2	2	1	0	1	0
	204	42	29	62	66	49	29	16	31	65
	205	77	113	151	183	79	58	56	52	101
	206	56	32	62	84	73	42	14	25	50
	207	18	11	14	23	13	16	6	8	20
	208	24	22	33	32	15	6	2	5	10
	209	44	57	48	44	37	44	49	32	36
	210	12	37	33	29	17	31	15	18	33
Rainy River West	211	43	67	96	116	70	18	4	4	77
	213	1	0	0	1	1	1	0	0	0
	214	1	9	11	2	9	6	2	2	7
Rainy River Central	104	5	6	9	10	1	0	2	19	24
	110	10	19	11	17	4	1	2	10	12
Rainy River East	107	13	9	18	20	4	2	2	34	21
Superior Wilderness	115	1	1	0	0	0	0	1	15	12
	116	2	1	1	3	0	0	1	0	0
Superior Central	122	8	9	10	12	4	1	1	1	14
Superior East	126	14	16	9	20	7	3	2	3	14
	127	1	2		1	0	0	1	4	0
Itasca North West	167	9	12	16	13	5	2	3	20	23
	168	20	31	24	32	2	5	4	71	57
	283								7	9
Itasca North East	175	19	28	36	50	9	8	10	58	25
	178	13	10	15	12	5	2	5	70	34
Itasca South West	170	34	50	60	60	15	29	26	139	149
	172	68	55	36	47	14	14	28	69	90
	174	35	24	31	24	8	8	12	49	63
Itasca South East	180	65	46	81	86	3	36	45	39	93
	181	12	24	29	32	12	4	10	119	112
	183	22	28	45	42	13	17	25	86	94
	199	5	5	3	2	3	2	2	6	2

Table 61 (cont.)										
Sub-DMU	Permit Area	1992	1993	1994*	1995*	1996*	1997*	1998*	1999*	2000*
Leech Lake I.R.	197	8	7	15	13	9	2	11	12	39
Bemidji	284	129	61	143	113	99	46	72	300	377
	285	19	18	18	30	15	8	7	6	16
	287	0	7	3	10	1	0	0	3	0
Mille Lacs West	244	123	102	68	54	15	56	85	54	151
	245	76	56	67	64	10	43	37	114	164
	251	2	11	2	7	1	2	4	1	3
Mille Lacs Central	243								93	86
	246	244	120	159	129	80	142	160	85	160
	247	165	193	208	186	253	222	300	252	340
	248	92	55	51	49	56	41	49	69	155
	249	135	54	74	74	85	71	97	128	82
Mille Lacs East	152	8	3	5	3	6	5	5	10	6
	154	58	26	2	21	28	33	52	122	137
	156	66	30	56	50	67	53	78	82	120
	157	123	44	70	62	66	68	69	231	429
	159	176	121	163	122	147	131	162	157	323
White Earth I.R.	297	8	5	5	7	0	4	0	0	5
	298	2	10	3	2	1	0	1	3	11
Big Woods North	409	158	159	164	185	252	274	217	160	381
	410	132	269	227	242	175	169	84	39	228
	411	127	231	207	202	181	164	163	118	232
	412	173	287	213	269	288	189	111	226	241
	413	179	165	243	288	293	224	266	173	275
	414	98	112	86	234	123	204	210	241	303
	415	199	216	219	205	218	215	243	276	174
	416	86	84	65	84	161	116	157	188	164
	417	259	245	216	256	275	339	180	258	207
	418	318	214	252	252	248	286	188	207	169
	419	479	132	123	246	280	242	227	220	223
	429		57	156	76	118	142	121	122	106
Big Woods Central	221	79	83	81	77	126	95	115	112	261
	222	31	100	42	57	48	35	63	53	100
	223	128	218	307	293	342	265	260	250	287
	224	13	16	11	10	17	21	13	10	22
	225	356	151	70	77	154	129	120	351	334
Big Woods Metro North	227	280	381	385	353	382	343	325	396	376
	228			689	711	828	734	756	768	772
	235	52	35	35	44	41	68	29	38	29
	236	639	626	602	623	611	572	550	583	524
Big Woods Metro South	337	405	1,223	861	953	901	821	681	817	820
	338	368	195	112	215	158	127	147	82	104
	339	335	155	256	245	244	239	220	226	165

Table 61 (cont.)										
Sub-DMU	Permit Area	1992	1993	1994*	1995*	1996*	1997*	1998*	1999*	2000*
Big Woods Southeast	341	117	196	134	223	279	286	317	363	353
	342	58	118	88	129	133	119	120	128	194
	343	350	281	400	391	467	615	476	573	524
	344	131	99	91	88	105	91	48	70	68
	345	92	148	105	197	154	174	159	145	214
	346	221	197	116	105	190	270	167	168	216
	347	129	141	208	195	197	201	151	184	198
	348	137	153	101	70	163	156	195	171	250
	349	89	129	92	84	150	173	181	182	274
Prairie North	420	164	160	100	94	128	72	0	24	71
	421	105	108	81	81	83	75	29	30	61
	422	76	65	53	52	64	46	38	43	28
	423	22	49	30	46	35	21	38	23	23
	424	47	57	42	65	118	57	23	35	37
	425	130	41	44	102	90	26	19	46	25
	426	43	48	110	101	52	39	38	82	38
	427	87	53	33	51	45	44	43	37	35
	428	83	88	101	89	96	82	80	81	82
Prairie River	431	53	47	48	38	91	56	76	80	33
	433	147	171	174	122	137	151	78	121	114
	435	93	86	79	71	91	99	52	61	64
	440	109	113	74	112	122	130	97	96	121
	442	198	205	191	222	203	191	169	145	221
	443	68	82	94	76	97	72	81	58	87
Prairie Southwest	446	26	29	16	23	31	15	28	16	43
	447	58	48	41	38	45	24	42	24	48
	448	49	42	47	40	41	26	26	20	18
	449	113	92	78	100	113	79	78	36	49
	450	25	26	34	44	32	35	28	33	23
	451	73	76	45	57	79	48	39	35	39
	452	72	97	39	37	83	45	72	53	68
	453	42	46	42	43	57	38	29	39	37
	454	117	130	93	77	156	81	77	85	87
	455	20	19	21	18	11	10	17	16	19
	456	147	79	82	77	80	96	71	93	82
	457	79	61	71	33	78	44	40	58	66
	458	68	53	84	60	83	59	52	54	61
	459	96	71	74	84	106	123	73	91	84
Prairie Southeast	461	118	86	145	131	108	132	163	125	152
	462	130	127	143	234	275	206	218	265	206
	463	55	43	47	47	44	26	52	34	37
	464	59	57	55	64	125	77	92	50	48
	465	86	82	85	171	172	143	135	159	94
	466	118	122	121	113	164	133	163	223	221
	467	113	129	153	173	162	204	235	130	200
Unknown	UNK	124	8	0	0	0	0	0	0	0
Camp Ripley		158	287	267	247	160	142	175	203	375
TOTAL		12,999	13,722	13,427	4,013 (527)†	14,338 (765)†	13,258 (1,009)†	12,306 (448)†	13,376 (581)†	16,151 (1,167)†

* Includes Regular licenses, Management permits, Intensive harvest permits, and Special permit areas.
† Harvest in () shows Intensive Harvest Permit harvest.

Table 62. Muzzleloader Season harvest by block, 2000 (Includes Special Permit Areas)

Block	Adult		Fawns		
Number	Male	Female	Male	Female	Total
104	1	2	0	0	3
107	1	0	0	0	1
110	1	4	0	1	6
115	5	9	0	1	15
152	2	12	3	2	19
154	5	30	8	6	49
156	8	17	1	2	28
157	14	54	15	18	101
159	8	25	10	3	46
167	5	4	1	1	11
168	8	5	2	0	15
170	9	24	1	1	35
172	14	19	3	4	40
174	4	10	3	0	17
175	0	7	0	0	7
178	4	5	2	1	12
180	3	1	0	0	4
181	6	9	2	1	18
183	2	7	2	0	11
197	3	2	3	0	8
201	7	0	0	0	7
202	5	0	0	0	5
203	1	0	0	0	1
204	9	11	6	0	26
205	8	25	9	5	47
206	9	8	4	1	22
207	3	0	0	0	3
208	3	3	1	1	8
209	1	3	2	2	8
210	3	6	3	0	12
211	25	24	4	8	61
214	2	0	0	0	2
221	10	16	7	4	37
222	6	9	4	0	19
223	1	12	9	3	25
225	9	30	7	4	50
227	11	7	3	3	24
228	4	4	2	7	17
235	3	7	2	2	14
236	10	21	8	1	40
243	3	11	4	1	19
244	12	19	7	2	40
245	18	42	15	12	87
246	10	20	10	10	50
247	26	36	12	13	87
248	4	7	0	1	12
249	10	12	3	3	28
284	4	23	5	2	34
285	2	3	1	1	7
297	0	1	1	1	3
298	6	1	2	0	9

Table 62. (Cont.)

