

# *STATUS OF WILDLIFE POPULATIONS,*

04 - 0617

## *FALL 2004*

(INCLUDING 1998 - 2003 HUNTING AND TRAPPING HARVEST STATISTICS)



**MINNESOTA DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF FISH AND WILDLIFE  
ST. PAUL, MINNESOTA**

# STATUS OF WILDLIFE POPULATIONS, FALL 2004

(Including 1993-2003 Hunting and Trapping Harvest Statistics)



edited by  
Margaret H. Dexter

Minnesota Department of Natural Resources  
Division of Fish and Wildlife  
Saint Paul, Minnesota  
1 (888) 646-6367  
<http://www.dnr.state.mn.us>

© October, 2004 State of Minnesota, Department of Natural Resources

Equal opportunity to participate in and benefit from programs of the Minnesota Department of Natural Resources is available to all individuals regardless of race, color, creed, religion, national origin, sex, marital status, status with regard to public assistance, age, sexual orientation, membership or activity in a local commission, or disability. Discrimination inquiries should be sent to MN-DNR, 500 Lafayette Road, St. Paul, MN 55155-4031; or the Equal Opportunity Office, Department of the Interior, Washington, DC 20240.

Printed on recycled paper containing a minimum of 30% post-consumer waste and soy-based ink

This report should be cited as follows:

Dexter, M.H., editor. 2004. Status of wildlife populations, fall 2004. Unpub. Rep., Division of Fish and Wildlife, Minn. Dept. Nat. Res., St. Paul, Minnesota. 176 pp.

Note: Data in this report may change as a result of future verification and more comprehensive analysis.

## Status of Wildlife Populations, Fall 2004

(Including 1993-2003 Hunting and Trapping Harvest Statistics)

This is the 28<sup>th</sup> year that the 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 fieldwork 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.

Wetland Wildlife Populations and Research Group conduct much of the census and survey work for wetland species.

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

**Prairie Chickens:** Beginning in 2004, population survey procedures and efforts were standardized and census blocks redistributed to better document spatial connectivity and population responses to potential habitat changes. The new maps and tables are presented in the Farmland Wildlife Populations section. A conservative hunting season was also opened in 2004. The 5-day hunt was limited to 100 permits in 7 permit areas in northwestern Minnesota. Results of the hunt are presented in the Hunting Harvest Statistics section.

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

## CONTENTS

### Wildlife populations and surveys

Farmland wildlife .....	1
Wildlife Damage Complaints.....	33
Predator Scent Post Survey and winter track indices .....	41
Forest wildlife.....	51
Migratory birds.....	71

### History of hunting regulations

Waterfowl .....	93
-----------------	----

### Harvest statistics

Hunting.....	103
Trapping.....	147
Registered furbearers .....	155

## Index

	Page
August farmland roadside survey	
2004 data.....	3, 11-14
historical summary.....	4- 10
Badger	
hunting	
harvest.....	109, 110, 111
hunter success.....	110
number of hunters.....	108
take per hunter.....	109, 110
trapping	
harvest.....	153
number of trappers.....	151
pelt prices.....	154
take per trapper.....	152
Bear	
hunting	
harvest by quota area.....	143
number of hunters.....	144
permits issued.....	144
success by quota area.....	143, 144, 145
management units.....	145
wildlife damage complaints.....	35, 36, 38
Beaver	
pelt prices.....	61, 154
trapping	
harvest.....	153
number of trappers.....	151
take per trapper.....	152
Black duck	
hunting	
harvest, Minnesota, 2002-2003.....	114
Bobcat	
carcass examination data.....	59
harvest	
by county.....	158, 162
by method of take.....	161
distribution among takers by year.....	160
distribution by 5-day increments.....	159
registered take.....	59, 153, 157
pelt prices.....	59, 154
population data.....	58, 59
population model.....	58
scent post indices.....	47, 59
winter track indices.....	49, 59
Bufflehead	
hunting	
harvest, Minnesota, 2002-2003.....	114

Canvasback	
breeding populations, North America.....	85, 86
hunting	
harvest, Minnesota, 2002-2003 .....	114
Cat, domestic	
survey, scent post indices.....	44-46
Coot, American	
hunting	
harvest.....	111
number of hunters.....	108
take per hunter .....	109, 110
Cottontail, eastern	
hunting	
harvest.....	111
number of hunters.....	108
take per hunter .....	109, 110
survey	
August roadside .....	5, 9, 12-14
Coyote	
pelt price .....	154
hunting	
harvest.....	111
number of hunters.....	108
take per hunter .....	109, 110
trapping	
harvest.....	153
number of trappers.....	151
take per trapper.....	152
scent post indices .....	44-46
winter track indices .....	49
Crow, American	
hunting	
harvest.....	111
number of hunters.....	108
take per hunter .....	109, 110
Deer, white-tailed	
farmland/transition zone	
permit areas .....	19
productivity.....	20-22
spring population densities, estimates .....	23-27
survey, August roadside .....	6, 12-14
forest zone	
permit areas.....	66
spring population modeling, density estimates .....	67
hunting	
all season deer harvest by permit area.....	141-142
archery harvest by sub DMU and permit area.....	135-137
harvest and success rates.....	129, 130
licenses sold (firearms).....	128, 130
licenses sold (archery) .....	128, 130
muzzleloader harvest.....	129, 138-139
muzzleloader special permit area.....	140

Deer, white-tailed (cont.)	
registered harvest by sub DMU and permit area .....	131-134
wildlife damage complaints .....	35, 36, 39
Dog, domestic	
survey, scent post indices .....	44-46
Dove, mourning	
survey	
August roadside .....	6, 12-14
Duck stamp sales	
Minnesota (federal and state) .....	111
Ducks	
breeding populations	
Minnesota .....	73-76
North America .....	84-86
hunting	
harvest	
Ranking of six most numerically important species, 1961-2003 .....	117-118
Minnesota .....	111
nonresidents in Minnesota .....	113
per hunter, Minnesota .....	109, 110
top 10 states, 2003 .....	115
number of hunters	
Minnesota .....	108, 115
nonresidents in Minnesota .....	113
Mississippi flyway	
active hunters .....	115
hunter days .....	115
top 10 states, 2003 .....	115
Ermine (see Weasel, short-tailed)	
Fisher	
carcass examination data .....	63
pelt prices .....	63, 154
population data .....	62, 63
population model .....	62
trapping	
permits issued .....	157
registered take .....	63, 153, 157
take by county .....	163, 165, 166
take by county and sex .....	165
take by date and sex .....	164
winter track indices .....	49, 63
Fox, gray	
hunting	
harvest .....	111
number of hunters .....	108
take per hunter .....	109, 110
hunter success .....	110
pelt prices .....	154

Fox, gray (cont.)	
trapping	
harvest .....	153
number of trappers .....	151
take per trapper .....	152
Fox, red	
hunting	
harvest .....	111
number of hunters .....	108
take per hunter .....	109, 110
hunter success .....	110
pelt prices .....	154
survey	
scent post indices .....	44-46
winter track indices .....	49
trapping	
harvest .....	153
number of trappers .....	151
take per trapper .....	152
Gadwall	
breeding populations, North America .....	84, 86
hunting	
harvest, Minnesota, 2002-2003 .....	114
Gallinules (see Rails and Gallinules)	
Goldeneye	
hunting	
harvest, Minnesota, 2002-2003 .....	114
Goose, Canada	
hunting	
harvest, Minnesota .....	111, 116
harvest by flyway .....	116
hunter days .....	116
number of hunters, Minnesota .....	108, 116
number of hunters, nonresident in Minnesota .....	113
hunter success .....	110
take per hunter, Minnesota .....	109, 110, 116
take per nonresident hunter .....	113
Top 10 states, 2003 .....	116
breeding populations	
Eastern Prairie Population breeding survey, 1971-72 thru 2003-04 .....	77, 78, 79
Minnesota Canada goose density estimates .....	80, 81
wildlife damage complaints .....	35, 37, 40
Goose, other than Canada	
hunting	
harvest, Minnesota .....	111
number of hunters .....	108
take per hunter .....	109, 110
hunter success .....	110



Grouse, ruffed	
hunting	
harvest.....	111
number of hunters.....	108
number of nonresident hunters.....	113
hunter success.....	110
take per hunter.....	109, 110
take per nonresident hunter.....	113
survey, Spring drumming.....	53-55
Grouse, sharp-tailed	
hunting	
harvest.....	111
number of hunters.....	108
take per hunter.....	109, 110
hunter success.....	110
survey	
Spring dancing ground.....	56
Grouse, spruce	
hunting	
harvest.....	111
number of hunters.....	108
take per hunter.....	109, 110
hunter success.....	110
Hare, snowshoe	
hunting	
harvest.....	111
number of hunters.....	108
take per hunter.....	109, 110
hunter success.....	110
survey.....	57
winter track indices.....	49
Hunters, deer	
hunting success.....	129
licenses sold (firearms, archery).....	128, 130
Hunters, small game	
harvest.....	111
license sales.....	111, 112
mail survey response.....	106, 107
numbers hunting and not hunting.....	107, 108
take per hunter.....	109, 110
success rates.....	110
Hunters, trends.....	105
Hunters, nonresident small game	
harvest.....	113
licenses sold.....	113
mail survey response.....	113

Hunters, waterfowl	
ducks retrieved per hunter-day	
Minnesota .....	115
Mississippi flyway .....	115
top 10 states .....	115
United States .....	115
duck stamp sales	
Minnesota .....	111
harvest by flyway	
all duck harvest .....	114
all goose harvest .....	116
harvest by species, Minnesota .....	114
hunter-days	
Minnesota .....	115, 116
Mississippi flyway .....	115, 116
top 10 states .....	115, 116
United States .....	115, 116
number of hunters	
Minnesota .....	115, 116
Mississippi flyway .....	115
nonresidents in Minnesota .....	113
top 10 states .....	115, 116
United States .....	115, 116
Jackrabbit, white-tailed	
hunting	
harvest .....	111
hunter success .....	110
number of hunters .....	108
take per hunter .....	109, 110
survey	
August roadside .....	5, 10, 12-14
Lynx	
pelt prices .....	154
trapping	
registered harvest, .....	153
Mallard (domestic)	
hunting	
harvest, Minnesota .....	114
Mallard (wild)	
breeding populations	
Minnesota .....	73, 74
North America .....	84, 86
hunting	
harvest, Minnesota, 2002-2003 .....	114
ranking of six most numerically important species, 1961-2003 .....	117-118
Marten, pine	
carcass examination data .....	65
pelt prices .....	65, 154
population data .....	65
population model .....	64

Marten, pine (cont.)	
trapping	
permits issued .....	157
registered harvest .....	65, 153, 157, 167
take by county .....	167, 169 170
take by county and sex .....	169
take by date and sex .....	168
winter track indices .....	49, 69
Merganser, hooded	
hunting	
harvest, Minnesota, 2002-2003 .....	114
Merganser, other than hooded	
hunting	
harvest, Minnesota, 2002-2003 .....	114
Mink	
pelt prices .....	154
trapping	
harvest .....	153
number of trappers .....	151
take per trapper .....	152
Moose	
hunting, 1985-2003	
harvest .....	146
license applications .....	146
licenses issued .....	146
party success .....	146
sex ratio of moose killed .....	146
survey, aerial	
area boundaries .....	68
population estimates .....	68, 69
Muskrat	
pelt prices .....	154
trapping	
harvest .....	153
number of trappers .....	151
take per trapper .....	152
Opossum	
pelt prices .....	154
trapping	
harvest .....	153
number of trappers .....	151
take per trapper .....	152
Otter	
pelt prices .....	61, 154
population data .....	61
population model .....	60
trapping	
permits issued .....	157
registered take .....	61, 153, 157
take by county .....	171, 173, 174-175
take by county and sex .....	173
take by date and sex .....	172

Partridge, gray	
hunting	
harvest.....	111
hunter success.....	110
number of hunters.....	108
take per hunter .....	109, 110
survey	
August roadside .....	4, 8, 12-14
Pelt prices of furbearers, 1989-90 thru 2003-04.....	154
Pheasant, ring-necked	
hunting	
harvest.....	4, 111
harvest by nonresident hunters.....	113
hunter success.....	110
number of hunters.....	108
number of nonresident hunters .....	113
take per hunter .....	109, 110
take per nonresident hunter .....	113
survey	
August roadside	
agricultural region data.....	3, 7, 12-14
birds observed per 100 miles driven.....	3, 4, 7, 12-14
broods	
observed per 100 miles driven .....	12
observed per 100 hens.....	12
mean size.....	12
cocks observed per 100 miles driven.....	12
hatch date.....	12
hens observed per 100 miles driven.....	12
Pheasant stamp sales.....	111
Pintail	
breeding populations, North America.....	85, 86
hunting	
harvest, Minnesota, 2002-2003.....	114
Ponds, May (North Central U.S. and Prairie Canada) .....	82, 83, 85
Prairie chicken, greater	
survey	
Spring booming grounds.....	15-18
hunting	
area open to hunting by zone.....	127
harvest.....	126
number of permits available.....	126
applicants .....	126
number of permits issued.....	126
success rate.....	126
take by sex.....	126
Predator scent post survey	
indices .....	43-47
route locations .....	43
Rabbit (see Cottontail, eastern; Hare, snowshoe; and Jackrabbit, white-tailed)	

Raccoon	
hunting	
harvest.....	111
harvest by nonresident hunters.....	113
hunter success.....	110
number of hunters.....	108
number of nonresident hunters.....	113
take per hunter.....	109, 110
take per nonresident hunter.....	113
pelt prices.....	154
trapping	
harvest.....	153
number of trappers.....	151
take per trapper.....	152
survey, scent post indices.....	44-46
Rails/gallinules	
hunting	
harvest.....	111
hunter success.....	110
number of hunters.....	108
take per hunter.....	109, 110
Redhead	
breeding populations, North America.....	85, 86
hunting	
harvest, Minnesota, 2002-2003.....	114
Registered furbearers	
harvest.....	58-65, 153, 155-175
permits issued.....	157
population data.....	58-65
Ring-necked duck	
hunting	
harvest, Minnesota, 2002-2003.....	114
ranking of six most numerically important species, 1961-2003.....	117-118
Ruddy duck	
hunting	
harvest, Minnesota, 2002-2003.....	114
Scaup, greater	
breeding populations, North America.....	85, 86
hunting	
harvest, Minnesota, 2002-2003.....	114
Scaup, lesser	
breeding populations, North America.....	85, 86
hunting	
harvest, Minnesota, 2002-2003.....	114
ranking of six most numerically important species, 1961-2003.....	117-118
Scent post survey (see Predator scent post survey)	
Scoter	
hunting	
harvest, Minnesota, 2002-2003.....	114

Shoveler, northern	
breeding populations, North America .....	85, 86
hunting	
harvest, Minnesota, 2002-2003 .....	114
Skunk, spotted	
pelt prices .....	154
trapping	
harvest .....	153
number of trappers .....	151
take per trapper .....	152
Skunk, striped	
pelt prices .....	154
survey	
scent post indices .....	44-46
trapping	
harvest .....	153
number of trappers .....	151
take per trapper .....	152
Snipe, common	
hunting	
harvest .....	111
hunter success .....	110
number of hunters .....	108
take per hunter .....	109, 110
Squirrel, fox	
hunting	
harvest .....	111
hunter success .....	110
number of hunters .....	108
take per hunter .....	109, 110
Squirrel, gray	
hunting	
harvest .....	111
hunter success .....	110
number of hunters .....	108
take per hunter .....	109, 110
Teal, blue-winged	
breeding populations	
Minnesota .....	75, 76
North America .....	84, 86
hunting	
harvest, Minnesota, 2002-2003 .....	114
ranking of six most numerically important species, 1961-2003 .....	117-118
Teal, green-winged	
breeding populations, North America .....	84, 86
hunting	
harvest, Minnesota, 2002-2003 .....	114
ranking of six most numerically important species, 1961-2003 .....	117-118

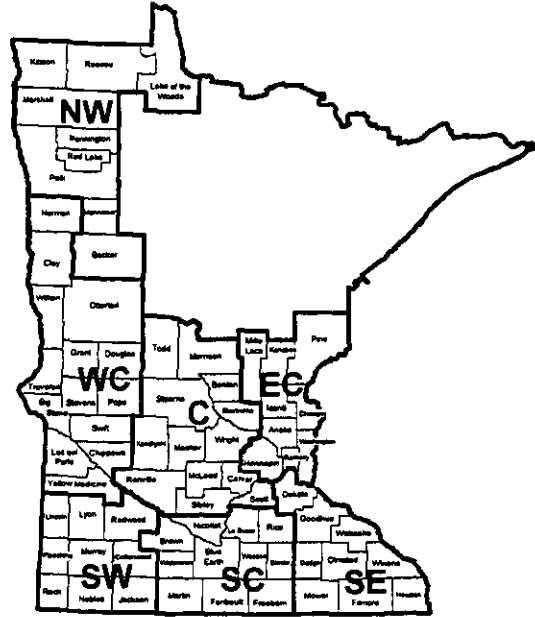
Trappers	
harvest.....	153
license sales.....	153
mail survey response.....	149, 150
number trapping.....	150, 151
take per trapper.....	152
Turkey, wild	
Fall hunting	
area open to hunting by zone.....	123, 125
harvest.....	123, 124
number of permits available.....	123
number of permits issued.....	123
success rate.....	123
take by sex.....	124
Spring hunting	
area open to hunting by zone.....	119, 122
harvest.....	119, 120-121
number of permits available.....	119, 120-121
number of permit applicants.....	119
number of persons hunting.....	119
success rate.....	119
Survey, HOWT (Hunters observing wild turkeys).....	28-32
Waterfowl (see Ducks; duck by species name; Geese; and Hunters, waterfowl)	
History of hunting regulations, 1915-2004.....	93-101
Weasel, long-tailed	
pelt prices.....	154
trapping	
harvest.....	153
number of trappers.....	151
take per trapper.....	152
winter track indices.....	49
Weasel, short-tailed	
pelt prices.....	154
trapping	
harvest.....	153
number of trappers.....	151
take per trapper.....	152
winter track indices.....	49
Wigeon, American	
breeding populations, North America.....	84, 86
hunting	
harvest, Minnesota, 2002-2003.....	114
ranking of six most numerically important species, 1961-2003.....	117-118
Wildlife damage complaints, bear, deer, goose.....	35-40
Winter track indices.....	48-49
Wolf, gray	
survey	
scent post indices.....	47
winter track indices.....	49