Block Number	Adult Male	Adult Female	Fawns Male	Fawns Female	Total
337	11	22	11	2	46
338	1	9	3	0	13
339	5	12	4	2	23
341	6	19	5	2	32
342	4	39	8	5	56
343	13	38	26	8	85
344	3	4	4	1	12
345	3	8	3	4	18
346	2	18	5	5	32
347	25	54	13	11	103
348	4	21	9	5	39
349	8	30	17	10	65
401	14	13	0	2	29
402	13	22	7	4	46
403	3	6	1	3	13
404	12	12	4	1	29
405	8	7	5	2	22
406	4	6	2	1	13
407	10	11	1	1	23
408	1	3	0	0	4
409	6	35	10	17	68
410	10	24	12	5	51
411	4	10	4	9	27
412	4	11	2	4	21
413	4	13	5	3	25
414	7	25	12	3	47
415	26	28	10	15	79
416	7	28	7	8	50
417	22	35	12	5	74
418	10	15	11	8	44
419	15	35	22	11	83
420	10	19	4	1	34
421	9	8	8	4	29
422	2	0	0	0	2
423	2	1	0	2	5
424	9	21	1	1	32
425	15	11	3	1	30
426	5	17	4	2	28
427	26	14	8	1	29
428	6	5	3	2	16
429	4	2	1	1	8
431	16	23	14	11	64
433	33	73	30	9	145
435	14	19	4	0	37
440	13	25	5	5	48
442	45	84	28	13	170
443	20	30	9	5	64
446	20	16	6	8	50
447	15	36	12	7	70
448	24	0	0	0	24
449	12	0	0	0	12

Table 62. (Cont.)

Block Number	Adult Male	Adult Female	Fawns Male	Fawns Female	Total
450	3	5	1	0	9
451	20	19	8	6	53
452	23	42	15	5	85
453	10	21	4	3	38
454	28	37	10	8	83
455	7	4	0	3	14
456	12	32	7	3	54
457	17	30	6	7	60
458	14	25	4	5	48
459	36	46	18	7	107
461	28	46	16	22	112
462	11	39	19	9	78
463	9	8	0	2	19
464	9	17	8	5	39
465	15	34	10	6	65
466	36	49	6	9	100
467	20	60	15	12	107
931	1	15	5	8	29
932	0	1	0	0	1
933	0	7	0	1	8
Total	1,192	2,161	722	473	4,548

Table 63. Muzzleloader Special Permit Area Data, 2000.

		Permits Issued	Harvest				Total
Area	Dates	Regular	Adult male	Fawn male	Adult female	Fawn female	
Jay Cooke S.P. (931)	11/25-11/29	105 [a, b]	1	5	15	8	29
Rice Lake S.P. (932)	11/25-11/28	12 [a, b]	0	0	1	0	1
Savanna Portage S.P. (933)	11/25-12/3	20 [a, b]	0	0	7	1	8

[a] Permits for these hunts were antlerless only.
[b] Management permits were available for these hunts.
[c] Illegal buck.

Table 64. All -season Buck Harvest by Permit Area, 2000.

Permit Area	Adult Male
104	4
107	1
115	3
116	1
122	2
126	2
127	1
154	3
156	1
157	4
159	3
167	1
172	4
174	1
175	2
178	1
180	1
181	4
183	1
202	2
204	2
205	3
206	0
207	2
209	1
210	4
211	4
221	1
222	3
223	1
225	1
227	7
228	2
235	1
236	1
243	6
244	6
245	20
246	4
247	7
248	6
249	4
284	7
287	1
298	1

Permit Area	Adult Male
337	6
338	2
339	1
342	1
343	4
344	2
345	2
346	4
347	1
348	1
349	5
401	1
402	1
403	1
404	2
405	3
406	1
407	5
408	4
409	3
410	3
411	3
412	2
413	6
414	8
415	6
416	6
417	15
418	3
419	5
420	5
422	2
424	4
426	2
428	5
429	1
431	5
433	13
435	6
440	1
442	4
443	3
446	2
447	1
448	3

Permit Area	Adult Male
449	9
450	4
451	2
452	5
453	2
454	6
455	1
456	2
457	4
458	1
459	4
461	5
462	3
463	1
464	3
465	7
466	8
467	7
Total	**375**

Table 65. Black bear registered harvest and hunter success, 1991-2000.

Quota Area	Harvest (success rate)									
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
12	93(32%)	109(36%)	90(27%)	130(34%)	229(49%)	114(23%)	163(34%)	170(30%)	142(24%)	186(32%)
13	93 (34%)	111(36%)	98(32%)	108(34%)	258(59%)	96(22%)	125(35%)	216(31%)	134(17%)	211(26%)
22	39(18%)	40(21%)	26(13%)	33(16%)	29(14%)	5(2%)	21(16%)	8(6%)	10(8%)	4(3%)
24	155(34%)	253(45%)	199(32%)	176(26%)	288(32%)	93(10%)	251(29%)	274(26%)	257(24%)	168(15%)
25	237(37%)	331(47%)	248(33%)	199(27%)	489(40%)	149(12%)	357(35%)	419(27%)	443(24%)	387(19%)
26	337(38%)	328(40%)	330(39%)	260(30%)	513(59%)	131(15%)	311(38%)	373(38%)	371(32%)	284(23%)
31	377(39%)	554(55%)	342(34%)	260(27%)	636(47%)	188(13%)	402(38%)	544(28%)	483(23%)	413(19%)
41	74(23%)	95(28%)	85(28%)	92(31%)	148(50%)	38(13%)	88(32%)	120(25%)	92(14%)	171(34%)
44	234(24%)	436(36%)	539(37%)	294(24%)	643(43%)	231(16%)	357(24%)	563(25%)	435(18%)	556(22%)
45				91(14%)	173(24%)	106(13%)	143(18%)	170(15%)	153(10%)	150(9%)
51	247(20%)	521(37%)	585(35%)	432(23%)	872(37%)	431(18%)	605(25%)	812(19%)	739(18%)	795(19%)
No Quota	257(19%)	397(27%)	435(29%)	254(17%)	678(35%)	292(16%)	389(22%)	441(25%)	361(20%)	573(25%)
Total	2,143 (30%)	3,175 (40%)	3003 (35%)	2,329 (26%)	4,956 (43%)	1,874 (16%)	3,212 (31%)	4,110 (28%)	3,620 (23%)	3898 (23%)

Table 66. Minnesota bear permits, licenses, hunters, harvests, and success rates during 1989-2000.

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Permit applications	24,096	24,861	25,890	26,428	27,365	30,127	29,922	30,405	27,353	30,245	29,384	29,275
Permits available	5,520	6,370	7,140	7,920	8,630	9,400	11,950	12,030	11,370	18,210	20,840	20,710
Licenses purchased:												
Quota area	4,628	5,568	6,257	6,845	7,528	8,125	10,304	10,592	9,655	14,941	16,563	17,021
No-quota area	1,273	1,526	1,500	1,640	1,696	1,701	2,144	1,822	1,785	1,796	1,792	2,283
% Permit-holders buying license	83.8	87.4	87.6	86.4	87.2	86.4	86.2	88.0	84.9	82.0 [a]	79.5 [a]	82.2 [a]
Estimated number of hunters [b]	5,500	6,600	7,200	7,900	8,600	9,100	11,600	11,500	10,300	14,500	15,900	16,800
Harvest	1,930	2,381	2,143	3,175	3,003	2,329	4,956	1,874	3,212	4,110	3,620	3,898
% Success rate [c]	35	36	30	40	35	26	43 [c]	16 [d]	31	28	23	23

[a] Low rate due to under-subscription of permits in BMUs 22 and 24 in 1998, BMUs 22, 24, and 25 in 1999, and BMUs 13, 22, and 24 in 2000. Excluding these under subscribed areas, 85.1%, 82.6% and 84.4% of permit holders bouthg licenses in 1998, 1999 and 2000 respectively.

[b] Number of licensed hunters x percent of license-holders hunting. Percent hunting based on data from bear hunter surveys in 1981-91 and 1998; percent hunting for 1992-96 based on average from 1981-91 data (93%), and value for 1997 based on average of the 1991 (92.6%) and 1998 (86.8%) surveys. Decline in percent hunting follows decline in percent of permit-holders buying a license.

[c] Highest hunting success ever, due to poor natural food.

[d] Lowest hunting success since initiation of the permit system, due to exceptionally abundant food.

Table 67. Success rates of Minnesota bear hunters as measured by registered harvest / licenses sold, 1989-2000.

Area	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
12	31	29	32	36	27	34	49	23	34	30	24	32
13	46	37	34	36	32	34	59	22	35	31	17	26
22	16	13	18	21	13	16	14	2	16	6	8	3
24	32	30	34	45	32	26	32	10	29	26	24	15
25	33	32	39	47	33	27	40	12	35	27	24	19
26	47	40	38	40	39	30	59	15	38	38	32	23
31	38	38	39	55	34	27	47	13	38	28	23	19
41	28	39	23	28	28	31	50	13	32	25	14	34
44	39	34	24	36	37	24	43	16	24	25	18	22
45						14	24	13	18	15	10	9
51	35	39	20	37	35	23	37	18	25	19	18	19
No Quota Areas		28	19	27	29	17	35	16	22	25	20	25

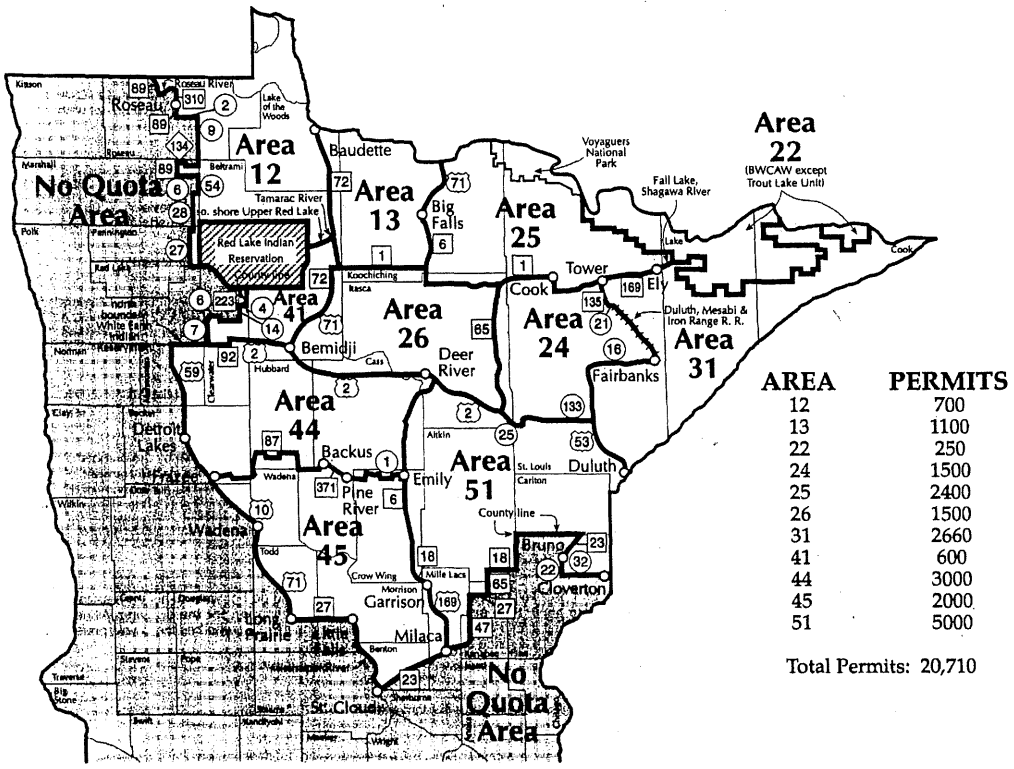

Figure 48. Black bear permit areas, 2000.

Table 68. Moose hunt quota and harvest statistics, 1985-2000.

Year	Area	Number of 2, 3, or 4-person licenses issued	Number of 2, 3, or 4-person license applications	Chances for permit	Harvest	Party success (%)	Sex of Moose	
							Male	Female
1985	NW NE	768 300	14,772	1:14	718 250	93 83	419 (58%) 165 (66%)	299 (42%) 85 (34%)
1987	NW NE	772 528	14,234	1:11	727 436	94 83	505 (69%) 292 (67%)	222 (31%) 144 (33%)
1989	NW NE	449 545	15,381	1:15	438 444	98 81	291 (66%) 285 (64%)	147 (34%) 159 (36%)
1991	NW NE	365 0	5,665	1:16	359 -	98 -	258 (72%)	101 (28%)
1993	NW NE	446 315	9,925	1:13	419 264	94 84	317 (76%) 200 (76%)	102 (24%) 64 (24%)
1994	NW NE	262 189	11,351	1:25	245 155	93 82	166 (65%) 115 (74%)	77 (32%) 40 (26%)
1995	NW NE	191 188	10,753	1:28	172 156	90 83	112 (65%) 129 (83%)	60 (35%) 27 (17%)
1996	NW NE	39 207	6,550	1:27	38 156	97 75	31 (82%) 123 (79%)	7 (18%) 33 (21%)
1997	NW NE	0 198	3,958	1:20	- 152	- 77	- 124 (82%)	- 28 (28%)
1998	NW NE	0 182	4,157	1:20	- 125	- 69	- 90 (72%)	- 36 (28%)
1999	NW NE	0 189	3,919	1:21	- 136	- 72	- 101 (74%)	- 35 (26%)
2000	NW NE	Cancelled	Cancelled	Cancelled	Cancelled	Cancelled	Cancelled	Cancelled

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Table 69. Trapper response to mail surveys, 1979-80 through 2000-01.

Year	Number mailed	Number not delivered	Delivered questionnaires completed and returned	
			Number	Percent
1979-80	1,011	29	888	90.4
1980-81	1,345	110	1,072	86.8
1981-82	1,345	36	1,167	89.2
1982-83	925	28	794	88.5
1983-84	770	10	663	87.2
1984-85	556	9	495	90.5
1985-86	581	13	506	89.1
1986-87	582	8	514	89.5
1987-88	721	11	607	85.5
1988-89	852	25	727	87.9
1989-90	3,302	120	2,804	88.1
1990-91	2,294	102	1,875	85.5
1991-92	2,643	149	2,062	82.7
1992-93	2,080	76	1,681	83.9
1993-94	2,828	100	2,194	80.4
1994-95	2,382	76	1,876	81.5
1995-96	3,244	118	2,467	80.3
1996-97	4,071	132	3,017	76.6
1997-98	3,500	96	2,629	77.2
1998-99	3,900	117	2,878	76.4
1999-00	3,110	74	2,313	76.2
2000-01	5,262	146	3,941	77.0

Table 70. Use of trapper licenses, 1987-88 through 2000-01.

		Return from mail survey	Projections from license sales
1987-88	Trapped	512 (84.6%)	15,777
	Did not trap	93 (15.4%)	2,866
		605 (100.0%)	18,643
1988-89	Trapped	582 (80.1%)	9,789
	Did not trap	145 (19.9%)	2,432
		727 (100.0%)	12,221
1989-90	Trapped	2,251 (80.3%)	7,314
	Did not trap	553 (19.7%)	1,794
		2,804 (100.0%)	9,108
1990-91	Trapped	1,399 (80.6%)	4,972
	Did not trap	337 (19.4%)	1,197
		1,736 (100.0%)	6,169[a]
1991-92	Trapped	1,639 (79.5%)	4,150
	Did not trap	423 (20.5%)	1,070
		2,062 (100.0%)	5,220[a]
1992-93	Trapped	1,438 (85.5%)	4,927
	Did not trap	243 (14.5%)	836
		1,681 (100.0%)	5,763[a]
1993-94	Trapped	1,904 (85.5%)	4,862
	Did not trap	290 (13.2%)	739
		2,194 (100.0%)	5,601[a]
1994-95	Trapped	1,647 (87.8%)	6,054
	Did not trap	228 (12.2%)	841
		1,875 (100.0%)	6,895[a]
1995-96	Trapped	2,053 (83.2%)	4,684
	Did not trap	414 (16.8%)	946
		2,467 (100.0%)	5,630[a]
1996-97	Trapped	2,505 (84.8%)	5,660
	Did not trap	450 (15.2%)	1,015
		2,955 (100.0%)	6,675[a]
1997-98	Trapped	2,310 (88.6%)	6,198
	Did not trap	296 (11.4%)	798
		2606 (100.0%)	6,996[a]
1998-99	Trapped	2,398 (88.6%)	5,541
	Did not trap	480 (16.7%)	1,111
		2,878 (100.0%)	6,652[a]
1999-00	Trapped	1,927 (83.5%)	4,122
	Did not trap	381 (16.5%)	814
		2,308 (100.0%)	4,936[a]
2000-01	Trapped	2,897 (75.9%)	4,051
	Did not trap	920 (24.1%)	1,286
		3,817 (100.0%)	5,337[a]

[a] excludes duplicates.