Woodcock, American	
singing ground survey results .....	88, 89, 91
breeding range .....	87, 91
hunting	
days afield.....	90
harvest.....	90, 111
hunter success.....	110
number of hunters.....	90, 108
take per hunter .....	109, 110
recruitment .....	89
Wood duck	
hunting	
harvest, Minnesota, 2002-2003 .....	114
ranking of six most numerically important species, 1961-2003 .....	117-118



FARMLAND WILDLIFE POPULATIONS  
Wildlife Populations and Research Group  
Route 1, Box 181  
Madelia, MN 56062  
(507) 642-8478

# Pheasants/100



<u>RANGEWIDE</u>	
2004	57
2003	108
1994-2003	59
1955-1964	288
LTA (1955-2003)	104
<u>% change from:</u>	
2003	-47
1993-2003	-2
1955-1964	-80
LTA	-45

<u>WEST CENTRAL</u>	
2004	45
2003	82
1994-2003	37
1955-1964	346
LTA (1955-2003)	107
<u>% change from:</u>	
2003	-45
1993-2003	22
1955-1964	-87
LTA	-58

<u>CENTRAL</u>	
2004	39
2003	88
1994-2003	44
1955-1964	190
LTA (1955-2003)	75
<u>% change from:</u>	
2003	-55
1993-2003	-11
1955-1964	-79
LTA	-47

<u>EAST CENTRAL</u>	
2004	41
2003	56
1994-2003	47
1955-1964	184
LTA (1955-2003)	90
<u>% change from:</u>	
2003	-27
1993-2003	-12
1955-1964	-78
LTA	-54

<u>SOUTHWEST</u>	
2004	123
2003	244
1994-2003	91
1955-1964	356
LTA (1955-2003)	112
<u>% change from:</u>	
2003	-50
1993-2003	35
1955-1964	-65
LTA	10

<u>SOUTH CENTRAL</u>	
2004	74
2003	137
1994-2003	83
1955-1964	409
LTA (1955-2003)	141
<u>% change from:</u>	
2003	-46
1993-2003	-12
1955-1964	-82
LTA	-48

<u>SOUTHEAST</u>	
2004	29
2003	48
1994-2003	57
1955-1964	129
LTA (1955-2003)	83
<u>% change from:</u>	
2003	-40
1993-2003	-49
1955-1964	-77
LTA	-65

Figure 1. Ring-necked pheasants seen per 100 miles of August Roadside Survey and percent change from 2003, 10-yr mean (1994-2003), benchmark (1955-1964), and long-term average (1955-2003). Benchmark reflects soil-bank years with marginal cropland in long-term set-aside, a diversified agricultural landscape, more small grains and tame hay, and less pesticide use. Note: estimates are based on all routes completed and, thus, may differ from values in Table 2 and 3 (full report), which were based on routes directly comparable among years (i.e., unaltered routes with few or no missing survey years).

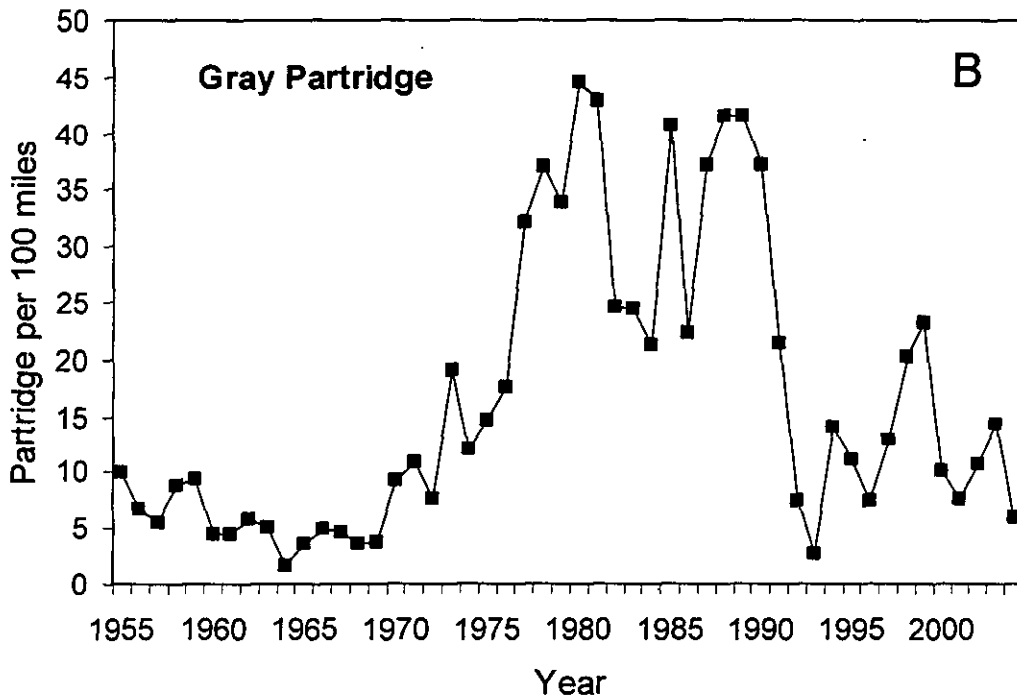
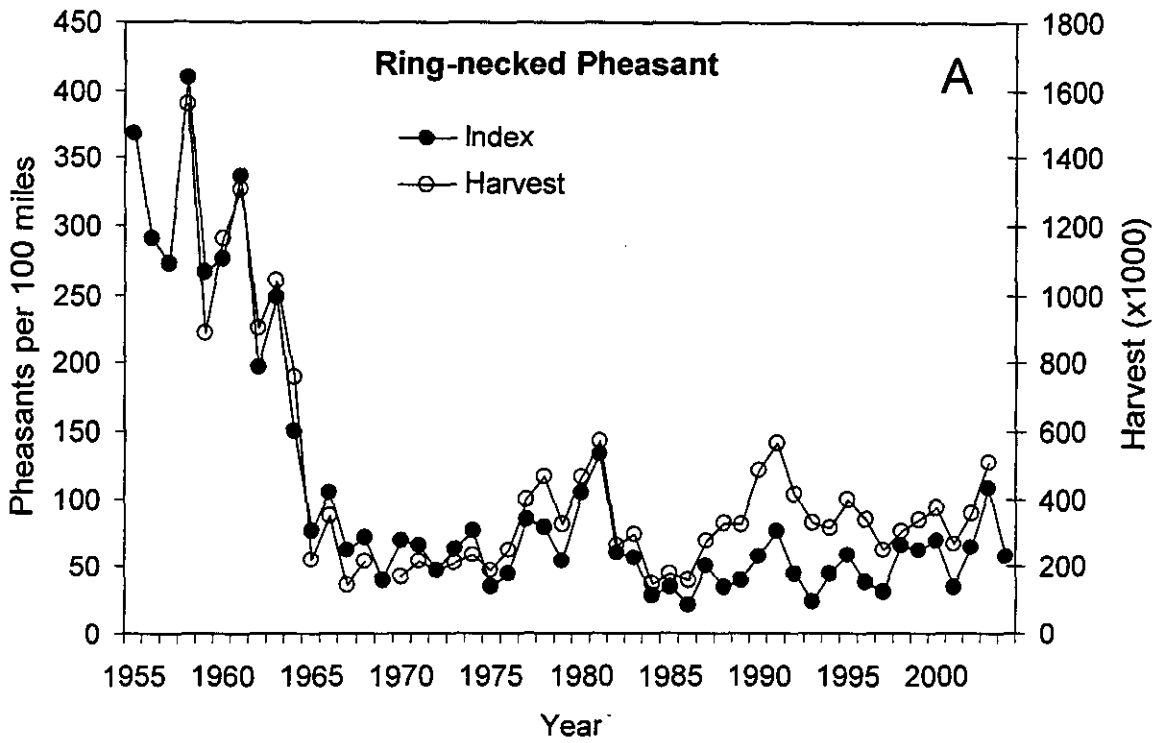


Figure 2. Statewide index of ring-necked pheasants (A) and gray partridge (B) seen per 100 miles driven. Does not include the Northwest region. Based on all survey routes completed.

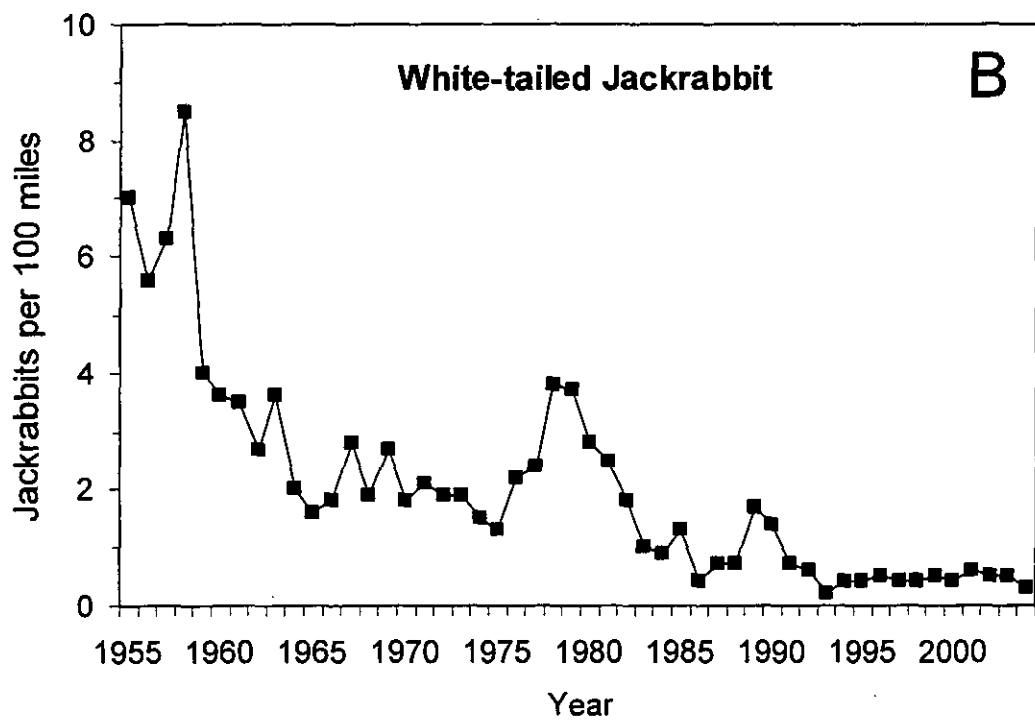
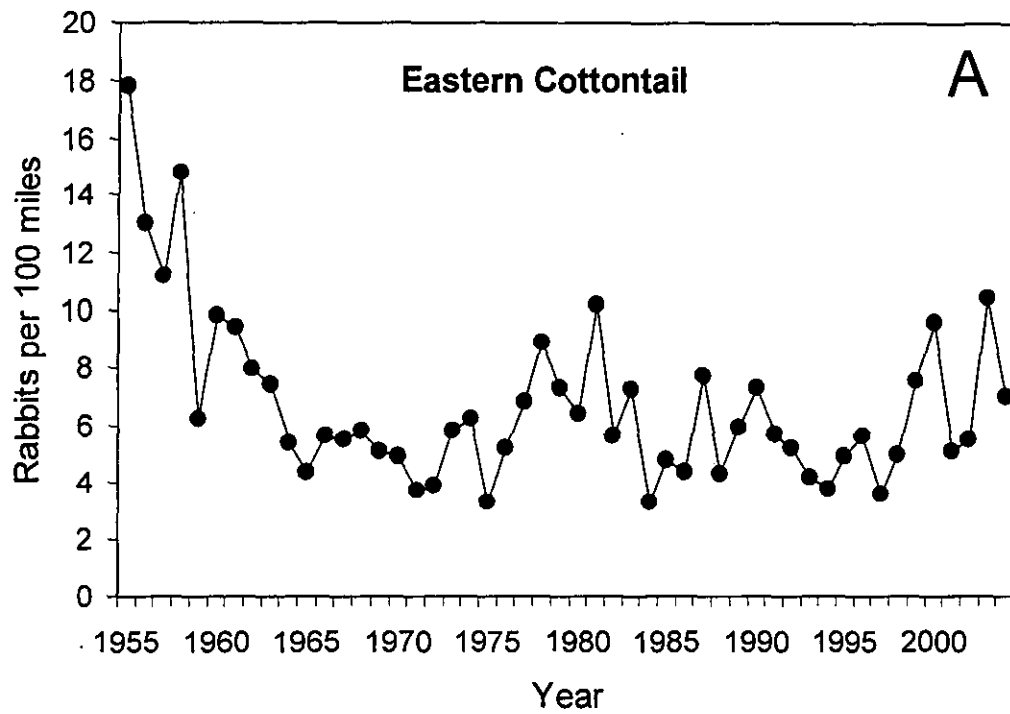


Figure 3. Statewide index of eastern cottontail (A) and white-tailed jackrabbits (B) seen per 100 miles driven. Does not include the Northwest region. Based on all survey routes completed.

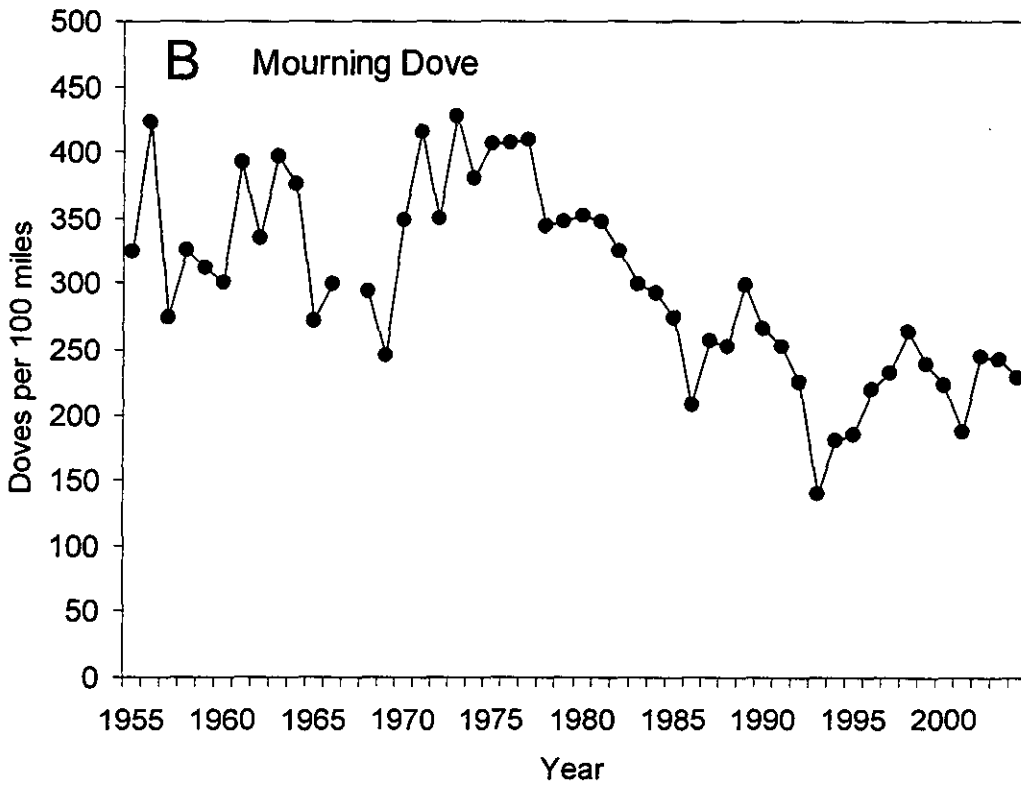
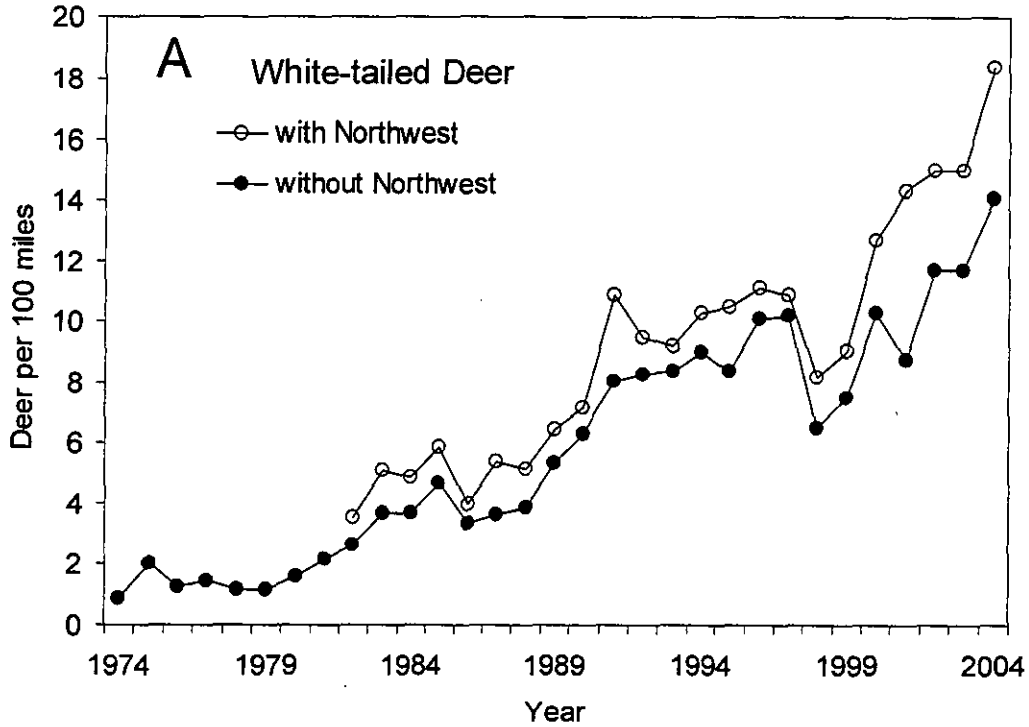


Figure 4. Statewide index of white-tailed deer (A) and mourning doves (B) seen per 100 miles driven. Doves were not counted in 1967 and the dove index does not include the Northwest region. Based on all survey routes completed.