Table 71. Estimated number of trappers of various furbearers, 1986-87 through 2000-01.

	Estimated number of trappers (thousands)														
	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
Muskrat	11	15	7	4	2	2	3	3	4	3	4	4	3	2	2
Mink	9	13	7	5	3	2	3	3	3	2	3	3	3	2	2
Short-tailed weasel	1	1	1	<1	<1	<1	<1	<1	1	<1	<1	1	<1	<1	<1
Long-tailed weasel	1	2	1	1	<1	<1	<1	<1	<1	<1	<1	1	<1	<1	<1
Raccoon (Sept 00-Feb 01)	8	11	6	4	2	2	2	3	3	2	3	3	3	2	2
Raccoon (Mar 00-Aug 00)[a]									<1	<1	<1	<1	<1	<1	<1
Striped skunk	4	5	3	2	1	1	1	1	1	1	1	1	1	1	1
Eastern spotted skunk	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	Closed	Closed	Closed	Closed	Closed
Badger	1	1	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Opossum	1	2	1	1	1	1	1	1	1	1	1	1	1	<1	<1
Red fox (Sept 00-Feb 01)	5	6	4	2	2	2	2	2	2	2	2	2	1	1	1
Red fox (Mar.00-Aug 00)[a]									<1	<1	<1	<1	<1	<1	<1
Gray fox	2	2	1	1	<1	<1	<1	<1	<1	<1	n.a.	<1	<1	<1	<1
Coyote	2	2	1	1	1	1	1	1	1	1	1	1	1	1	<1
Beaver (Oct 00 - Feb 01)	6	8	4	3	2	2	2	2	3	2	2	3	3	2	2
Beaver (Mar 00 - Apr 00)	4	4	2	2	1	1	1	1	2	1	2	2	2	1	1

[a] Raccoon and red fox season changed to year round beginning May, 1994.

Table 72. Estimated take per trapper of various furbearers, 1986-87 through 2000-2001.

	Estimated take per successful trapper reporting that species														
	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
Muskrat	73	69	28	27	24	20	36	64	90	70	55	58	42	46	42
Mink	9	9	9	9	10	8	12	12	12	11	11	11	13	14	12
Short-tailed weasel	4	5	4	5	3	4	5	6	12	10	9	10	7	5	8
Long-tailed weasel	5	4	5	5	3	5	4	4	6	5	5	5	5	5	5
Raccoon (Sept 00-Feb 01)	11	12	13	12	16	14	16	5	20	23	23	24	23	20	20
Raccoon (Mar 00-Aug 00)[a]									15	15	13	14	15	14	11
Striped skunk	10	10	10	10	12	9	8	9	8	8	10	10	9	8	8
Eastern spotted skunk	3	2	2	5	7	3	2	6	4	5	Closed	Closed	Closed	Closed	Closed
Badger	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Opossum	14	7	8	9	11	9	10	8	9	9	9	9	11	13	11
Red fox (Sept 00-Feb 01)	8	9	13	10	18	14	11	11	11	9	7	7	5	6	6
Red fox (Mar 00-Aug 00)[a]									9	5	4	4	3	4	4
Gray fox	3	3	4	3	3	2	4	3	2	2	n.a.	3	3	2	2
Coyote	4	3	4	4	3	4	5	5	4	5	4	3	3	4	4
Beaver (Oct 00-Feb 01)	12	16	11	15	13	15	13	16	18	14	16	16	16	16	15
Beaver (Mar 00 - Apr 00)	22	23	14	20	19	27	29	29	37	29	31	32	29	27	26

[a] Raccoon and red fox season changed to year round beginning May, 1994.

Table 73. Minnesota trapper license sales and estimated annual harvest, 1989-90 through 2000-2001[a]

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
Trapper license sales[b]	9,108	6,163	5,220	5,763	5,601	6,895	5,630	6,675	6,996	6,652	4,936	5,337
Estimated harvest[c] (thousands)												
Muskrat	118	55	45	92	202	355	195	202	194	131	97	86
Mink	40	25	21	32	33	40	26	35	34	36	27	23
Short-tailed weasel	2	1	1	1	2	6	4	4	4	2	2	3
Long-tailed weasel	2	1	1	1	1	3	2	2	2	2	2	1
Raccoon (Sept 00- Feb 01)	41	34	31	34	56	58	53	69	66	64	37	32
Raccoon (Mar 00-Aug 01)[f]						1	5	5	5	7	4	4
Striped skunk	17	15	10	7	9	9	8	11	11	9	5	5
Eastern spotted skunk[g]	<1	<1	<1	<1	<1	<1	<1	closed	closed	closed	closed	closed
Badger	1	1	1	1	1	1	<1	1	1	<1	<1	<1
Opossum	6	6	5	6	5	5	6	6	6	7	6	5
Red fox (Sept 00- Feb 01)	25	33	25	23	22	24	14	13	12	6	7	6
Red fox (Mar 00-Aug 00)[f]						1	1	1	1	<1	<1	<1
Gray fox	2	1	1	1	1	1	1	n.a.	1	1	1	<1
Coyote	4	3	3	4	4	5	3	3	3	2	2	2
Beaver (Oct 00- Feb 01)	48	24	25	22	29	49	25	38	36	39	31	25
Beaver (Mar 00-Apr 00)	31	20	26	34	32	64	41	48	47	55	36	37
Registered harvest												
Otter	1,294	88	855	1,368	1,459	2,445	1,435	2,219	2,145	1,946	1,635	1,578
Lynx[g]	closed	closed	closed	closed	closed	closed	closed	closed	closed	closed	closed	closed
Bobcat[e]	129	84	106	168	201	238	134	223	359	103	206	231
Fisher	1,243	746	528	778	1,159	1,771	942	1,773	2,761	2,695	1,725	1,674
Marten	2,119	1,349	656	1,602	1,438	1,527	1,500	1,625	2,261	2,299	2,423	1,629

[a] Includes data for all seasons from October through April of years indicated.

[b] Separate licenses were issued for juveniles (13-17 years old) and adults (18 and older), beginning in 1982. As of April 5, 2001, 5,337 trapping licenses were sold in 2000, 605 (11.3%) were juvenile licenses and 4,732 (88.6%) were adult licenses. Duplicate licenses excluded.

[c] Based upon trappers' responses to mail surveys.

[d] 1 is any number which rounds to 1. <1 is any number which is <0.5.

[e] Registered harvest for bobcat includes animals taken by hunting.

[f] Raccoon and red fox seasons changed to year round beginning May 1994.

[g] Lynx (1984) and Eastern spotted skunk (1996) listed as Special Concern and threatened species (respectively) and are fully protected.

Table 74. Average price per pelt paid to hunters and trappers in Minnesota, 1987-88 through 2000-01.

Average pelt prices paid hunters and trappers in Minnesota (dollars)														
Species	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
Muskrat	3.12	2.07	0.80	0.75	1.55	1.35	1.35	1.61	1.53	3.49	2.24	1.11	1.57	1.83
Mink (male)	40.54	39.76	30.38	23.06	27.30	24.74	21.89	14.90	11.75	20.82	13.52	9.83	11.61	11.15
Mink (female)	20.25	22.70	17.26	14.73	17.36	15.02	12.18	11.43	8.56	13.71	9.65	6.11	8.22	7.70
S.T. Weasel	0.89	1.11	1.20	1.55	0.77	1.31	1.72	1.73	1.84	2.32	2.33	1.72	2.16	2.30
L.T. Weasel	1.02	1.04	1.25	0.58	1.21	1.06	1.05	2.05	1.24	3.33	2.67	2.05	2.34	1.80
Raccoon	16.67	7.53	4.88	4.19	8.57	7.29	8.26	9.02	9.40	15.16	13.92	7.25	5.09	8.86
Striped Skunk	2.47	1.90	1.31	1.84	1.47	2.69	3.70	3.52	3.21	2.11	3.18	4.72	4.40	4.79
Badger	5.74	2.99	2.91	4.33	3.51	4.20	4.62	6.12	6.33	8.49	6.53	6.30	7.30	10.15
Opossum	0.91	0.62	0.76	3.51	0.96	0.78	0.89	0.98	0.97	1.04	1.10	0.58	0.96	0.97
Red Fox	16.69	9.89	8.58	7.17	10.81	8.88	10.59	13.42	14.21	14.81	11.23	8.04	11.82	14.45
Gray Fox	22.56	11.45	7.39	5.16	5.22	6.73	6.55	9.69	7.49	9.00	7.69	5.63	7.06	7.52
Coyote	18.35	8.43	6.42	8.95	14.85	15.55	14.68	13.55	10.89	12.25	10.12	5.57	9.42	12.40
Lynx	- No Open Season -													
Bobcat	101.10	68.31	48.50	42.50	37.44	28.18	43.42	36.36	31.81	32.82	30.39	27.66	24.23	33.09
Beaver (fall-winter)	16.75	13.84	12.49	9.44	9.00	7.10	11.24	13.80	12.56	19.24	16.48	11.40	11.51	14.66
Beaver (spring)	17.12	12.62	10.99	9.66	9.25	7.89	9.41	14.48	10.96	19.14	17.39	14.06	11.02	12.80
Otter	22.85	22.02	22.01	24.21	24.74	29.90	43.14	47.50	38.76	38.75	39.81	34.03	41.41	50.52
Fisher (male)	84.36	53.83	26.15	34.85	21.46	15.73	14.17	19.06	16.17	25.48	31.09	18.92	19.45	20.14
Fisher (female)	170.31	99.63	52.92	46.25	47.93	28.79	28.40	29.93	24.90	34.47	33.65	21.76	19.91	19.01
Marten (male)	43.13	50.08	47.90	43.89	39.59	27.87	35.86	34.07	28.30	34.47	27.82	19.70	24.89	27.56
Marten (female)	39.20	43.46	46.88	40.84	27.24	24.96	29.58	28.34	21.42	29.26	21.79	16.12	21.27	21.25

REGISTERED FURBEARER HARVEST STATISTICS

Forest Wildlife Populations and Research Group
1201 E. Hwy 2
Grand Rapids, MN 55744
(218) 327-4432

Table 75. Registered furbearer harvests and total permits issued, 1985-2000[a].

Year	Bobcat		Fisher		Marten		Otter	
	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest
1985	--	119	--	678	746	430	--	559
1986	--	160	3,302	1,607	2,171	798	3,198	777
1987	--	214	4,952	1,642	3,025	1,363	4,708	1,386
1988	--	140	4,419	1,025	3,369	2,072	4,070	922
1989	--	129	3,712	1,243	3,074	2,119	3,549	1,294
1990	--	84	2,385	746	2,090	1,349	2,199	888
1991[b]	--	106	2,360	528	2,020	686	2,282	855
1992[b]	--	168	2,420	778	2,050	1,602	3,440	1,368
1993[b]	--	201	2,299	1,159	1,925	1,438	2,254	1,459
1994[b]	--	238	2,186	1,771	2,477	1,527	2,964	2,445
1995[b]	--	134	2,520	942	2,268	1,500	2,579	1,435
1996[b]	--	223	1,557	1,773	1,392	1,625	1,623	2,219
1997[b]	--	359	2,517	2,761	2,517	2,261	2,543	2,145
1998[b]	–	103	2,808	2,695	2,808	2,299	2,749	1,946
1999[b]	–	206	1,984	1,725	1,984	2,423	1,918	1,635
2000[b]	–	231	3,226	1,674	3,226	1,629	3,116	1,578

[a] Prior request tags and permits were required beginning in 1985 for marten and in 1986 for fisher and otter. No possession tags or permits are required for bobcat.

[b] Confiscation and 1854 Authority removed.

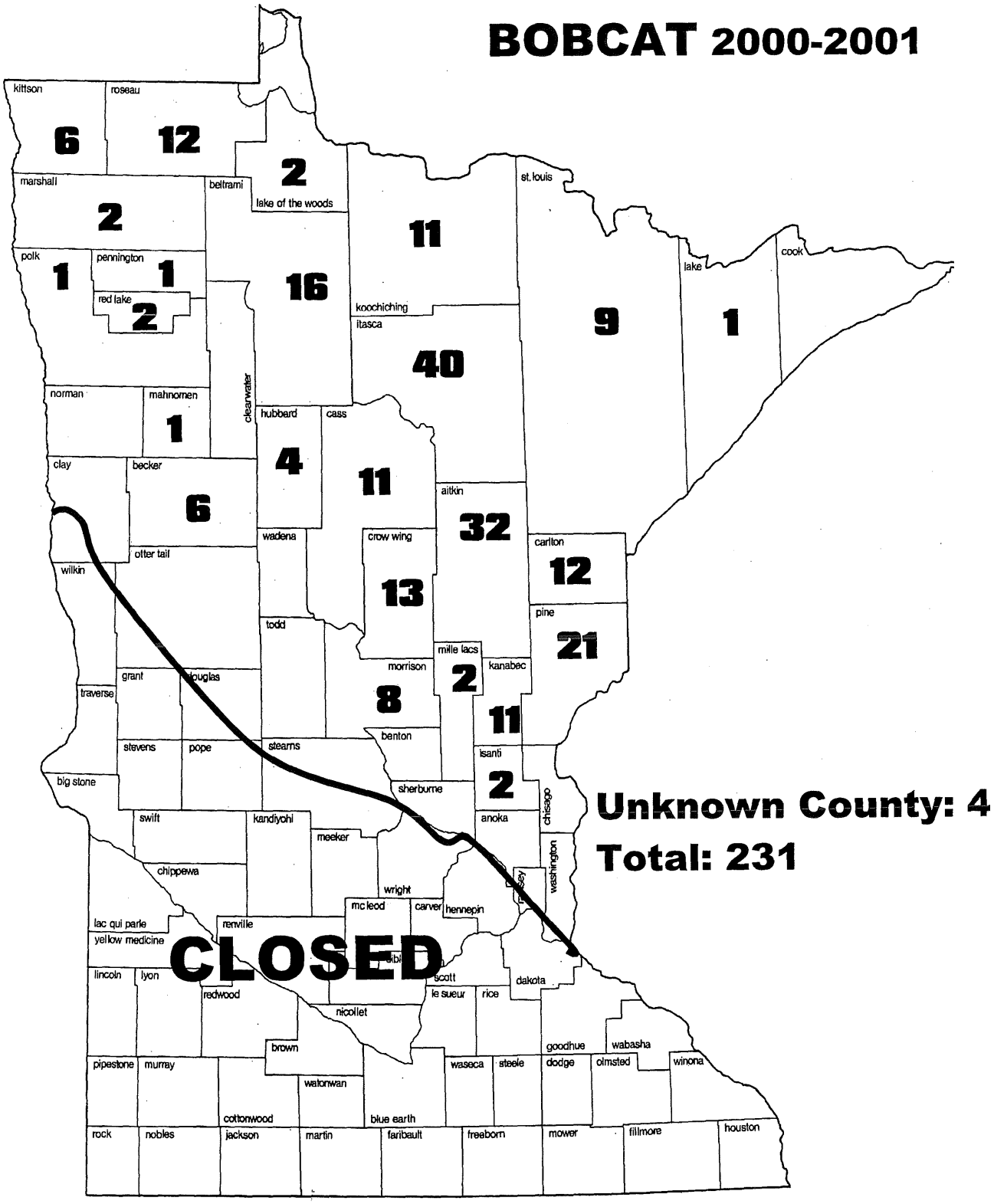

Figure 49. Bobcat harvest by county, 2000-2001.

Table 76. Time distribution of bobcat harvest by 5-day increments, 2000-2001 season.

Interval	Sex			Total	% of Known Total	Cumulative Percent
	M	F	U			
Dec. 2 - 6	13	13	-	26	12	12
Dec. 7 -11	13	22	-	35	16	28
Dec. 12 - 16	15	29	-	44	20	48
Dec. 17 - 21	16	10	-	26	12	60
Dec. 22 - 26	11	13	-	24	11	71
Dec. 27 - 31	12	17	-	29	13	84
Jan. 1 - 5	9	15	1	25	12	96
Jan. 6 - 7*	5	4	-	9	4	100
Unknown	10	3	-	13	-	-
Total	104	126	1	231	100	100

* 2-day interval

Table 79. Comparison of bobcat harvest by county, 1991-92 through 2000-01.