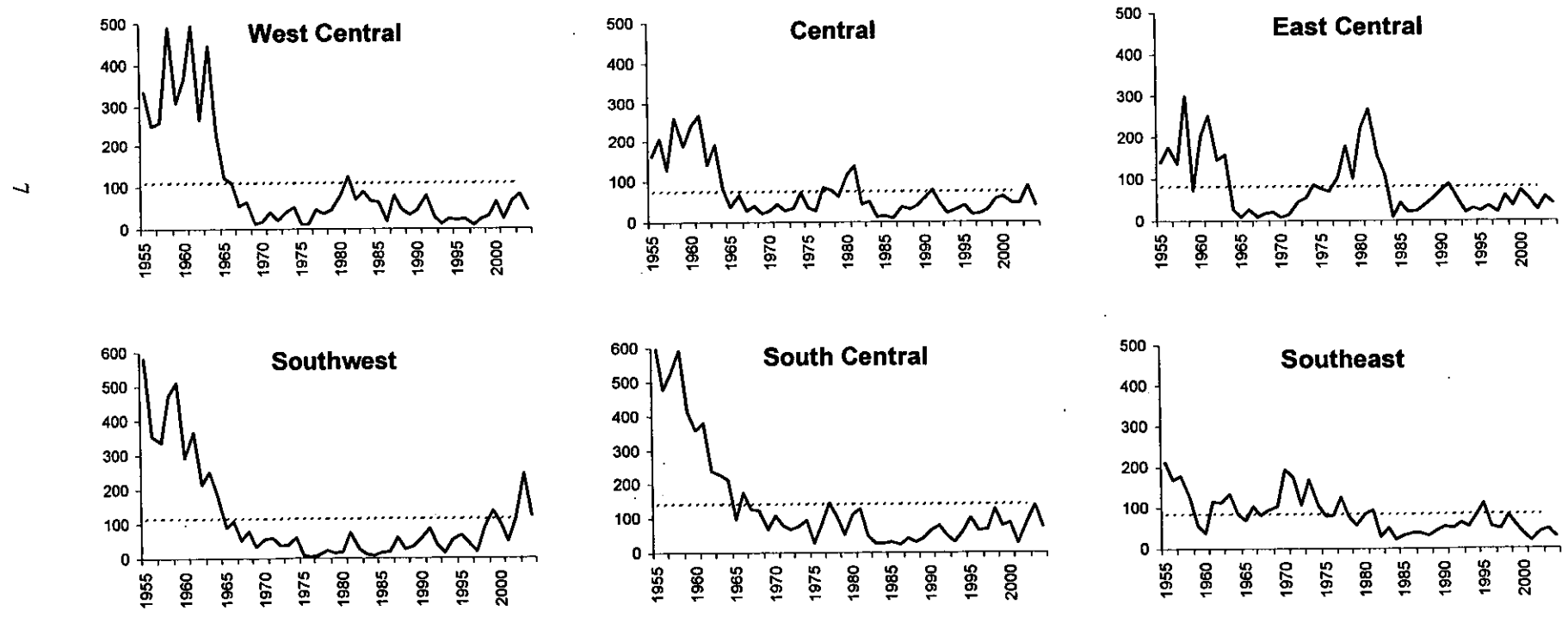
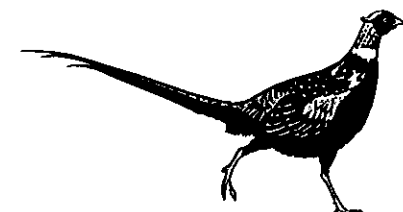


Figure 5. Regional index (—) and long-term average (.....) of ring-necked pheasants seen per 100 miles driven, Minnesota August roadside survey (1955-present). Based on all survey routes completed.

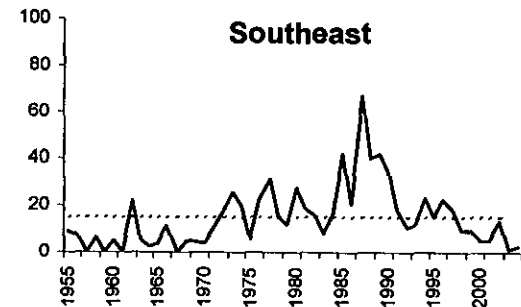
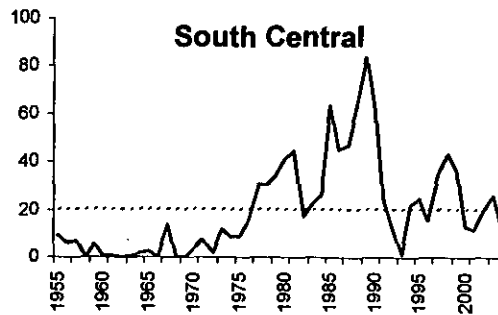
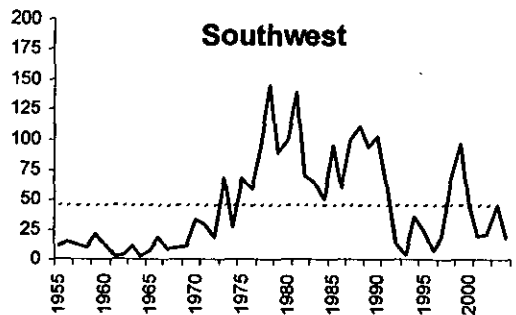
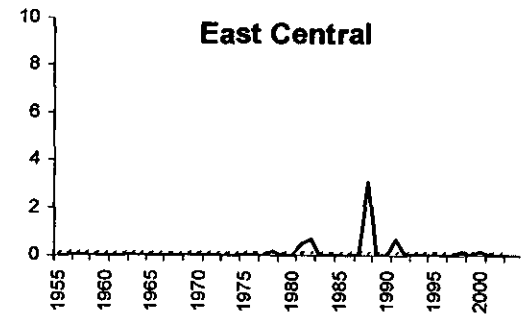
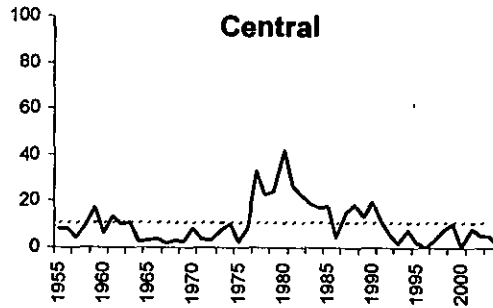
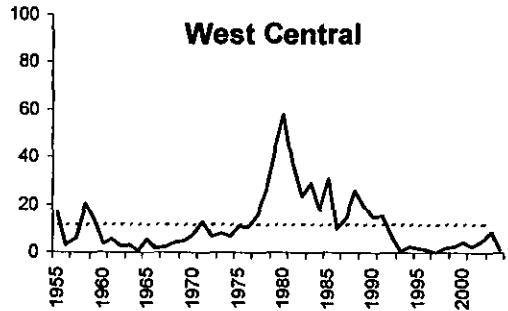
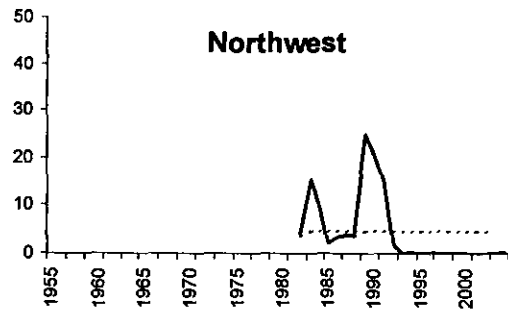
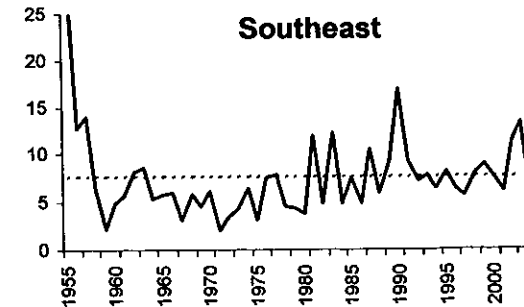
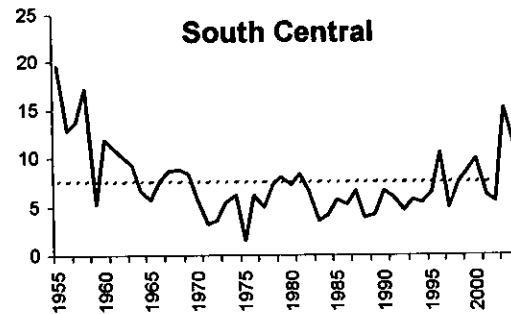
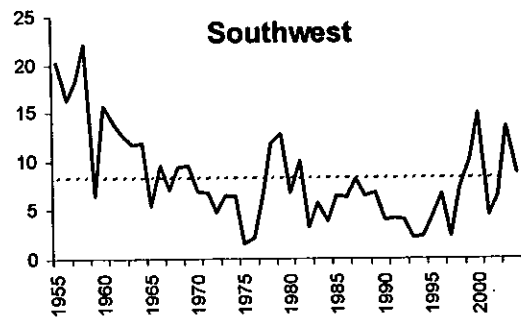
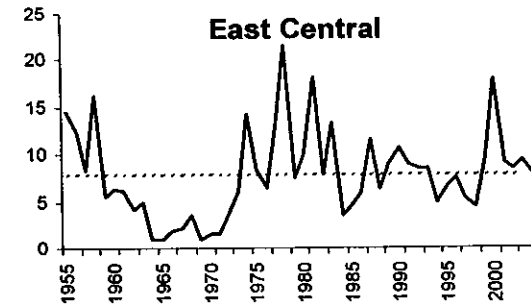
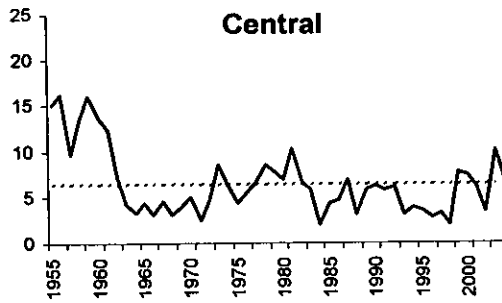
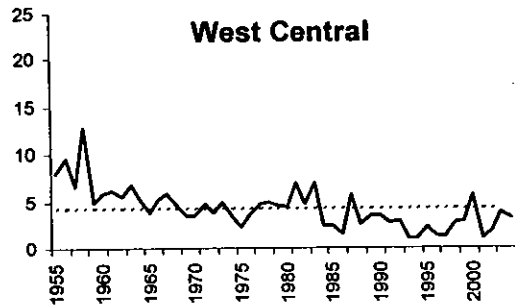
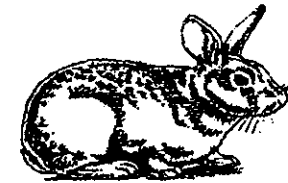
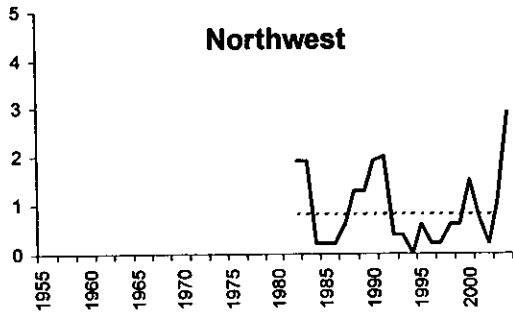


Figure 6. Regional index ( — ) and long-term average ( ····· ) of gray partridge seen per 100 miles driven, Minnesota August roadside survey (1955-present). Based on all survey routes completed. Note: scale of vertical axis is not the same among survey regions.



6

Figure 7. Regional index (—) and long-term average (.....) of cottontail rabbits seen per 100 miles driven, Minnesota August roadside survey (1955-present). Based on all survey routes completed. Note: scale of vertical axis is not the same among survey regions.



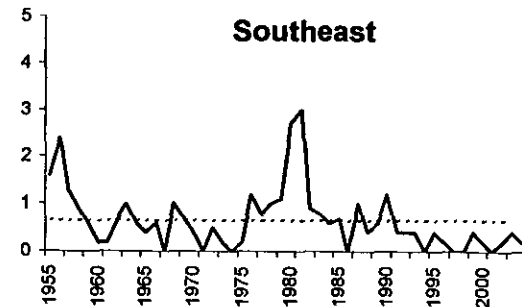
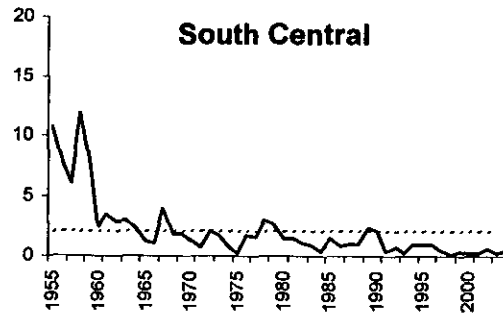
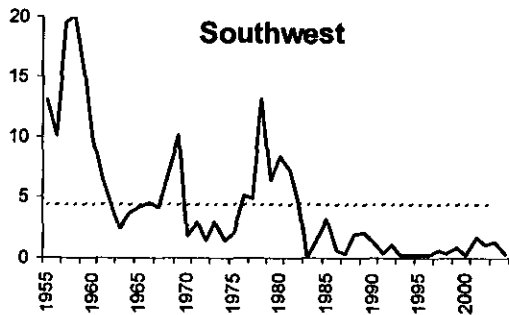
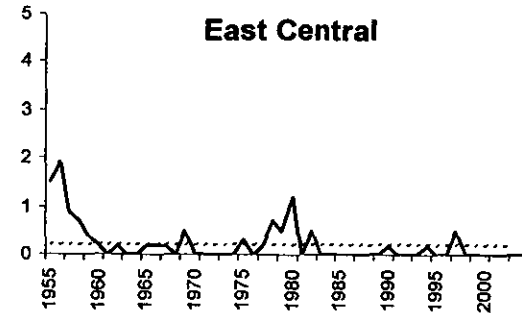
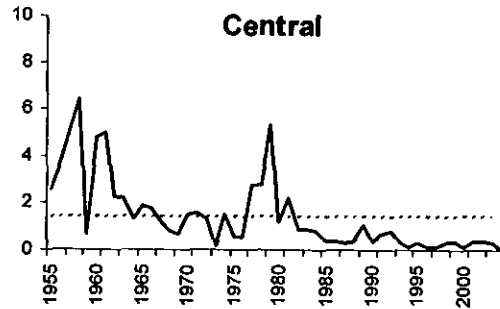
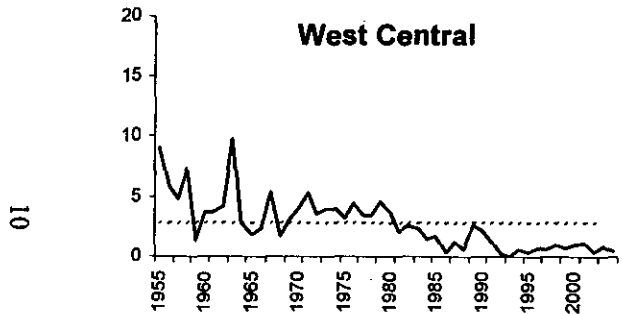
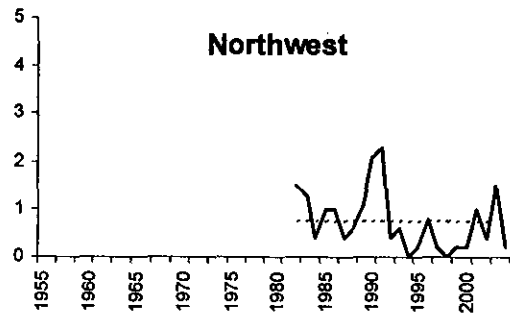


Figure 8. Regional index (—) and long-term average (.....) of white-tailed jackrabbits seen per 100 miles driven, Minnesota August roadside survey (1955-present). Based on all survey routes completed. Note: scale of vertical axis is not the same among survey regions.