County	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
Aitkin	3	22	28	14	12	20	19	6	25	32
Becker	5	1	1	7	5	4	10	1	8	6
Beltrami	6	8	15	23	6	20	37	7	13	16
Benton	1	0	0	0	1	0	0	0	0	0
Carlton	2	10	5	8	5	14	18	4	10	12
Cass	14	27	16	31	10	22	64	16	24	11
Chisago	0	0	0	0	0	0	0	0	0	0
Clearwater	0	5	2	7	6	3	14	1	4	0
Cook	0	0	1	0	2	0	0	0	0	0
Crow Wing	4	6	3	8	5	5	8	15	21	13
Hubbard	3	3	2	4	2	4	19	1	7	4
Isanti	0	0	0	0	0	0	0	0	2	0
Itasca	16	35	39	51	20	51	45	10	23	40
Kanabec	0	4	7	3	1	6	13	3	4	11
Kittson	3	3	1	3	3	1	0	0	7	6
Koochiching	5	5	3	6	1	23	14	2	8	11
Lake	1	5	1	0	2	0	0	1	0	1
Lake of the Woods	0	0	0	2	0	2	0	2	2	3
Mahnomen	-	-	-	-	1	0	2	0	1	1
Marshall	5	0	6	4	2	5	28	4	10	2
Mille Lacs	7	3	1	5	3	0	0	0	1	2
Morrison	2	5	14	5	6	5	1	2	6	8
Ottertail	1	0	2	0	0	0	2	0	0	0
Pennington	0	0	0	0	0	2	1	0	0	1
Pine	16	11	29	26	23	20	23	12	15	21
Polk	0	0	0	0	0	1	1	0	0	1
Red Lake	-	-	-	-	-	-	-	-	-	2
Roseau	1	3	5	9	1	5	15	3	7	12
St. Louis	3	8	10	15	7	7	14	10	5	9
Todd	-	-	-	-	-	-	-	2	1	0
Wadena	2	0	2	0	2	1	5	1	2	0
Unknown	6	5	8	7	8	2	4	0	0	4
Total	106	168	201	238	134	223	357	103	206	231

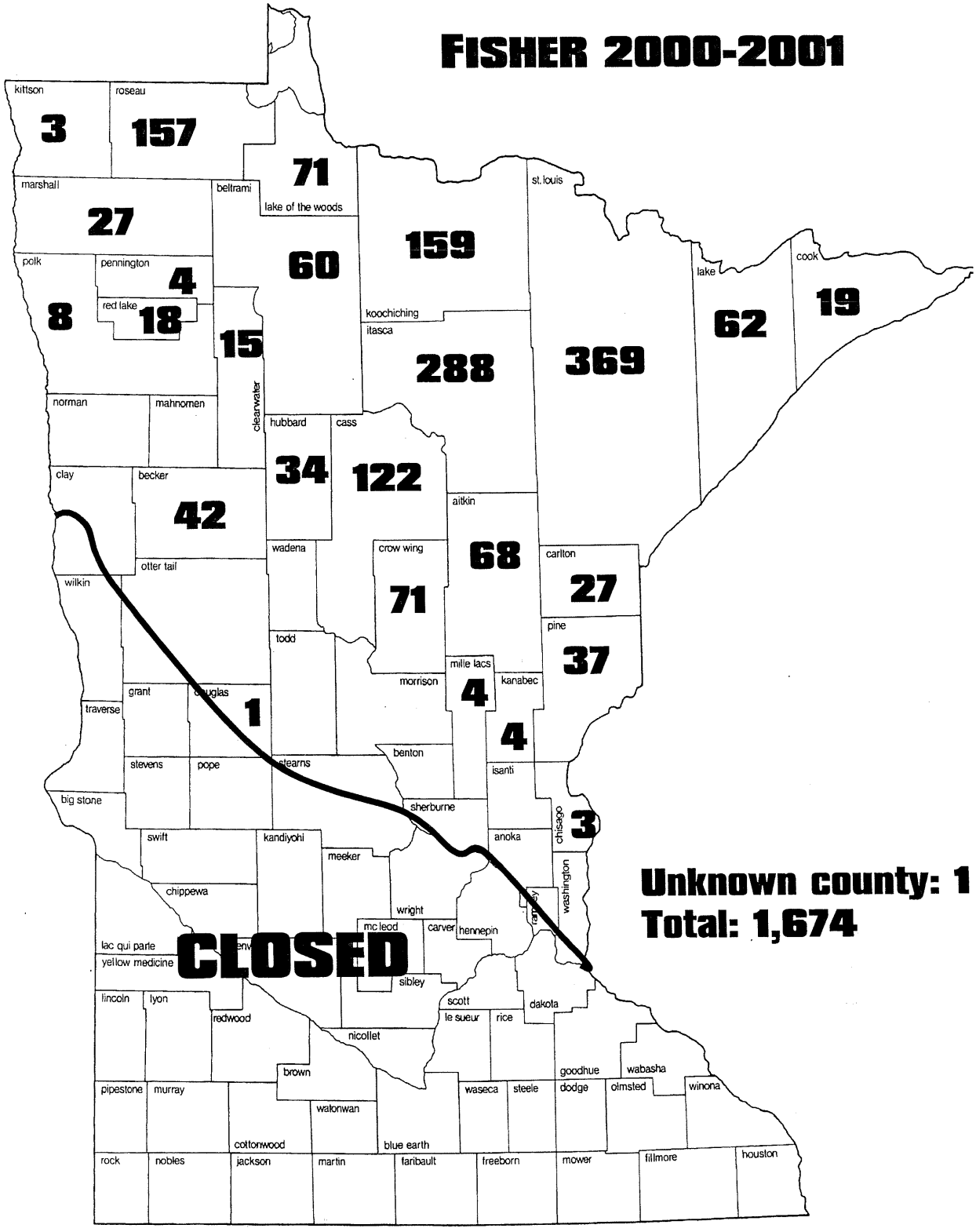

Figure 50. Fisher harvest by county, 2000-2001.

Table 80. Fisher harvest by date and sex, 2000-01 season, in Minnesota.

Date	Sex			Total	% of known Total	Cumulative Percent
	Male	Female	Unknown			
Dec. 2	4	9	0	13	1	1
Dec. 3	54	39	0	93	6	7
Dec. 4	93	52	1	146	9	16
Dec. 5	82	38	0	120	7	23
Dec. 6	76	61	0	137	8	31
Dec. 7	55	46	0	101	6	37
Dec. 8	55	55	0	110	7	44
Dec. 9	110	66	0	176	11	55
Dec. 10	86	83	1	170	10	65
Dec. 11	52	28	0	80	5	70
Dec. 12	57	37	0	94	6	76
Dec. 13	38	34	1	73	4	80
Dec. 14	42	36	1	79	5	85
Dec. 15	49	26	0	75	4	89
Dec. 16	61	56	0	117	7	96
Dec. 17	37	39	1	77	4	100
Unknown	9	4	0	13	--	--
Total	960	709	5	1,674	100	100

Table 81. Fisher harvest by county and sex, 2000-01 season, in Minnesota.

County	Sex			Total
	Male	Female	Unknown	
Aitkin	42	26	0	68
Becker	14	27	1	42
Beltrami	35	25	0	60
Carlton	15	12	0	27
Cass	71	51	0	122
Chisago	2	1	0	3
Clearwater	7	8	0	15
Cook	16	3	0	19
Crow Wing	48	23	0	71
Douglas	0	1	0	1
Hubbard	22	12	0	34
Itasca	156	128	4	288
Kanabec	3	1	0	4
Kittson	3	0	0	3
Koochiching	103	56	0	159
Lake	35	27	0	62
Lake of the Woods	34	37	0	71
Mahnomen	0	0	0	0
Marshall	19	8	0	27
Mille Lacs	1	3	0	4
Morrison	0	0	0	0
Norman	0	0	0	0
Ottertail	0	0	0	0
Pennington	3	1	0	4
Pine	22	15	0	37
Polk	7	1	0	8
Red Lake	12	6	0	18
Roseau	99	58	0	157
St. Louis	191	178	0	369
Todd	0	0	0	0
Wadena	0	0	0	0
Unknown	0	1	0	1
Total	960	709	5	1,674

Table 82. Comparison of fisher harvest by county, 1989-90 through 2000-01.

County	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
Aitkin	26	17	8	15	17	23	26	58	86	105	84	68
Becker	4	5	4	6	4	22	17	15	25	15	32	42
Beltrami	78	34	34	34	44	103	27	84	140	105	70	60
Carlton	2	3	3	8	12	14	14	10	45	25	23	27
Cass	43	34	30	33	57	100	58	142	212	133	123	122
Chisago										1	0	3
Clearwater	3	3	2	3	3	13	0	6	31	18	13	15
Cook	10	14	4	17	17	16	12	12	24	26	19	19
Crow Wing	12	12	14	18	23	30	24	32	65	75	53	71
Douglas												1
Hubbard	8	4	6	7	6	8	15	30	66	38	34	34
Itasca	184	99	73	76	177	299	116	291	477	441	248	288
Kanabec	0	0	0	2	0	1	0	6	7	3	11	4
Kittson	1	2	1	0	1	1	0	0	7	3	3	3
Koochiching	211	77	96	97	148	250	92	232	386	369	150	159
Lake	80	78	17	57	82	99	43	60	123	84	46	62
Lake of the Woods	58	27	21	26	8	43	4	30	59	99	83	71
Mahnomen	0	0	0	0	1	1	0	0	0	0	3	0
Marshall	4	3	2	3	7	9	2	4	21	7	10	27
Mille Lacs								6	0	3	0	4
Morrison											2	0
Norman	----------closed----------									0	6	0
Ottertail										1	0	0
Pennington	0	0	0	0	0	1	0	1	1	0	2	4
Pine	3	2	0	3	17	23	20	24	34	55	36	37
Polk	0	0	0	0	1	2	3	3	6	5	6	8
Red Lake	0	0	1	0	1	0	0	2	5	0	2	18
Roseau	53	32	21	32	68	93	26	89	134	171	111	157
St. Louis	463	279	187	229	463	616	153	604	783	880	546	369
Todd									2	0	0	0
Wadena							1	2	10	5	8	0
Unknown	0	21	4	112	2	5	289	30	12	28	2	1
Total	1,243	746	528	778	1,159	1,771	942	1,773	2,761	2,695	1,725	1,674

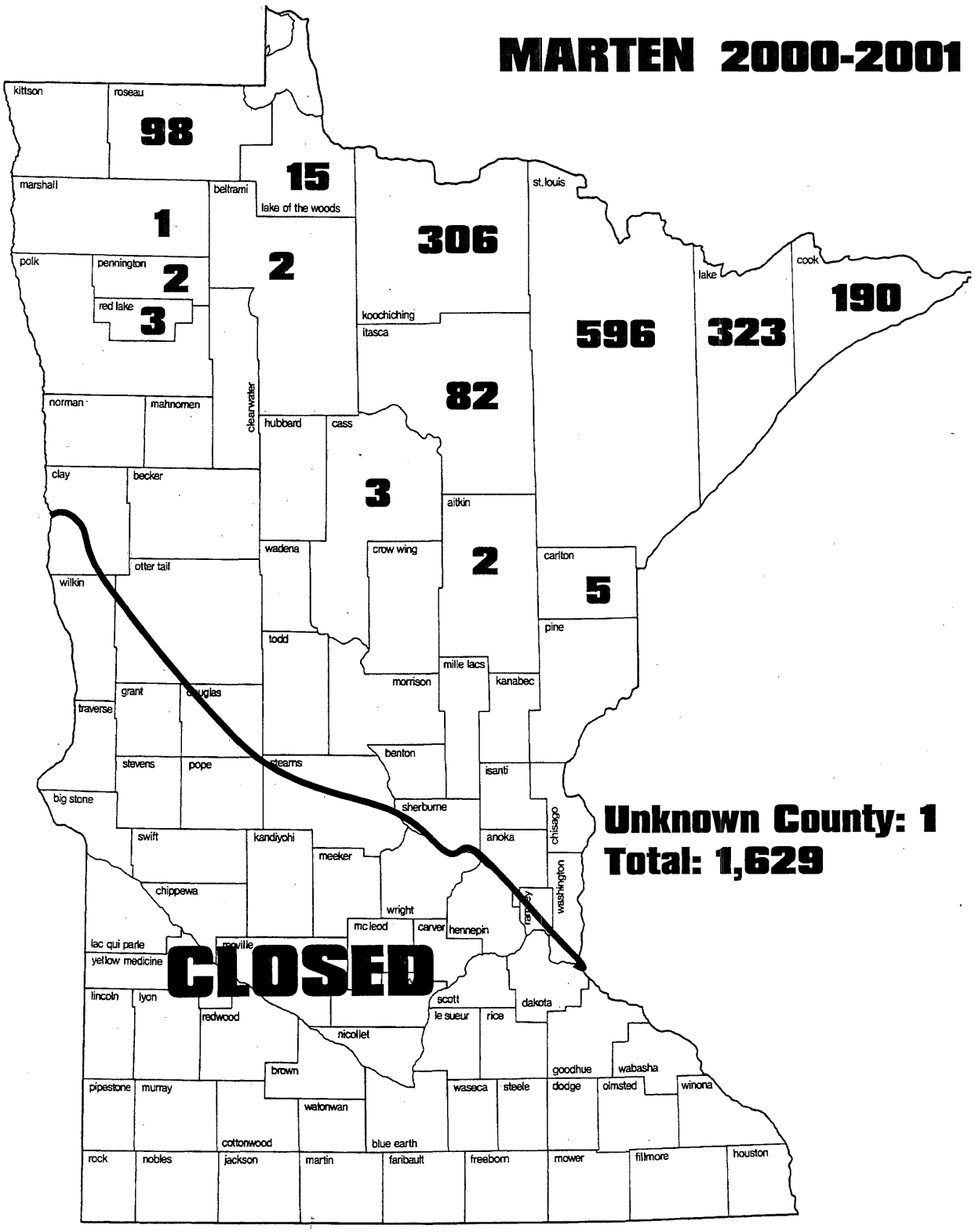

Figure 51. Marten harvest by county, 2000-2001

Table 83. Marten harvest by date and sex, 2000-01 season, in Minnesota.

Date	Sex			% of Known Total	Cumulative Total	Percent
	Male	Female	Unknown			
Dec. 2	8	7	0	15	1	1
Dec. 3	147	62	2	211	13	14
Dec. 4	137	61	1	199	12	26
Dec. 5	88	38	0	126	8	34
Dec. 6	92	58	0	150	9	43
Dec. 7	69	36	0	105	7	50
Dec. 8	80	35	0	115	7	57
Dec. 9	106	59	0	165	10	67
Dec. 10	91	38	0	129	8	75
Dec. 11	49	26	0	75	5	80
Dec. 12	31	21	0	52	3	83
Dec. 13	21	24	0	45	3	86
Dec. 14	39	24	0	63	4	90
Dec. 15	34	21	0	55	3	93
Dec. 16	45	12	0	57	4	97
Dec. 17	30	17	1	48	3	100
Unknown	7	7	5	19	-	-
Total	1,074	546	9	1,629	100	100

Table 84. Marten harvest by county and sex, 2000-01 season, in Minnesota.

	Sex			
County	Male	Female	Unknown	Total
Aitkin	1	1	0	2
Beltrami	1	1	0	2
Carlton	4	1	0	5
Cass	1	2	0	3
Cook	126	58	6	190
Crow Wing	0	0	0	0
Itasca	49	32	1	82
Koochiching	199	107	0	306
Lake	222	101	0	323
Lake of the Woods	11	4	0	15
Marshall	1	0	0	1
Pennington	0	2	0	2
Red Lake	3	0	0	3
Roseau	64	34	0	98
St. Louis	391	203	2	596
Unknown	1	0	0	1
Total	1,074	546	9	1,629

Table 85. Comparison of marten harvest by county in Minnesota, 1990-91 through 2000-01.

County	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01
Aitkin	----------Closed----------								1	2	2
Beltrami	0	0	1	0	1	0	2	12	12	37	2
Carlton	----------Closed----------								3	6	5
Cass	----------Closed----------								1	2	3
Cook	178	69	180	133	164	156	116	195	208	240	190
Crow Wing										3	0
Itasca	16	12	28	43	41	26	83	164	155	114	82
Koochiching	123	115	206	232	313	251	382	597	517	492	306
Lake	446	123	357	252	299	252	234	287	284	284	323
Lake of the Woods	0	0	0	1	2	0	0	12	26	58	15
Marshall	----------Closed----------									1	1
Pennington											2
Red Lake											3
Roseau	----------Closed----------								41	51	98
St. Louis	567	336	666	771	707	396	797	980	1,020	1,131	596
Unknown	19	1	164	6	0	419	11	14	31	2	1
Total	1,349	656	1,602	1,438	1,527	1,500	1,625	2,261	2,299	2,423	1,629