Table 1. Abundance (total acres) and density (acres/mi<sup>2</sup>) of undisturbed grassland habitat within the pheasant range, 2004<sup>a</sup>.

AGREG	Cropland retirement					USFWS <sup>c</sup>	MNDNR <sup>d</sup>	Total	%	Density (ac/mi <sup>2</sup> )
	CRP	CREP	RIM	RIM-WRP	WRP					
WC <sup>b</sup>	173,033	37,379	14,325	822	11,199	151,624	95,507	483,888	7.1	45.6
SW	121,775	22,040	9,786	579	969	11,958	49,265	216,371	5.7	36.6
C	151,149	14,490	14,839	714	2,767	42,670	41,631	268,260	4.4	28.4
SC	178,512	26,557	9,882	3,796	8,187	5,775	29,168	261,876	6.5	41.5
SE	150,841	0	4,841	554	541	74	44,065	200,916	5.4	34.7
EC	91,524	0	779	0	4	0	82,163	174,470	5.4	34.8
Total	866,833	100,465	54,452	6,465	23,665	212,101	341,799	1,605,781	5.8	37.3

<sup>a</sup> Unpublished data, Tabor Hoek, BWSR, 17 February 2004.

<sup>b</sup> Does not include Norman County.

<sup>c</sup> Includes Waterfowl Production Areas (WPA) and USFWS easements, but does not include USFWS refuges.

<sup>d</sup> MNDNR Wildlife Management Areas (WMA).

Table 2. Statewide trends (% change) in number of wildlife observed per 100 miles driven, Minnesota August roadside survey, 1955-2004.

Species Subgroup	Change from 2003 <sup>a</sup>					Change from 10-year average <sup>b</sup>				Change from long-term average <sup>c</sup>			
	<i>n</i>	2003	2004	%	95% CI	<i>n</i>	1994-03	%	95% CI	<i>n</i>	LTA	%	95% CI
<b>Ring-necked pheasant</b>													
Total pheasants	153	108.0	57.1	-47	±12	151	59.0	-2	±16	142	107.2	-44	±10
Cocks		8.8	8.4	-5	±17		5.0	70	±27		12.2	-28	±12
Hens		15.1	10.6	-26	±15		8.0	34	±24		15.4	-27	±14
Broods		16.7	9.2	-45	±13		9.0	4	±17		13.7	-29	±13
Chicks per brood		5.0	4.2	-17			5.2	-20			5.7	-27	
Broods per 100 hens		110.9	86.5	-21			112.8	-23			101.8	-15	
Median hatch date		Jun 07	Jun 07				Jun 07						
<b>Gray partridge</b>													
Total partridge	172	12.7	5.3	-58	±26	170	11.9	-55	±21	142	17.4	-63	±19
Adults		2.9	2.3	-24	±27		3.0	-24	±23		4.4	-38	±20
Broods		1.0	0.5	-49	±29		1.1	-51	±25		1.5	-57	±22
Chicks per brood		9.3	5.7	-45			8.2	-30			9.0	-37	
Broods per 100 adults		35.4	23.7	-27			36.1	-34			33.6	-29	
Median hatch date		Jun 22	Jun 23				Jun 24						
<b>Eastern cottontail</b>	172	9.4	6.6	-29	±20	170	5.5	21	±25	142	6.9	6	±22
<b>White-tailed jackrabbit</b>	172	0.7	0.3	-54	±50	170	0.5	-32	±38	142	2.1	-85	±15
<b>White-tailed deer</b>	172	15.0	18.4	22	±22	170	11.8	58	±23	147	5.7	149	±43
<b>Mourning dove</b>	172	225.4	209.2	-7	±12	170	208.0	1	±11	142	281.5	-17	±12

<sup>a</sup> Includes Northwest region, except for pheasants. Estimates based on routes (*n*) surveyed in both years.

<sup>b</sup> Includes Northwest region, except for pheasants. Estimates based on routes (*n*) surveyed at least 9 of 10 years.

<sup>c</sup> LTA = 1955-2003, except for deer = 1974-2003. Does not include Northwest region (8 counties in Northwest were added to survey in 1982). Estimates for all species except deer based on routes (*n*) surveyed ≥40 years; estimates for deer based on routes surveyed ≥25 years.

Table 3. Regional trends (% change) in number of wildlife observed per 100 miles driven, Minnesota August roadside survey, 1955-2004.

Region Species	Change from 2003 <sup>a</sup>					Change from 10-year average <sup>b</sup>				Change from long-term average <sup>c</sup>			
	<i>n</i>	2003	2004	%	95% CI	<i>n</i>	1994-03	%	95% CI	<i>n</i>	LTA	%	95% CI
<b>Northwest<sup>d</sup></b>													
Gray partridge	19	0.2	0.0			19	0.0	0.2		19	4.7	-96	±72
Eastern cottontail		1.1	2.9	180	±402		0.6	403	±700		0.8	254	±489
White-tailed jackrabbit		1.5	0.2	-86	±98		0.5	-55	±111		0.8	-73	±78
White-tailed deer		41.7	53.1	27	±56		30.2	76	±54		23.2	128	±75
Mourning dove		87.0	60.5	-31	±28		84.4	-28	±24		137.0	-56	±19
<b>West Central</b>													
Ring-necked pheasant	37	82.2	45.1	-45	±30	35	38.2	25	±37	33	14.2	-41	±20
Gray partridge		8.5	1.3	-85	±78		3.1	-56	±71		11.6	-87	±25
Eastern cottontail		3.8	3.2	-15	±55		2.5	39	±63		4.5	-23	±36
White-tailed jackrabbit		0.9	0.5	-38	±67		0.7	-24	±60		2.8	-83	±21
White-tailed deer		13.0	14.4	11	±51		12.4	22	±44		7.7	91	±75
Mourning dove		290.9	259.8	-11	±25		319.7	-17	±19		415.9	-35	±19
<b>Central</b>													
Ring-necked pheasant	31	88.1	39.5	-55	±24	31	44.3	-11	±37	25	10.4	-40	±31
Gray partridge		5.0	1.3	-74	±124		5.1	-75	±77		10.6	-85	±39
Eastern cottontail		10.2	7.0	-32	±42		5.1	36	±59		6.6	14	±57
White-tailed jackrabbit		0.3	0.0	-100	±114		0.3	-100	±62		1.5	-100	±23
White-tailed deer		8.2	7.3	-11	±57		5.7	29	±44	30	3.6	103	±75
Mourning dove		178.7	198.0	11	±38		178.5	11	±25	25	243.2	-10	±25
<b>East Central</b>													
Ring-necked pheasant	14	56.0	40.9	-27	±37	14	47.6	-14	±58	14	12.0	-48	±32
Gray partridge		0.0	0.0				0.1	-100	±147		0.2	-100	±133
Eastern cottontail		9.4	8.0	-15	±58		8.8	-9	±52		8.4	-5	±54
White-tailed jackrabbit		0.0	0.0				0.0				0.3	-100	±59
White-tailed deer		15.7	21.7	38	±60		12.3	77	±85		6.6	229	±174
Mourning dove		85.7	102.3	19	±32		89.6	14	±34		130.0	-21	±35

Table 3. Continued.

Region Species	Change from 2003					Change from 10-year average				Change from long-term average			
	<i>n</i>	2003	2004	%	95% CI	<i>n</i>	1994-03	%	95% CI	<i>n</i>	LTA	%	95% CI
<b>Southwest</b>													
Ring-necked pheasant	19	243.8	122.9	-50	±26	19	90.9	35	±39	19	14.3	38	±40
Gray partridge		44.9	18.8	-58	±42		37.8	-50	±30		45.5	-59	±23
Eastern cottontail		13.5	8.8	-34	±52		7.2	23	±57		8.3	6	±53
White-tailed jackrabbit		1.3	0.4	-67	±158		0.7	-37	±117		4.4	-90	±26
White-tailed deer		14.5	17.4	20	±62		9.8	77	±81		6.7	161	±120
Mourning dove		342.4	276.7	-19	±47		263.7	5	±44		310.8	-11	±41
<b>South Central</b>													
Ring-necked pheasant	32	136.7	73.9	-46	±23	32	83.5	-12	±32	31	18.2	-34	±27
Gray partridge		26.2	12.9	-51	±36		24.7	-48	±36		20.9	-36	±59
Eastern cottontail		15.1	11.3	-25	±39		8.0	41	±61		7.5	55	±67
White-tailed jackrabbit		0.3	0.5	100	±204		0.5	-7	±95		2.0	-75	±29
White-tailed deer		8.0	8.4	5	±38		4.9	72	±66		3.0	185	±116
Mourning dove		256.3	247.6	-3	±21		212.0	17	±30	31	253.7	-1	±30
<b>Southeast</b>													
Ring-necked pheasant	20	48.2	29.0	-40	±52	20	56.6	-49	±34	20	10.7	-52	±31
Gray partridge		1.0	2.4	140	±356		12.2	-80	±55		15.4	-84	±36
Eastern cottontail		13.4	5.0	-63	±62		8.2	-39	±41		7.9	-37	±41
White-tailed jackrabbit		0.4	0.2	-50	±239		0.2	11	±269		0.7	-71	±74
White-tailed deer		15.4	24.8	61	±43		15.3	62	±46		8.5	192	±107
Mourning dove		244.9	223.8	-9	±21		199.3	12	±26		229.0	-2	±25

<sup>a</sup> Based on routes (*n*) surveyed in both years.

<sup>b</sup> Based on routes (*n*) surveyed at least 9 of 10 years.

<sup>c</sup> LTA = 1955-2003, except for Northwest region (1982-2003) and white-tailed deer (1974-2003). Estimates based on routes (*n*) surveyed ≥40 years (1955-2003), except for Northwest (≥20 years) and white-tailed deer (≥25 years).

<sup>d</sup> Eight Northwestern counties (19 routes) were added to August roadside survey in 1982.

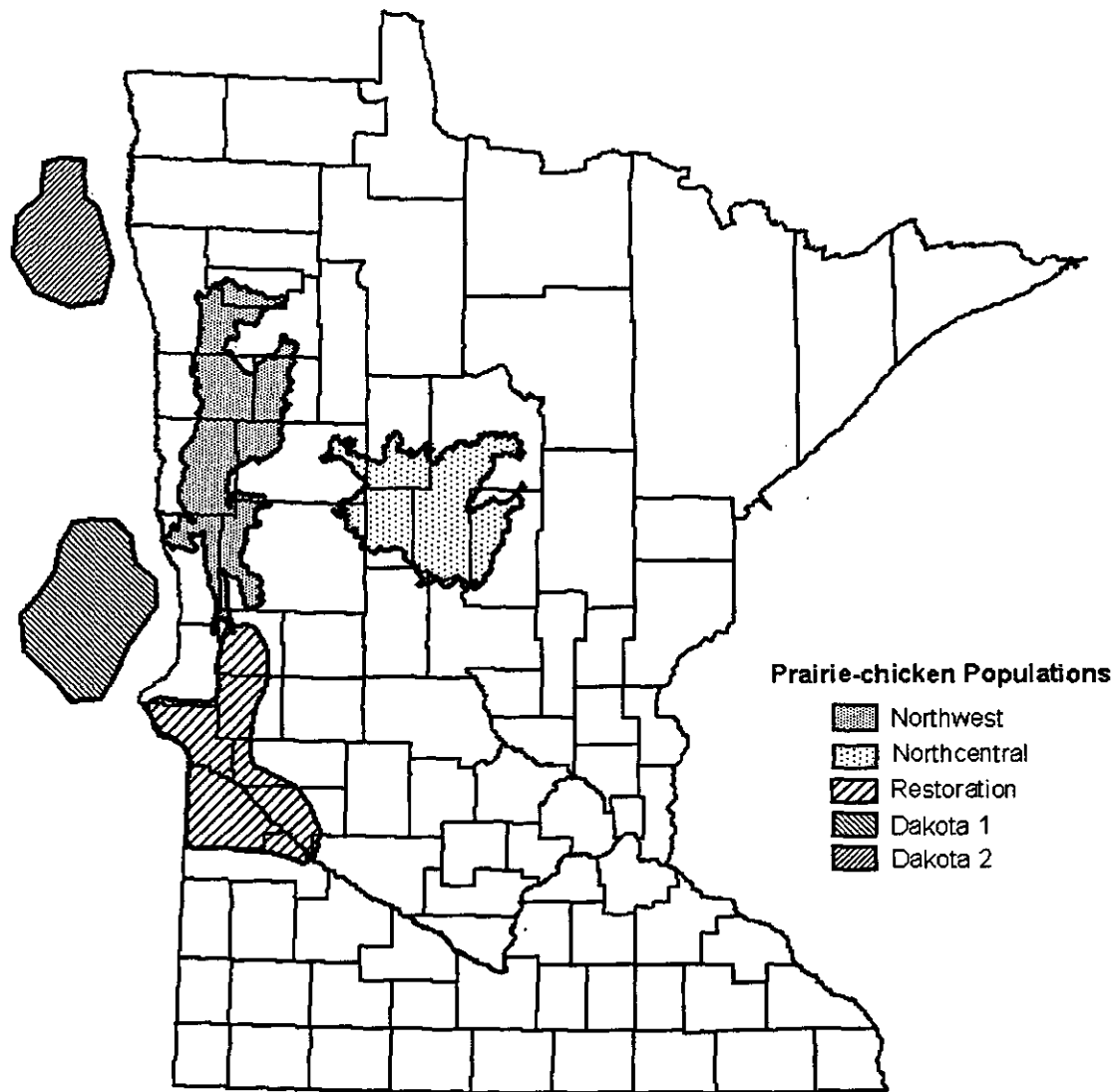


Figure 9. Distribution of greater prairie-chicken populations in Minnesota and adjacent populations in North and South Dakota. Delineations for the Northwest and Northcentral populations were based on ecological Land Type Associations and historic lek locations (1964-1999); delineations of other populations were based on an unpublished map.

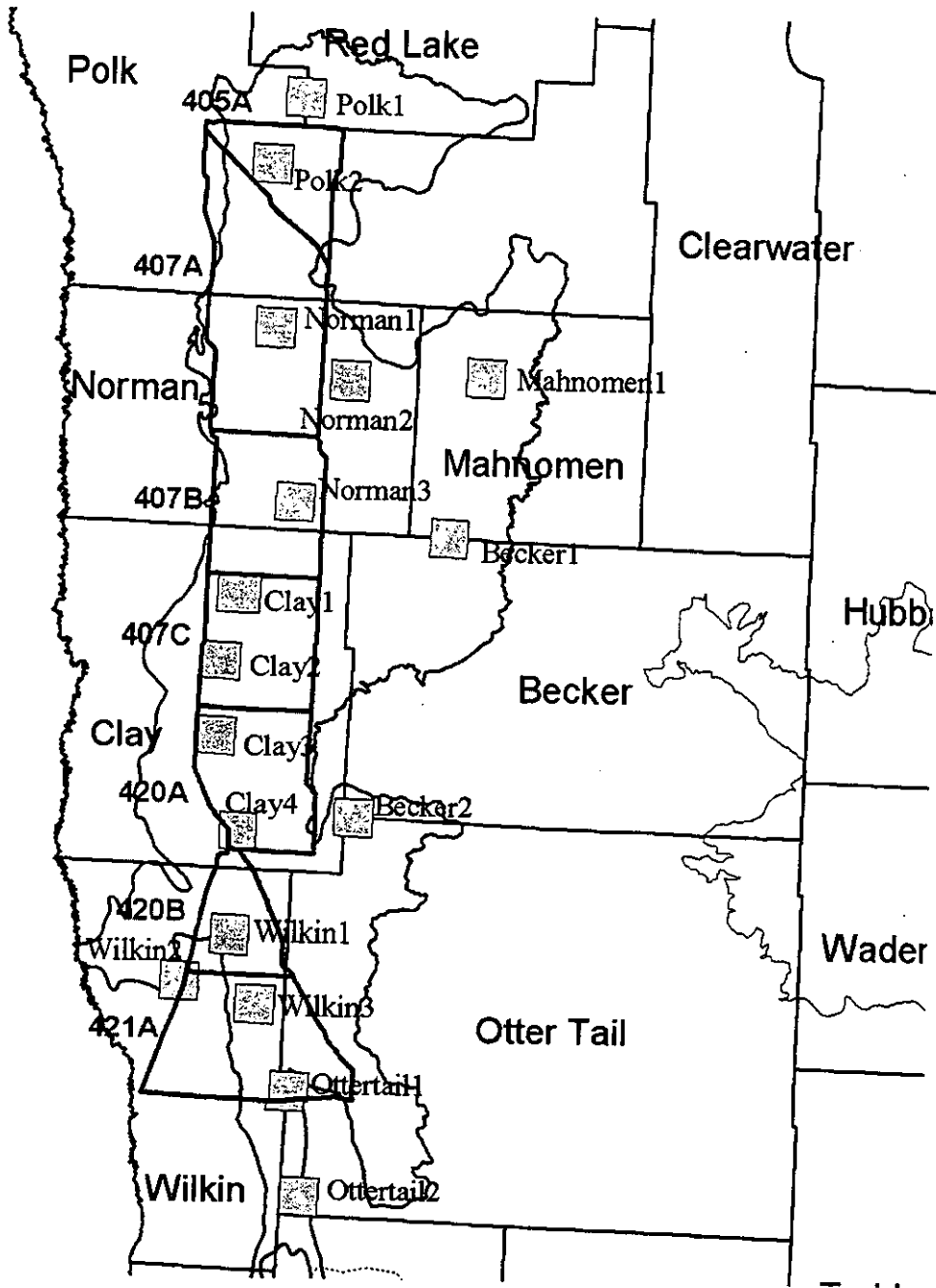


Figure 10. Distribution of 17 census blocks and 7 permit zones in Minnesota's northwest prairie-chicken range. Each census block is approximately 16 mi<sup>2</sup>.

Table 4. Prairie-chicken leks and males/lek by census block, Minnesota, 1976-2004<sup>a</sup>.

Census block	2004		2002 <sup>b</sup>		10-yr average (1993-2002)					Long-term average (1976-2002)				
	Leks	Males /lek	Leks	Males /lek	n (yrs)	Leks	SE <sup>c</sup>	Males /lek	SE <sup>c</sup>	n (yrs)	Leks	SE <sup>c</sup>	Males /lek	SE <sup>c</sup>
Becker1	4	5.3	2	9.0	6	2.5	0.4	9.7	0.7	21	3.7	0.4	11.8	1.0
Becker2	6	10.5	3	14.0	5	2.4	0.4	10.9	1.5	5	2.4	0.4	10.9	1.5
Clay1	8	19.9	5	14.6	10	4.1	0.3	11.5	1.0	27	4.3	0.3	12.3	0.7
Clay2	2	62.0	2	35.5	10	3.8	0.3	14.8	2.6	25	2.9	0.3	13.8	1.2
Clay3	8	28.4	10	13.9	10	5.9	0.7	12.6	1.1	20	4.1	0.6	11.4	0.9
Clay4	6	15.7	4	16.0	10	2.8	0.2	10.4	1.1	15	2.3	0.3	8.8	1.0
Mahnomen1	3	7.7	1	25.0	7	1.0	0.0	13.1	2.3	22	2.3	0.3	11.2	1.0
Norman1	1	8.0	2	11.0	10	1.2	0.1	11.1	1.0	15	1.3	0.2	9.9	1.0
Norman2	14	7.7	5	8.8	8	2.9	0.4	10.3	1.1	8	2.9	0.4	10.3	1.1
Norman3	6	11.3	8	8.5	10	4.6	0.4	9.1	0.6	27	4.1	0.2	16.1	1.8
Ottertail1	3	15.7	2	19.0	10	2.0	0.3	10.2	1.5	23	1.6	0.2	6.8	0.9
Ottertail2	3	21.7	2	16.5	8	1.6	0.2	8.0	1.8	12	1.5	0.2	6.8	1.3
Polk1	7	13.9	4	11.8	10	3.0	0.5	8.4	0.9	20	2.6	0.4	7.0	0.7
Polk2	7	15.0	5	8.4	10	4.8	0.2	10.9	0.6	27	3.6	0.2	9.7	0.5
Wilkin1	10	21.5	6	21.7	10	5.1	0.5	18.7	1.0	25	4.6	0.3	16.0	0.8
Wilkin2	2	14.0	2	9.0	9	2.3	0.3	8.8	1.0	19	1.7	0.2	9.7	1.4
Wilkin3	5	22.8	6	19.2	9	4.2	0.3	18.0	1.0	25	3.4	0.3	16.5	1.1
Average <sup>d</sup>	5.6	17.7	4.1	15.4		3.2	0.3	11.5	0.7		2.9	0.3	11.1	0.7

<sup>a</sup> Survey effort was variable from 1976-2003 and, thus, block-years with leks = 0 could represent true zeros or lack of survey effort. Therefore, ten-year and long-term averages included only block-years with at least 1 lek observation. Likewise, leks with males = 1 and leks heard but not visited were excluded from the analysis.

<sup>b</sup> Most recent year for which data were available for comparison.

<sup>c</sup> Does not include within-year variation (among leks).

<sup>d</sup> Mean and SE of row estimates.



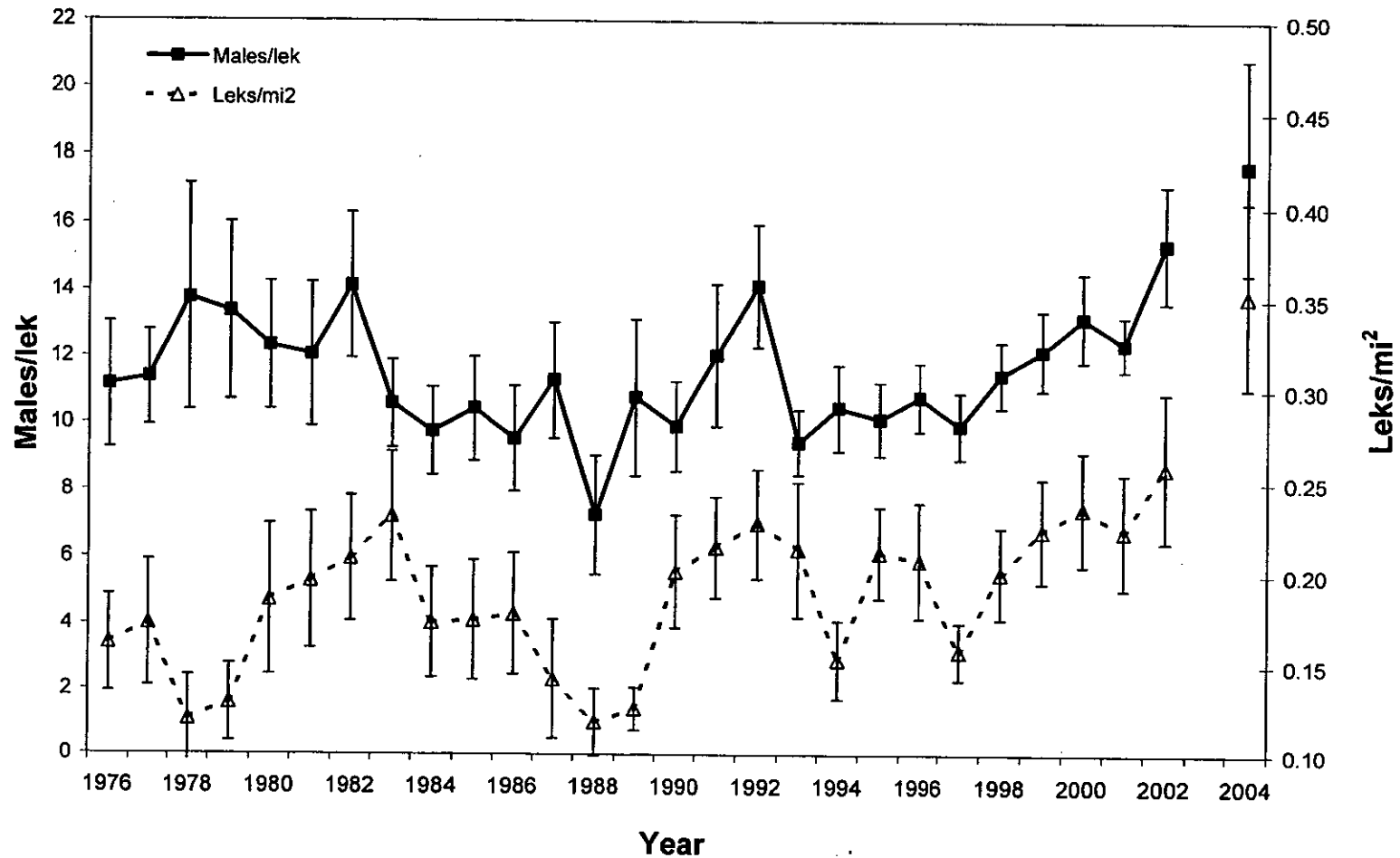


Figure 11. Mean ( $\pm 1$  SE) males/lek and leks/mi<sup>2</sup> based on census-block counts, Minnesota, 1976-2004. Survey effort varied prior to 2004; therefore, only census blocks with at least 1 lek observation/year were used in the analysis. Census blocks ( $n$ ) with at least 1 lek observation ranged from 8 in 1988 to 17 in 2004. Leks with males=1 and leks heard but not visited were excluded from the analysis. Absolute differences among years should be interpreted cautiously.

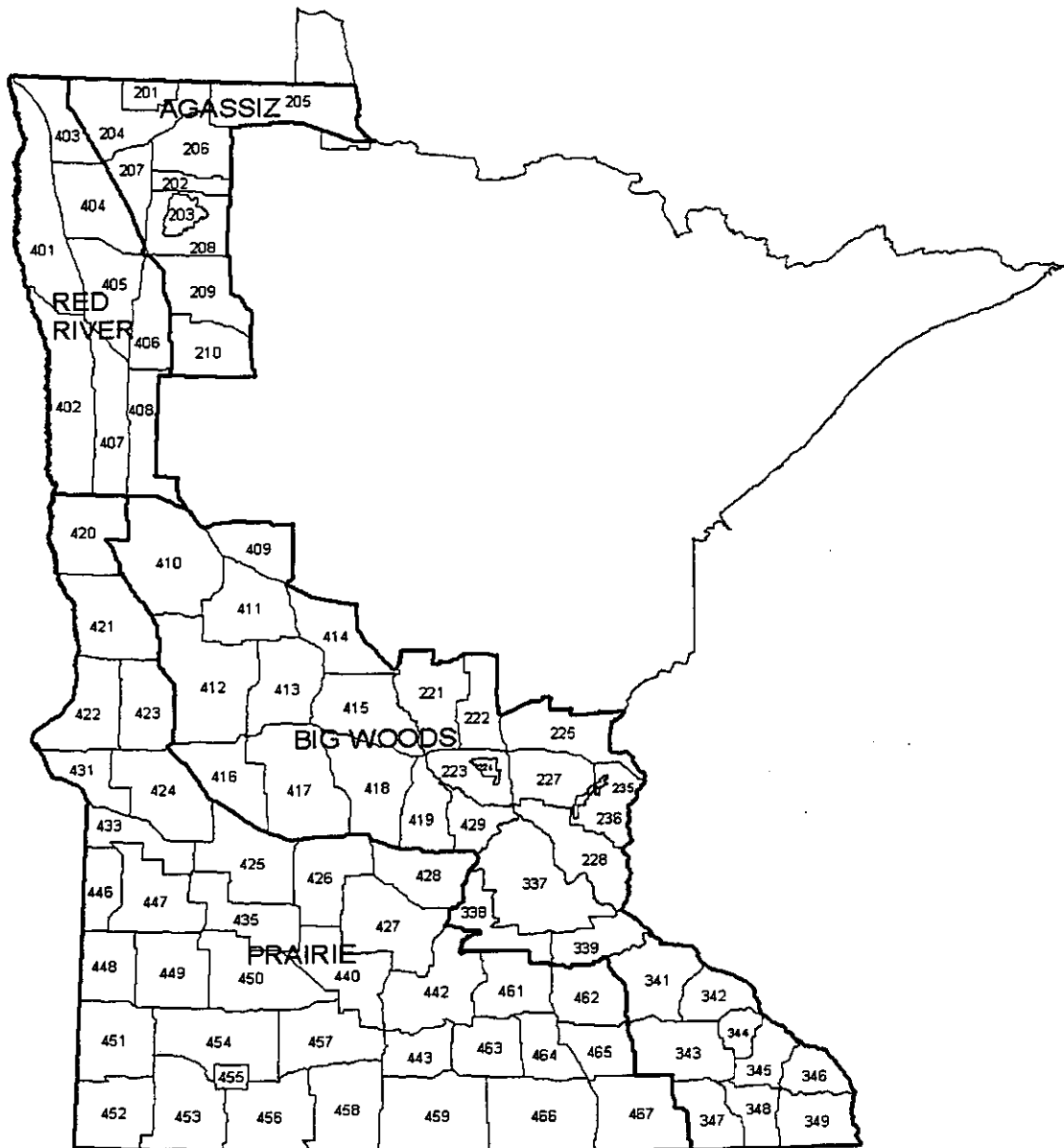


Figure 12. Deer Permit Areas in Minnesota's Farmland zone, 2003.

Table 5. Reproductive Performance of white-tailed deer in Minnesota for the Northwest<sup>a</sup> Deer Management Unit, 1980-2004.

Year	Fawns			Adults		
	N	Percent Pregnant	Fetuses per doe	N	Percent Pregnant	Fetuses per doe
1980	8	50	0.6	12	92	1.7
1981	4	0	0.0	11	100	1.7
1982	6	67	0.7	18	94	1.8
1983	15	27	0.3	26	85	1.6
1984	10	40	0.6	23	87	1.7
1985	6	17	0.2	11	91	1.7
1986	3	0	0.0	6	83	1.3
1987	3	0	0.0	5	100	1.6
1988	3	33	0.3	4	50	0.8
1989	14	21	0.3	27	93	1.7
1990	18	22	0.2	29	93	1.7
1991	11	9	0.1	15	87	1.6
1992	13	8	0.1	24	96	1.6
1993	7	0	0.0	11	100	1.6
1994	7	14	0.1	13	92	1.4
1995	4	25	0.3	6	100	2.0
1996	5	0	0.0	21	81	1.3
1997	4	0	0.0	12	100	1.5
1998	3	0	0.0	7	86	1.6
1999	5	0	0.0	14	100	1.6
2000	7	14	0.1	11	100	2.0
2001	4	0	0.0	8	100	1.8
2002	7	14	0.1	13	100	1.8
2003	0	0	0.0	3	100	1.7
2004	2	50	0.5	2	100	2.0
Mean (1980's)		26	0.3		88	1.6
Mean (1990's)		8	0.1		94	1.6
Mean (2000's)		16	0.2		100	1.8

<sup>a</sup> Red River (East and West) and Agassiz Deer Management Units were combined into the Northwest Deer Management Unit due to small sample sizes.

Table 6. Reproductive performance of white-tailed deer in Minnesota for the Big Woods Deer Management Unit <sup>a</sup>, 1978-2004.

Year	Fawns			Adults		
	N	Percent Pregnant	Fetuses per doe	N	Percent Pregnant	Fetuses per doe
1978	74	47	0.5	113	96	1.8
1979	87	30	0.3	119	92	1.7
1980	87	61	0.7	107	97	1.8
1981	78	58	0.6	132	92	1.7
1982	95	43	0.5	197	95	1.8
1983	83	55	0.7	167	95	1.8
1984	77	22	0.3	123	95	1.8
1985	60	50	0.6	105	96	1.8
1986	79	37	0.4	116	88	1.6
1987	45	44	0.5	146	94	1.8
1988	14	64	0.8	31	97	1.8
1989	51	31	0.3	85	96	1.8
1990	96	32	0.3	125	95	1.8
1991	50	20	0.2	71	96	1.8
1992	67	24	0.3	100	95	1.8
1993	47	38	0.4	95	93	1.7
1994	46	15	0.2	99	94	1.7
1995	21	19	0.2	54	91	1.8
1996	59	15	0.2	112	96	1.8
1997	40	33	0.4	96	88	1.6
1998	53	23	0.3	109	91	1.7
1999	49	37	0.4	95	91	1.6
2000	62	23	0.3	76	91	1.6
2001	36	14	0.1	65	94	1.7
2002	70	23	0.3	97	95	1.8
2003	66	20	0.2	90	95	1.6
2004	65	20	0.2	60	88	1.6
Mean (1980's)		47	0.5		95	1.8
Mean (1990's)		26	0.3		93	1.7
Mean (2000's)		20	0.2		93	1.7

<sup>a</sup> The majority of samples (approximately 85%) from this Deer Management Unit were obtained from the Big Woods Metro sub-unit. Consequently, the data reported in this table may not reflect reproductive performances throughout the remainder of the Big Woods Management Unit.

Table 7. Reproductive performance of white-tailed deer in Minnesota for the Prairie Deer Management Unit, 1978-2004.