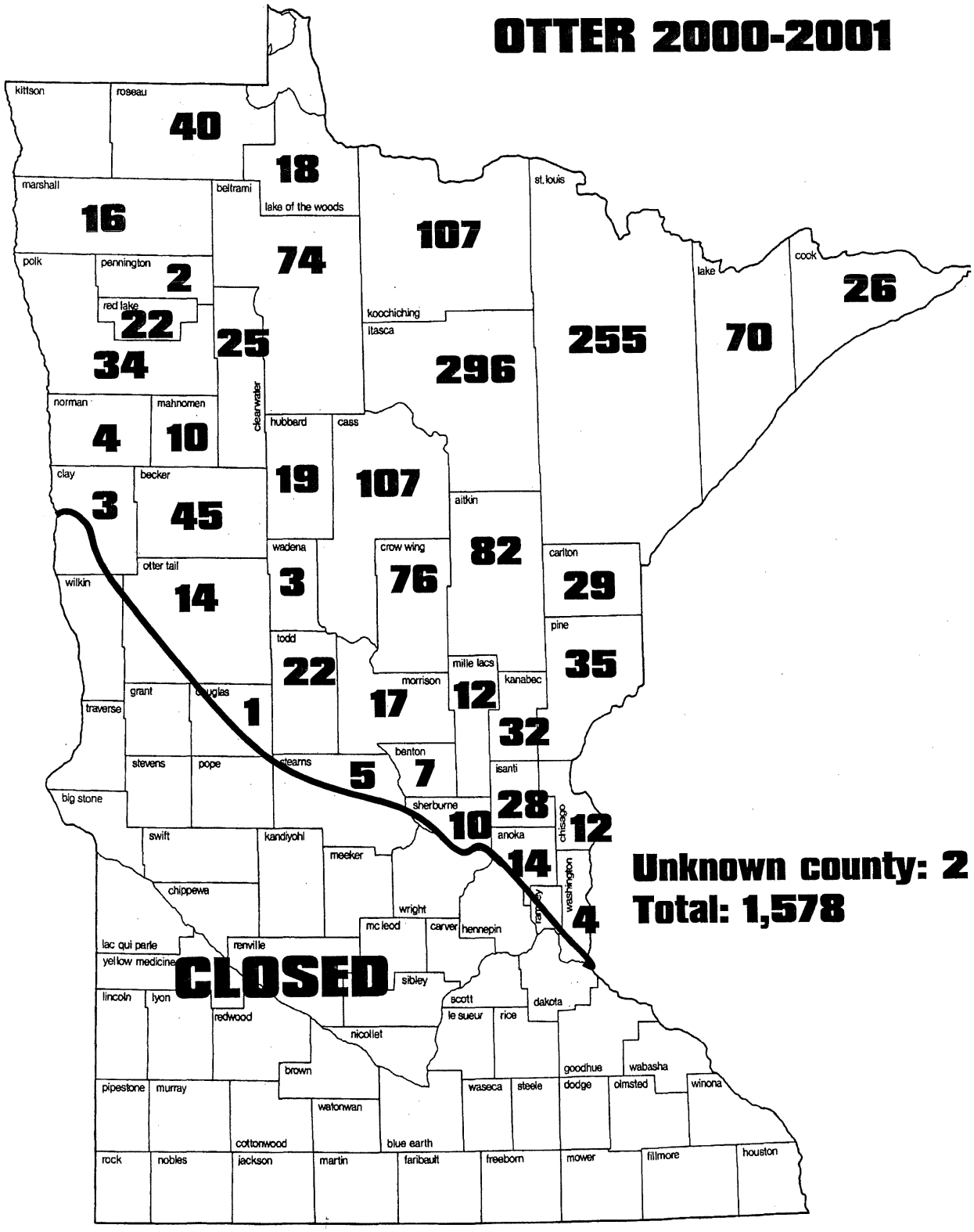

Figure 52. Otter harvest by county, 2000-2001.

Table 86. Otter harvest by 5-day interval and sex, 2000-01 season.

Interval	Sex			Total	% of Known Total	Cumulative Percent
	Male	Female	Unknown			
Oct. 8-Nov.1	83	51	0	134	9	9
Nov. 2 - 6	121	109	1	231	15	24
Nov. 7- 11	127	93	0	220	14	38
Nov. 12-16	94	58	2	154	10	48
Nov. 17-21	73	46	0	119	7	55
Nov. 22-26	89	68	0	157	10	65
Nov. 27-Dec. 1	63	53	0	116	7	72
Dec. 2-6	63	50	0	113	7	79
Dec. 7- 11	82	55	1	138	9	88
Dec. 12-16	30	26	0	56	4	92
Dec. 17-21	23	18	0	41	3	95
Dec. 22-26	19	10	0	29	2	97
Dec. 27-31	13	13	0	26	2	99
Jan. 1-5	11	5	0	16	1	100
Jan. 6-7*	1	3	0	4	0	100
Unknown	13	11	0	24	-	-
Total	905	669	4	1,578	100	100

* 2-day interval.

Table 87. Otter harvest by county and sex, 2000-01 season.

County	Sex			Total
	Male	Female	Unknown	
Aitkin	38	44	0	82
Anoka	7	7	0	14
Becker	26	17	2	45
Beltrami	36	38	0	74
Benton	2	5	0	7
Carlton	12	17	0	29
Cass	60	47	0	107
Chisago	4	8	0	12
Clay	1	2	0	3
Clearwater	16	9	0	25
Cook	17	9	0	26
Crow Wing	43	33	0	76
Douglas	1	0	0	1
Hubbard	12	7	0	19
Isanti	13	15	0	28
Itasca	180	116	0	296
Kanabec	16	16	0	32
Kittson	0	0	0	0
Koochiching	60	47	0	107
Lake	48	22	0	70
Lake of the Woods	13	5	0	18
Mahnomen	4	6	0	10
Marshall	12	4	0	16
Mille Lacs	8	3	1	12
Morrison	9	8	0	17
Norman	3	1	0	4
Ottertail	6	8	0	14
Pennington	2	0	0	2
Pine	18	17	0	35
Polk	16	18	0	34
Red Lake	14	8	0	22
Roseau	21	19	0	40
St. Louis	165	89	1	255
Sherburne	4	6	0	10
Stearns	2	3	0	5
Todd	11	11	0	22
Wadena	1	2	0	3
Washington	3	1	0	4
Unknown	1	1	0	2
Total	905	669	4	1,578

Table 88. Comparison of otter harvest by county, 1989-2000.

County	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Aitkin	62	49	44	78	70	83	57	78	95	87	103	82
Anoka	21	14	7	14	18	20	13	13	21	23	25	14
Becker	49	32	21	36	38	62	64	54	85	30	64	45
Beltrami	92	74	93	97	91	166	59	133	133	81	103	74
Benton	0	1	1	0	4	5	0	1	4	6	2	7
Carlton	13	25	23	39	38	40	17	33	43	39	45	29
Cass	130	73	67	107	114	184	124	184	189	149	109	107
Chisago	8	10	5	9	17	26	9	13	20	20	13	12
Clay								2	7	0	7	3
Clearwater	13	6	14	14	27	52	13	57	25	18	29	25
Cook	31	24	30	28	44	53	37	28	29	48	30	26
Crow Wing	65	40	41	83	75	111	59	73	84	81	77	76
Douglas	----------closed----------						2	5	7	7	1	1
Hubbard	39	45	34	44	30	43	48	89	95	28	23	19
Isanti	17	7	5	10	19	20	10	17	29	26	20	28
Itasca	207	108	110	193	259	432	245	383	371	339	220	296
Kanabec	30	18	11	24	32	57	13	20	43	24	29	32
Kittson	0	0	0	1	0	1	1	0	2	1	0	0
Koochiching	59	31	59	52	65	147	68	139	109	126	63	107
Lake	40	26	21	91	44	76	33	62	57	77	44	70
Lake of the Woods	11	6	21	15	1	20	9	16	24	32	36	18
Mahnomen	13	8	0	0	2	21	18	11	6	9	10	10
Marshall	3	0	2	6	7	13	3	14	14	5	8	16
Mille Lacs	12	7	10	5	16	40	7	27	18	17	15	12
Morrison	13	12	3	16	13	34	12	20	25	18	30	17
Norman	1	1	0	0	0	0	4	3	1	0	2	4
Ottertail	3	5	4	5	10	10	19	14	41	29	20	14
Pennington	1	1	1	0	0	0	0	5	6	2	10	2
Pine	64	49	12	76	52	92	59	72	73	62	21	35
Polk	10	7	12	14	28	33	36	45	35	23	21	34
Ramsey	0	1	0	0	0	0	0	0	0	0	0	0
Red Lake	4	0	5	2	5	8	1	9	9	7	8	22
Roseau	13	6	7	14	11	29	3	24	41	40	37	40
St. Louis	248	180	159	187	286	507	148	473	332	421	353	255
Sherburne	5	0	1	8	7	11	10	12	15	13	14	10
Stearns	----------closed----------						3	15	15	11	7	5
Todd	3	0	0	0	1	1	19	22	22	23	16	22
Wadena	7	5	7	2	4	3	9	14	8	6	13	3
Washington	4	3	1	3	0	1	0	7	4	6	4	4
Unknown	3	12	24	91	31	44	203	32	8	12	3	2
Total	1,294	888	855	1,368	1,459	2,445	1,435	2,219	2,145	1,946	1,635	1,578