Year	Fawns			Adults		
	N	Percent Pregnant	Fetuses per doe	N	Percent Pregnant	Fetuses per doe
1978	25	44	0.6	69	100	1.9
1979	83	34	0.4	92	90	1.8
1980	51	63	0.7	55	91	1.7
1981	57	44	0.5	65	92	1.8
1982	50	46	0.6	85	94	1.9
1983	42	62	0.9	51	96	1.9
1984	30	23	0.3	69	84	1.6
1985	21	38	0.4	49	94	1.9
1986	25	64	0.8	56	93	1.7
1987	27	52	0.6	47	94	0.9
1988	20	40	0.5	16	100	1.9
1989	37	38	0.4	54	89	1.7
1990	43	42	0.4	62	97	1.8
1991	30	20	0.2	67	94	1.8
1992	37	19	0.2	51	94	1.9
1993	39	38	0.4	75	93	1.8
1994	32	16	0.2	46	98	1.9
1995	39	21	0.3	50	92	1.7
1996	28	14	0.1	30	90	1.6
1997	26	4	0.0	49	92	1.7
1998	18	17	0.2	38	97	1.7
1999	26	19	0.2	47	96	1.7
2000	13	23	0.4	23	87	1.6
2001	18	6	0.1	39	87	1.5
2002	19	32	0.4	26	92	1.7
2003	18	22	0.2	123	93	1.7
2004	10	10	0.1	9	89	1.7
Mean (1980's)		47	0.5		93	1.7
Mean (1990's)		21	0.2		94	1.8
Mean (2000's)		19	0.2		90	1.7

Table 8. Pre-fawning deer density estimates <sup>a</sup> (deer/mi<sup>2</sup>) by deer management unit (DMU), sub-unit (DMSU), and permit area (PA) in Minnesota's Farmland Zone, 1993-2004.

DMU	DMSU	PA	Area mi <sup>2</sup>	Pre-fawning density											
				1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>RED RIVER</b>															
	<i>West</i>	401	1039	2.1	2.2	2.5	2.3	2.0	2.0	2.0	2.1	2.2	2.2	2.3	2.4
		402	1021	3.3	3.5	3.8	3.6	3.3	3.6	3.9	4.1	4.5	4.4	4.5	4.3
		Total	2060	2.7	2.8	3.2	2.9	2.6	2.8	2.9	3.1	3.3	3.3	3.4	3.3
	<i>East</i>	403	396	6.2	6.3	6.9	5.9	5.7	6.2	6.6	7.1	7.5	7.9	8.1	7.8
		404	631	7.0	7.1	7.8	7.0	6.5	7.1	7.5	7.9	8.3	8.4	8.8	8.7
		405	654	6.5	6.6	7.1	6.3	5.9	6.4	6.9	7.4	7.8	7.6	7.7	7.2
		406	413	11.0	11.8	13.4	12.1	10.8	11.4	12.0	12.9	13.4	13.1	13.4	13.1
		407	618	8.5	8.5	9.1	8.1	7.5	7.7	8.0	8.8	9.2	9.4	9.1	8.6
		408	494	8.0	8.1	8.4	7.3	6.9	7.2	7.3	7.9	8.4	8.8	9.0	8.7
		Total	3206	7.8	7.9	8.6	7.6	7.1	7.5	7.9	8.5	9.0	9.0	9.2	8.8
<u>Red River Total</u>			5266	5.8	5.9	6.5	5.8	5.3	5.7	5.9	6.4	6.8	6.8	6.9	6.7
<b>AGASSIZ</b>															
		201	155	5.9	4.7	3.4	2.1	1.7	2.2	2.7	3.2	3.8	4.0	3.8	4.1
		202	156	11.9	10.8	10.3	7.9	6.8	8.2	9.5	10.9	12.1	12.3	12.4	11.5
		203	108	11.4	9.0	6.8	3.1	2.7	3.6	4.5	5.7	7.2	8.9	11.0	12.1
		204	718	8.1	7.9	7.9	6.5	5.7	6.4	6.9	7.4	7.8	7.9	8.5	8.5
		205	642	12.5	12.6	12.5	10.1	8.6	10.0	11.0	12.2	13.0	13.9	14.1	12.0
		206	471	9.6	9.2	9.6	8.1	7.2	8.2	9.4	10.9	12.4	13.3	13.9	13.9
		207	300	8.7	7.9	7.5	6.0	5.5	6.1	6.7	7.2	7.6	7.7	7.9	6.6
		208	448	4.2	3.9	3.5	2.6	2.4	2.9	3.4	3.9	4.2	4.3	4.6	4.3
		209	576	6.0	6.0	6.3	5.4	5.1	5.7	6.0	6.4	6.7	6.8	7.0	6.8
		210	485	11.3	11.5	12.0	10.7	10.2	11.2	12.1	13.0	13.9	14.7	15.8	16.4
<u>Agassiz Total</u>			4059	8.6	8.3	8.3	6.8	6.2	7.1	7.8	8.6	9.3	9.8	10.2	9.8

Table 8 (cont.)

DMU	DMSU	PA	Area mi <sup>2</sup>	Pre-fawning density											
				1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>BIG WOODS</b>															
	<i>North</i>	409	417	23.4	25.6	29.0	30.9	29.7	29.3	31.7	35.4	35.5	36.7	39.1	40.1
		410	924	13.0	13.2	13.8	13.5	12.9	13.1	14.5	15.7	16.4	17.1	18.2	18.7
		411	642	18.5	19.2	20.8	20.8	20.3	21.1	22.7	24.7	26.1	27.2	29.2	30.5
		412	989	10.5	10.3	10.5	10.0	9.2	9.0	9.5	9.6	9.4	9.5	10.1	10.2
		413	644	13.2	13.7	14.8	14.9	14.3	14.8	15.4	16.8	17.9	18.7	19.4	19.7
		414	557	15.3	16.0	17.6	17.9	18.4	18.8	19.9	21.2	22.1	23.7	26.2	26.9
		415	702	8.4	8.8	9.4	9.3	8.9	8.8	9.1	9.4	9.4	9.6	9.9	9.0
		416	544	9.3	9.7	9.8	9.9	9.3	9.1	9.1	8.9	8.9	8.9	9.7	9.8
		417	939	9.1	9.0	9.3	9.6	8.7	8.0	7.9	7.8	7.7	8.0	8.6	8.4
		418	760	7.7	7.6	7.9	7.8	7.2	7.0	7.3	7.1	7.1	7.3	8.0	7.7
		419	393	9.0	9.4	9.6	9.6	8.9	7.7	7.8	8.5	8.8	9.2	10.3	10.9
		429	288	5.3	5.5	5.3	5.4	5.1	4.8	5.1	5.6	5.9	6.3	7.0	7.2
		Total	7799	11.7	12.1	12.8	12.9	12.3	12.2	12.9	13.6	14.0	14.5	15.6	15.8
	<i>Central</i>	221	642	8.7	8.7	9.4	9.4	9.4	9.8	10.5	11.5	11.3	11.9	12.5	12.4
		222	412	12.8	12.4	13.4	12.9	12.7	13.2	13.8	14.4	14.2	14.6	14.9	13.9
		223	376	12.3	12.7	13.4	12.9	12.7	12.5	12.5	13.3	13.4	13.8	14.8	14.8
		224	48	13.1	13.6	14.5	13.9	14.5	15.4	15.4	16.2	17.1	17.7	18.5	16.7
		225	619	17.8	17.4	18.7	17.8	17.9	17.6	18.2	18.7	18.9	19.1	20.3	20.3
		Total	2097	12.9	12.9	13.7	13.3	13.3	13.4	13.9	14.6	14.7	15.0	15.8	15.6
	<i>Metro</i> <sup>b</sup>	227	472	15.4	15.5	16.4	12.9	12.9	12.8	13.4	13.7	14.5	15.3	17.7	19.6
		235	33	12.5	11.7	11.3	9.5	9.6	9.9	12.1	12.9	14.8	17.5	22.7	25.2
		236	374	15.0	15.3	16.0	16.4	16.2	15.6	16.5	17.3	18.5	20.4	23.4	26.0
		338	452	4.5	4.2	4.1	4.1	3.6	3.2	3.2	3.4	3.7	4.1	5.2	6.0
		339	395	5.0	5.1	5.0	4.8	4.2	3.5	3.7	3.8	3.9	4.1	4.7	5.3
		Total	1726	9.5	9.5	9.8	9.5	9.2	8.7	9.2	9.5	10.1	10.9	12.8	14.3

Table 8. (cont.)

DMU	DMSU	PA	Area mi <sup>2</sup>	Pre-fawning density											
				1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>BIG WOODS</b>															
<i>Southeast (cont.)</i>		341	611	7.6	7.9	8.3	8.5	8.5	8.4	8.2	8.1	7.5	8.1	8.8	9.3
		342	352	10.3	10.3	10.4	9.6	9.6	10.3	10.2	10.1	9.4	9.9	11.2	11.9
		343	663	7.1	7.2	7.4	7.6	7.8	7.2	7.3	7.5	7.3	8.0	9.2	10.2
		344	189	18.0	17.3	16.9	16.3	14.8	13.4	12.3	11.9	11.8	12.5	14.2	15.3
		345	326	11.2	10.7	10.6	10.3	10.4	10.4	10.3	9.8	8.7	8.5	9.1	9.7
		346	319	17.2	16.5	16.5	17.0	17.5	16.9	17.0	17.3	16.9	17.3	18.9	19.4
		347	434	9.1	9.3	9.2	9.4	9.4	9.0	8.8	8.9	8.5	9.2	9.8	10.2
		348	332	15.6	15.7	16.1	16.7	17.0	17.1	16.5	16.2	15.1	15.0	16.1	16.5
		349	492	11.3	11.5	11.8	12.3	12.7	13.4	13.7	13.9	12.8	12.9	13.9	14.0
		Total	3718	10.8	10.8	10.9	11.0	11.1	11.0	10.9	10.9	10.3	10.7	11.7	12.3
	<u>Big Woods Total</u>	15340	11.4	11.6	12.1	12.1	11.8	11.7	12.1	12.6	12.8	13.3	14.3	14.7	
<b>PRAIRIE</b>															
<i>North</i>		420	651	4.2	3.9	3.8	3.7	3.2	3.0	3.4	3.7	3.8	3.6	3.9	3.8
		421	749	3.5	3.3	3.2	3.0	2.5	2.3	2.4	2.4	2.5	2.3	2.6	2.7
		422	634	2.9	2.6	2.5	2.4	2.0	2.2	2.2	2.2	2.2	2.2	2.5	2.7
		423	531	4.3	4.1	4.1	4.1	3.7	3.4	3.3	3.2	3.4	3.1	3.5	3.7
		424	766	6.0	6.0	6.0	6.5	5.2	4.3	4.0	3.6	3.4	3.2	3.4	3.9
		425	779	2.4	2.3	2.2	1.9	1.3	1.0	0.9	0.9	1.0	1.0	1.2	1.5
		426	614	4.0	3.9	3.7	3.2	2.9	2.7	2.8	2.9	3.2	3.3	3.8	4.1
		427	837	2.4	2.3	2.2	1.8	1.5	1.3	1.4	1.5	1.6	1.8	2.1	2.4
		428	550	4.2	4.0	4.1	4.0	3.6	3.4	3.6	3.6	3.9	4.1	4.8	5.5
		Total	6111	3.7	3.6	3.5	3.4	2.8	2.6	2.6	2.6	2.7	2.6	3.0	3.2
<i>River</i>		431	360	63.8	7.0	6.9	7.7	6.8	6.1	5.7	5.0	4.6	4.4	4.5	4.8
		433	397	9.5	9.9	10.3	10.4	9.3	8.8	8.3	8.2	7.9	7.7	8.9	9.1
		435	575	5.9	5.7	5.8	6.0	5.2	4.9	4.7	4.6	4.5	4.4	4.9	5.4



Table 8 (cont.)

DMU	DMSU	PA	Area mi <sup>2</sup>	Pre-fawning density											
				1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>PRAIRIE</b>															
<i>River (cont.)</i>															
		440	662	4.3	4.4	4.5	4.5	4.1	3.9	3.9	3.8	3.7	3.5	3.8	4.0
		442	806	4.5	4.5	4.7	4.5	3.9	3.8	4.0	4.2	4.3	4.3	4.9	5.5
		443	386	6.0	6.4	6.7	6.7	6.0	5.5	5.2	4.9	4.6	4.5	4.7	4.8
		Total	3186	5.8	5.9	6.0	6.1	5.4	5.1	5.0	4.9	4.7	4.6	5.1	5.4
<i>Southwest</i>															
		446	345	5.8	6.0	6.5	6.8	6.5	6.1	6.1	5.9	5.7	5.4	5.4	5.3
		447	675	2.7	2.6	2.7	2.6	2.2	2.1	2.0	2.1	2.0	2.0	2.4	2.6
		448	447	3.7	3.5	3.1	3.0	2.5	2.2	2.2	2.8	3.6	3.8	4.4	5.0
		449	625	3.9	3.8	3.7	3.4	2.8	2.5	2.4	2.9	3.8	4.1	5.0	5.8
		450	816	1.9	2.0	2.0	1.8	1.5	1.4	1.5	1.4	1.4	1.3	1.6	1.7
		451	687	2.7	2.7	2.7	3.1	2.7	2.5	2.5	2.5	2.6	2.8	3.3	3.8
		452	637	2.6	2.7	3.0	3.3	3.2	3.2	3.3	3.5	3.5	3.6	4.1	4.5
		453	729	1.9	2.0	2.0	2.0	1.7	1.6	1.8	2.0	2.2	2.4	3.1	3.6
		454	840	3.5	3.5	3.6	3.6	3.2	3.0	3.1	3.3	3.4	3.4	3.9	4.4
		455	95	4.6	4.8	4.6	4.8	4.4	4.4	4.4	4.1	3.9	3.9	4.4	4.4
		456	712	3.2	3.3	3.5	3.6	3.3	3.2	3.3	3.3	3.5	3.7	4.4	5.2
		457	666	2.6	2.6	2.5	2.7	2.4	2.3	2.5	2.6	2.7	2.6	2.9	3.1
		458	715	2.5	2.8	2.8	2.9	2.6	2.4	2.3	2.4	2.4	2.4	2.7	2.9
		459	974	2.8	3.1	3.3	3.4	3.2	2.7	2.7	2.8	2.7	2.8	3.2	3.5
		Total	8963	2.9	3.0	3.1	3.1	2.8	2.6	2.6	2.8	2.9	3.0	3.4	3.8
<i>Southeast</i>															
		461	481	7.5	8.1	8.6	8.8	8.8	8.0	7.8	7.5	7.2	7.1	7.6	7.4
		462	506	7.0	7.7	8.3	8.4	8.4	8.1	8.3	7.8	7.5	7.2	7.8	8.0
		463	453	3.4	3.5	3.6	3.3	3.3	2.9	3.0	3.0	3.0	2.9	3.1	3.2
		464	377	4.1	4.4	4.6	4.5	4.0	3.5	3.3	3.3	3.3	3.4	3.8	4.0
		465	385	4.3	4.7	5.1	4.9	4.9	4.3	4.5	4.1	4.1	4.2	4.7	4.8
		466	931	3.3	3.6	3.8	4.0	4.0	3.6	3.8	3.6	3.3	3.4	3.9	4.1
		467	774	2.9	3.3	3.4	3.4	3.5	3.3	3.3	3.4	3.4	3.3	3.6	3.3
		Total	3907	4.4	4.8	5.1	5.1	5.1	4.7	4.7	4.5	4.4	4.4	4.8	4.8

Table 8 (cont.)

DMU	DMSU	PA	Area mi <sup>2</sup>	Pre-fawning density											
				1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<u>Prairie Totals</u>			22167	3.8	3.9	4.0	4.0	3.6	3.3	3.3	3.3	3.4	3.4	3.8	4.1
<u>Farmland Zone Total</u>			46832	6.9	7.0	7.3	7.1	6.7	6.6	6.9	7.2	7.3	7.5	8.2	8.4

<sup>a</sup> Density estimates are subject to change as new data are incorporated or the model is revised.

<sup>b</sup> Excluding permit areas 228 & 337, which are not modeled.

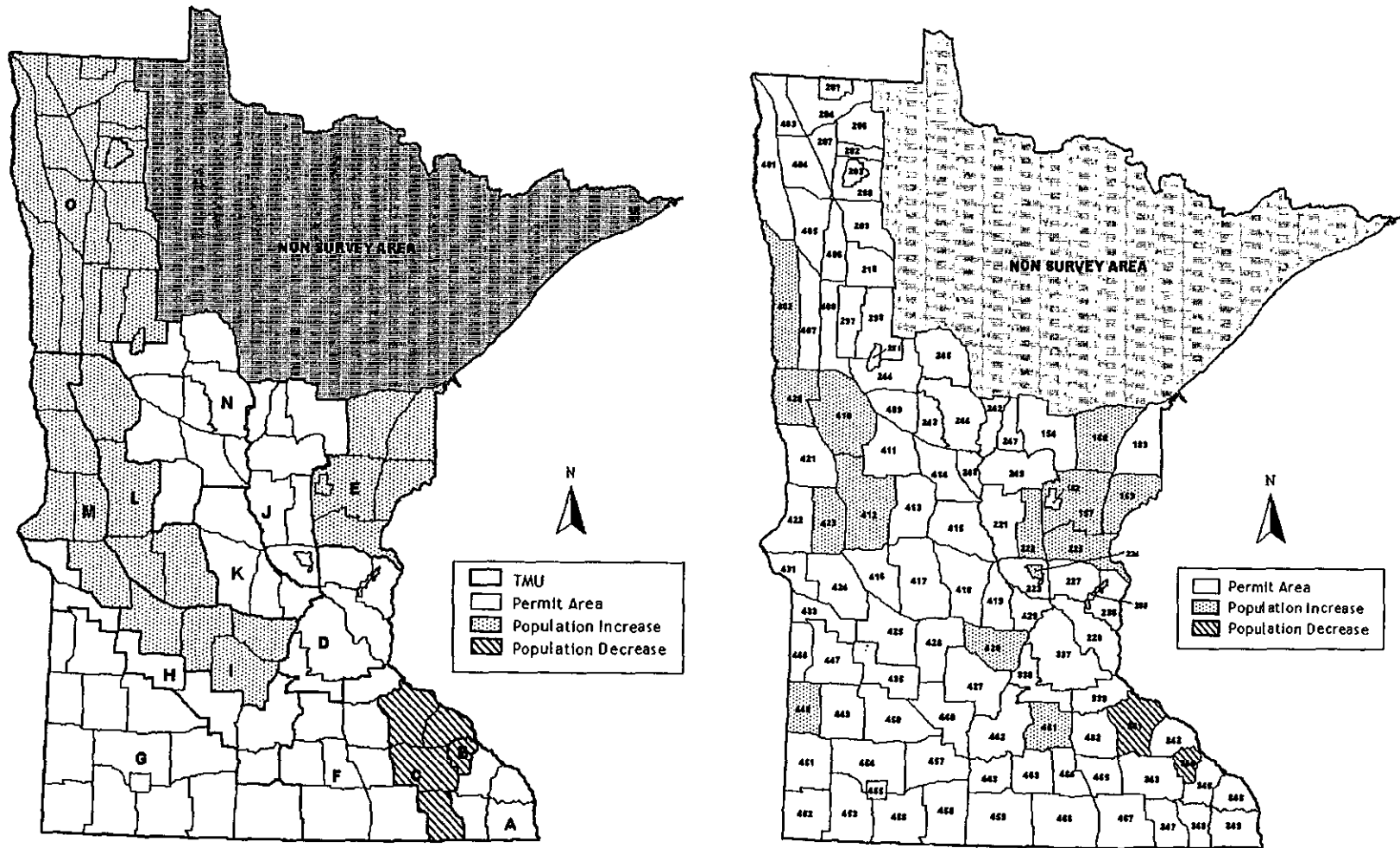


Figure 13. (a) Location of turkey management units (TMUs) and (b) antlerless deer permit areas for the wild turkey survey, Minnesota, Fall, 2002. Shaded areas had a significant increase, and barred areas had a significant decrease in hunters observing wild turkeys (HOWT population index).

Table 9. Percent of antlerless deer hunters observing wild turkeys (HOWT) in Minnesota. By turkey management unit (TMU), 1992-2002. *Note: No survey conducted in 1995, 1996, 1998, 2000, and 2001.*

TMU	Year	Respondents (n)	HOWT	99% CI on HOWT
A	1992	629	62.8	7.0
	1993	637	64.8	7.0
	1994	618	61.2	7.0
	1997	571	64.1	7.2
	1999	591	72.8 <sup>a</sup>	7.0
	2002	511	71.0	7.0
B	1992	473	62.4	13.0
	1993	467	53.1 <sup>b</sup>	8.3
	1994	421	59.6	8.6
	1997	386	58.8	8.9
	1999	409	77.0 <sup>a</sup>	8.4
	2002	314	62.7 <sup>b</sup>	8.8
C	1992	632	52.4	7.6
	1993	637	57.6	7.2
	1994	615	55.0	7.2
	1997	556	64.9 <sup>a</sup>	7.3
	1999	571	75.1 <sup>a</sup>	7.0
	2002	525	65.3 <sup>b</sup>	7.1
D	1992	563	17.1	5.9
	1993	633	17.4	5.6
	1994	633	19.3	5.6
	1997	576	38.0 <sup>a</sup>	6.6
	1999	598	39.8	7.3
	2002	538	46.7	7.6
E	1992	581	3.4	2.8
	1993	647	7.1 <sup>a</sup>	3.3
	1994	638	4.7	3.4
	1997	608	14.1 <sup>a</sup>	4.2
	1999	609	11.8	5.0
	2002	532	18.8 <sup>a</sup>	5.5

Table 9 (continued).

TMU	Year	Respondents ( <i>n</i> )	HOWT	99% CI on HOWT
F	1992	583	19.0 <sup>a</sup>	5.3
	1993	594	24.8	6.2
	1994	652	27.6	6.4
	1997	614	36.3 <sup>a</sup>	6.7
	1999	612	46.1 <sup>a</sup>	7.2
	2002	551	48.3	7.6
	G	1992	625	3.7
1993		644	5.3	3.0
1994		616	7.6	3.6
1997		595	14.8 <sup>a</sup>	4.7
1999		617	21.1 <sup>a</sup>	5.7
2002		544	26.8	6.5
H		1992	598	16.4
	1993	655	16.0	5.4
	1994	636	17.1	5.3
	1997	626	31.8 <sup>a</sup>	6.1
	1999	615	45.0 <sup>a</sup>	7.0
	2002	554	48.7	7.5
	I	1992	596	4.5
1993		569	3.9	3.0
1994		562	2.7	2.7
1997		525	9.7 <sup>a</sup>	3.8
1999		471	18.3 <sup>a</sup>	5.7
2002		445	26.7 <sup>a</sup>	7.1
J		1992	560	2.1
	1993	609	1.6	2.1
	1994	539	4.6 <sup>a</sup>	2.7
	1997	559	15.0 <sup>a</sup>	4.5
	1999	589	14.6	5.4
	2002	543	16.6	5.6

Table 9 (continued).

TMU	Year	Respondents ( <i>n</i> )	HOWT	99% CI on HOWT
K	1992	600	6.0	3.9
	1993	624	5.6	3.4
	1994	614	8.5	3.7
	1997	578	16.6	<sup>a</sup> 4.9
	1999	612	26.5	<sup>a</sup> 6.1
	2002	534	32.4	7.0
L	1992	653	1.7	2.0
	1993	687	2.5	2.0
	1994	667	4.2	2.5
	1997	675	10.1	<sup>a</sup> 3.6
	1999	615	16.8	<sup>a</sup> 4.9
	2002	589	29.2	<sup>a</sup> 6.2
M	1992	578	2.9	<sup>b</sup> 3.7
	1993	597	3.4	2.6
	1994	613	3.1	2.6
	1997	540	4.8	3.0
	1999	557	5.8	3.5
	2002	501	12.8	<sup>a</sup> 4.6
N	1992	663	2.1	2.0
	1993	710	1.7	1.9
	1994	657	2.3	2.0
	1997	607	4.6	2.7
	1999	614	8.8	<sup>a</sup> 3.7
	2002	578	13.0	4.7
O	1992	576	3.8	2.9
	1993	626	1.9	2.5
	1994	620	2.6	2.2
	1997	553	1.3	2.0
	1999	637	3.5	2.2
	2002	570	8.8	<sup>a</sup> 3.6

<sup>a</sup> Significant increase in HOWT from previous survey.

<sup>b</sup> Significant decrease from previous survey.

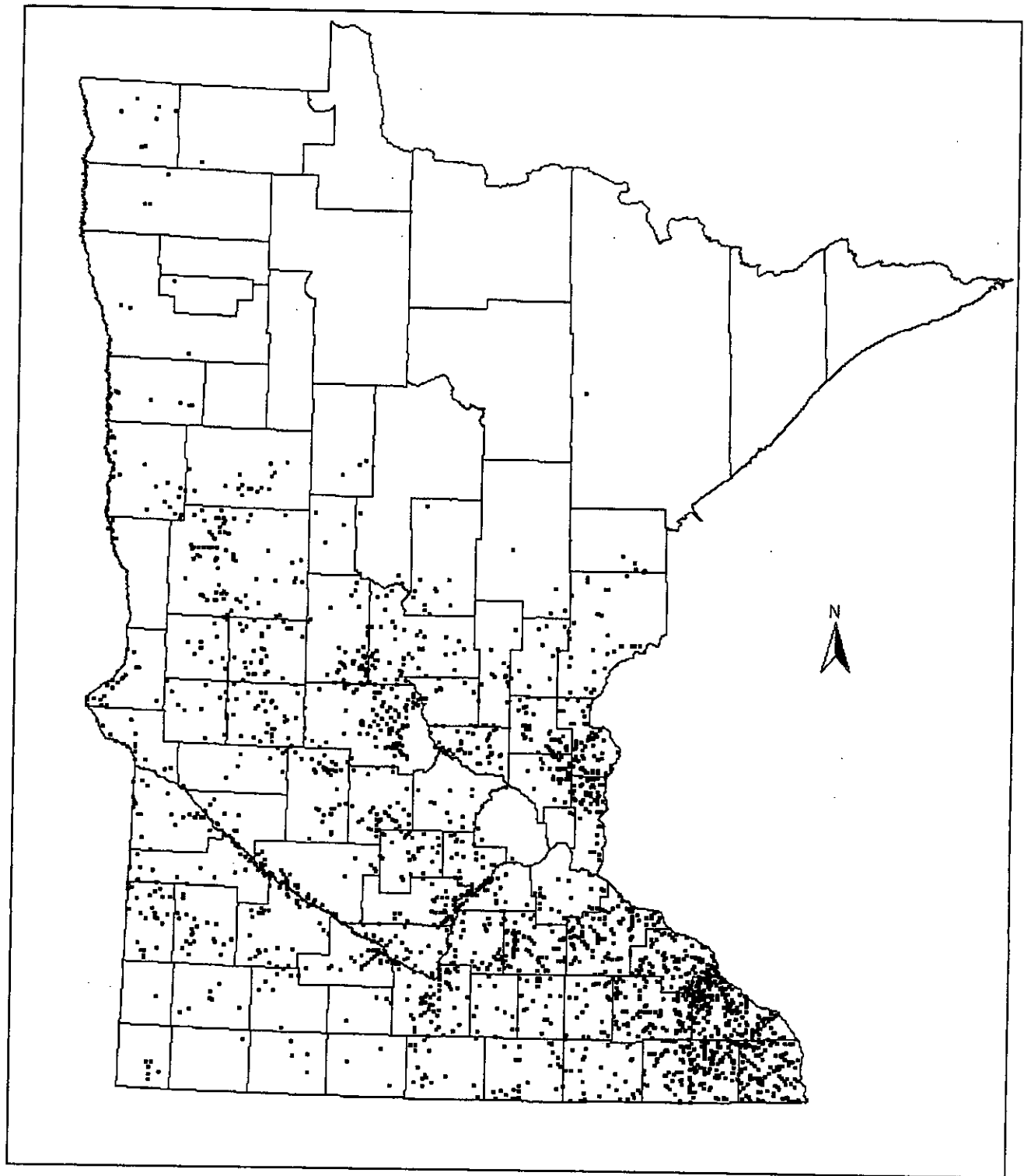


Figure 14. Distribution of wild turkey sightings based on a survey of antlerless deer hunters in Minnesota, fall 2002.

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.



### Wildlife Complaints 1993-2003

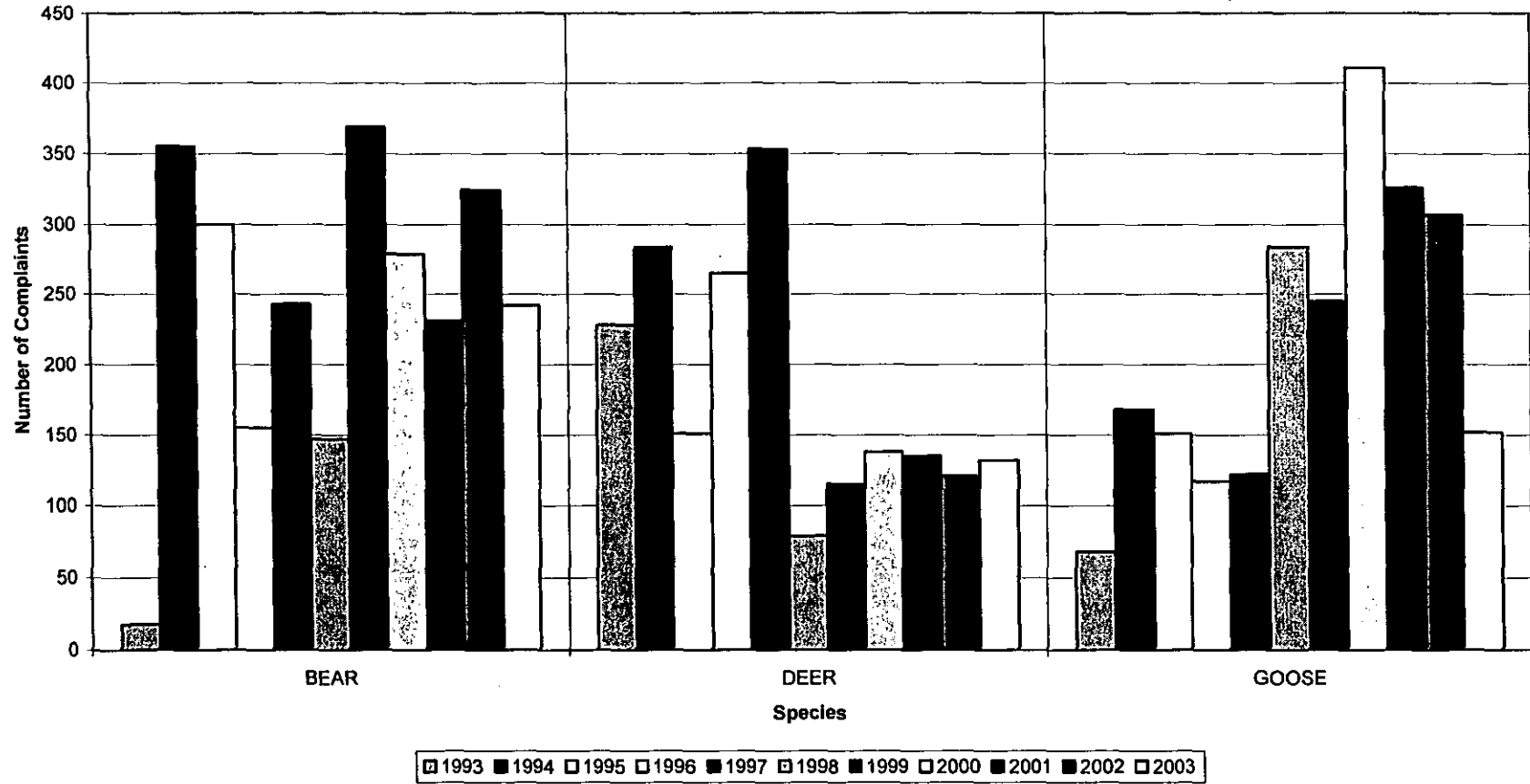


Figure 15. Number of wildlife complaints recorded by species from 1993-2003, in Minnesota.

**Bear Complaints 1993-2003**

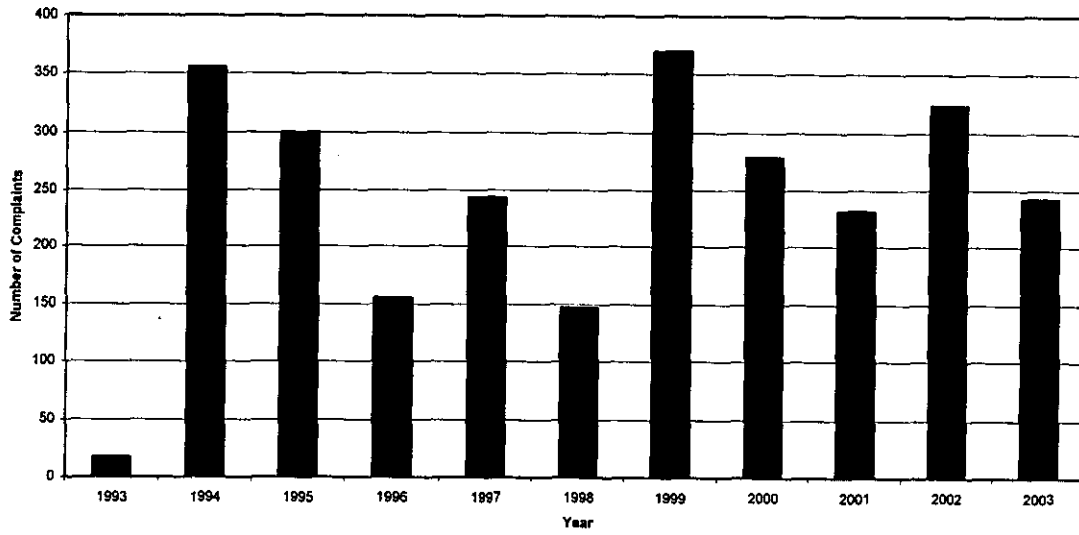


Figure 16. Number of bear complaints from 1993-2003, in Minnesota.

**Deer Complaints 1993-2003**

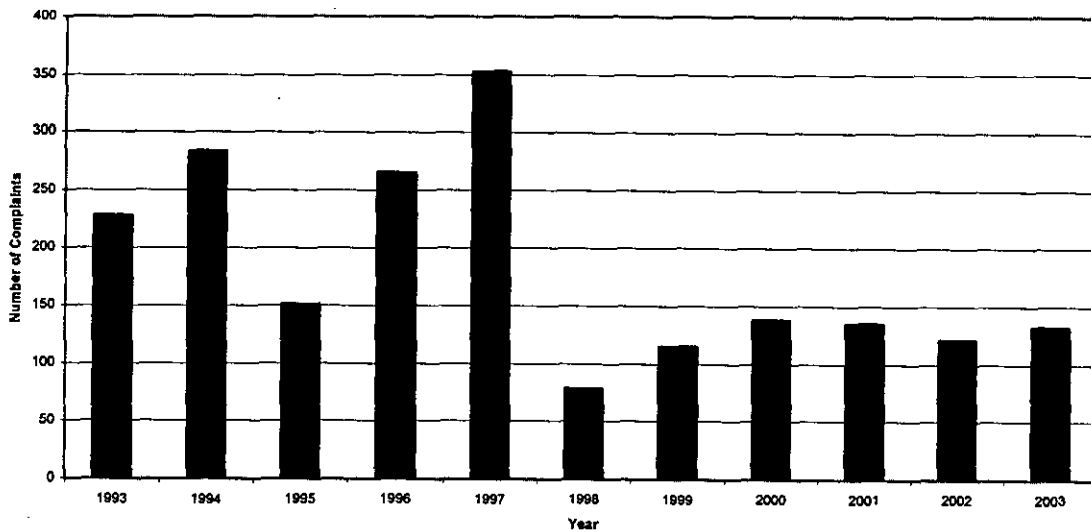


Figure 17. Number of deer complaints from 1993-2003, in Minnesota.

### Goose Complaints 1993-2003

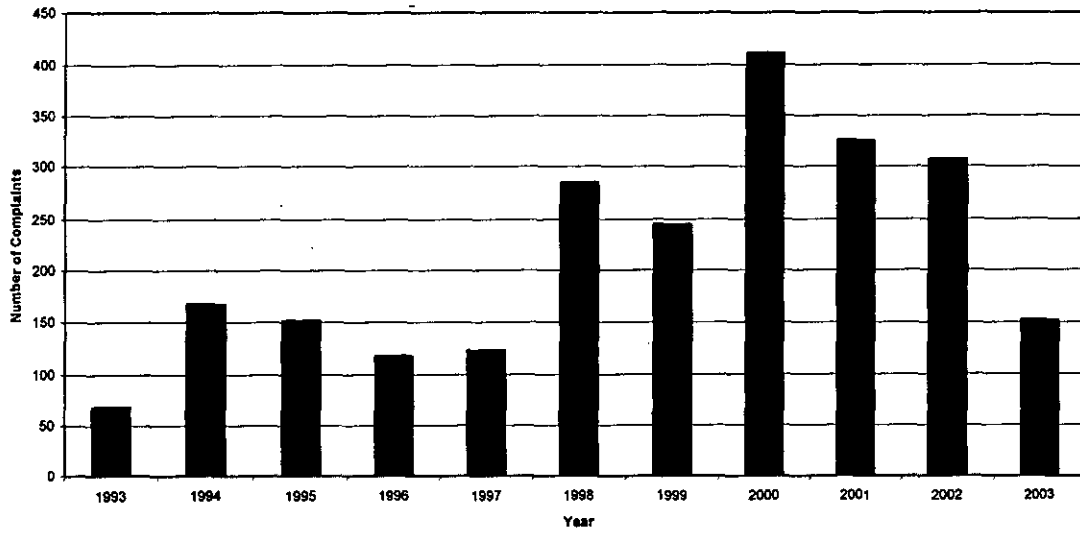


Figure 18. Number of goose complaints from 1993-2003, in Minnesota.

### Turkey Complaints 1993-2003

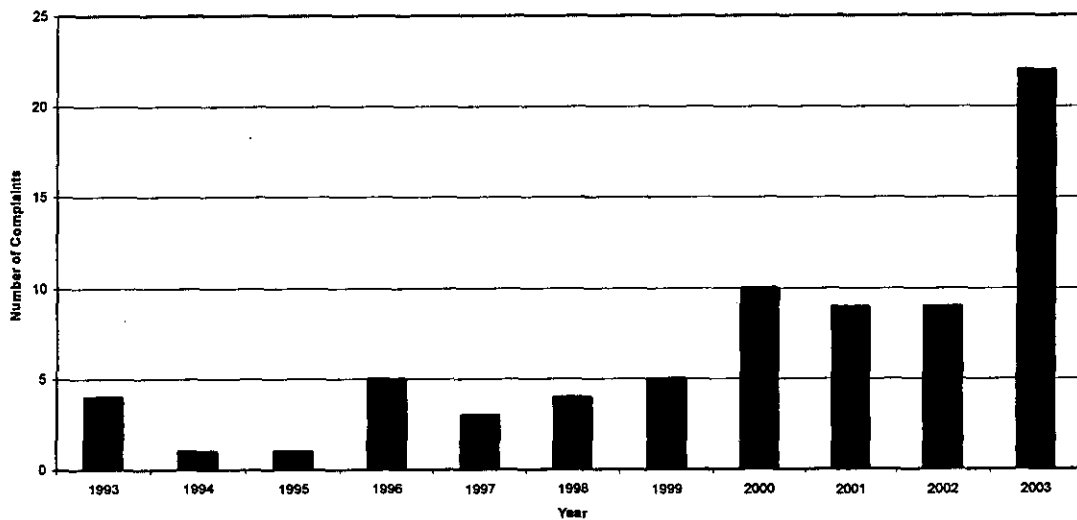
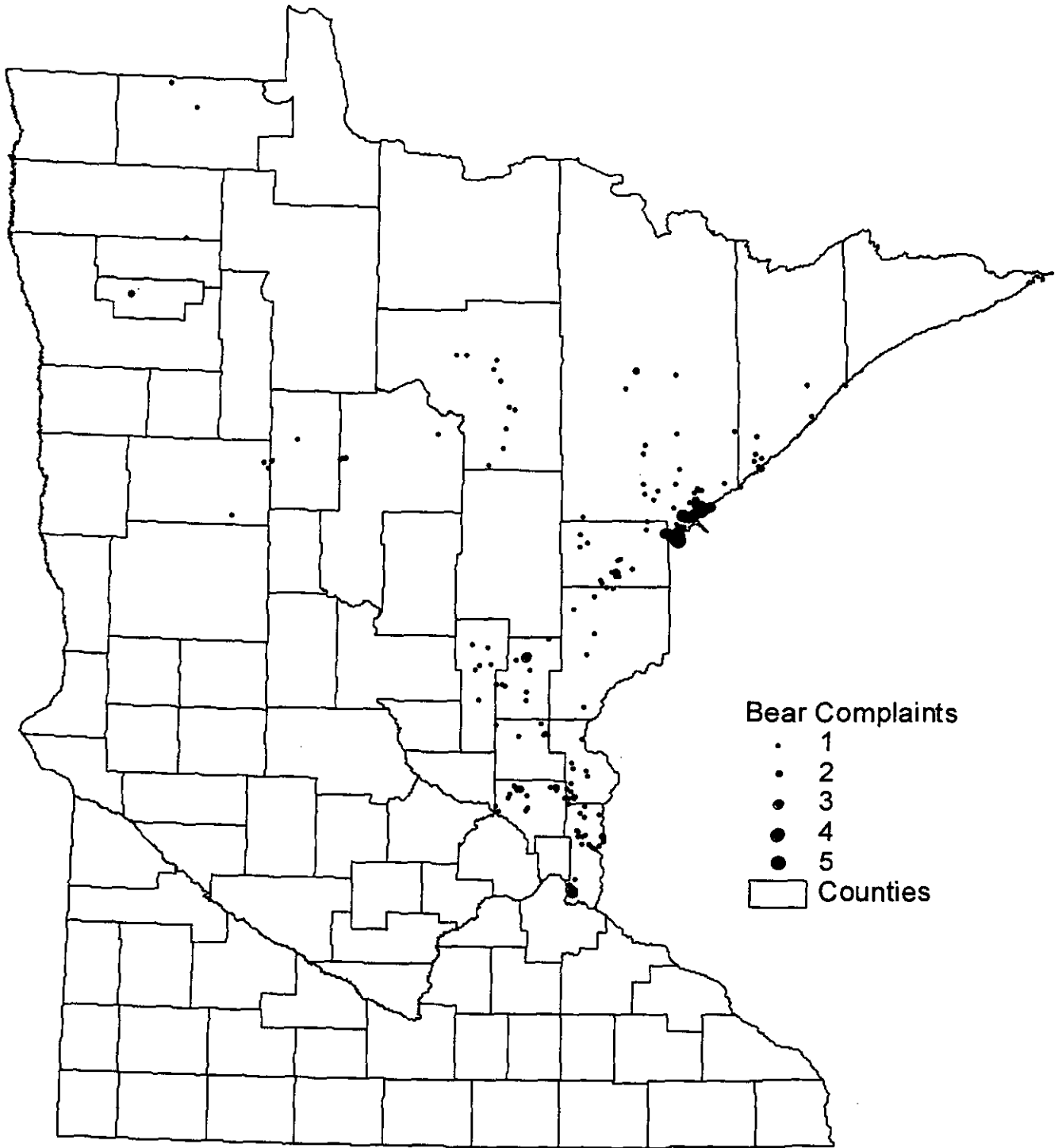
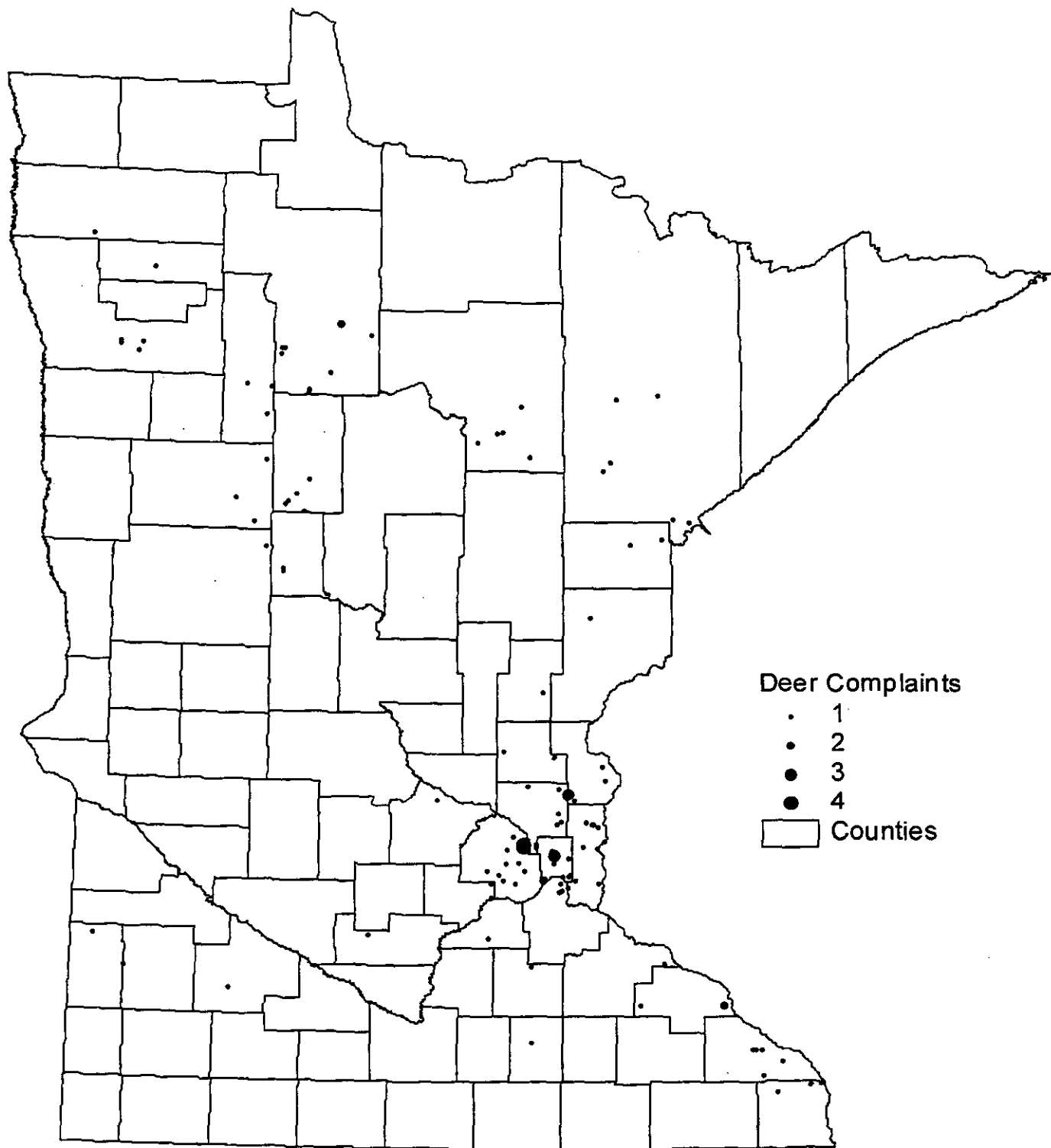


Figure 19. Number of wild turkey complaints from 1993-2003, in Minnesota.



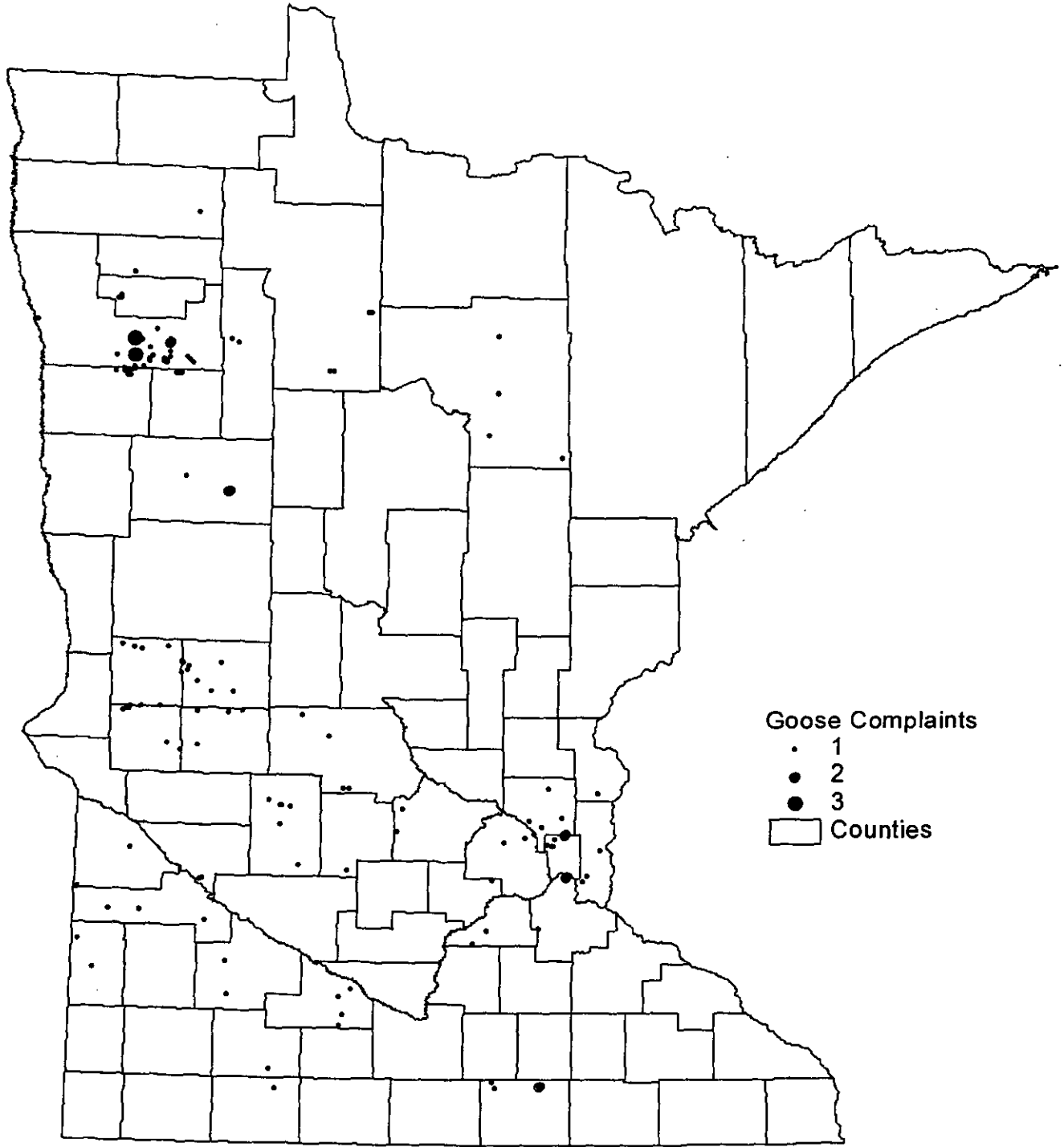
Location of bear damage complaints recorded in 2003 (n = 227)

Figure 20. Location of bear damage complaints recorded in 2003. (n= 227 )



Location of deer damage complaints recorded in 2003 (n = 121)

Figure 21. Location of deer damage complaints recorded in 2003. (n= 121)



Location of goose damage complaints recorded in 2003 (n = 145)

Figure 22. Location of goose damage complaints recorded in 2003. (n= 145)

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.

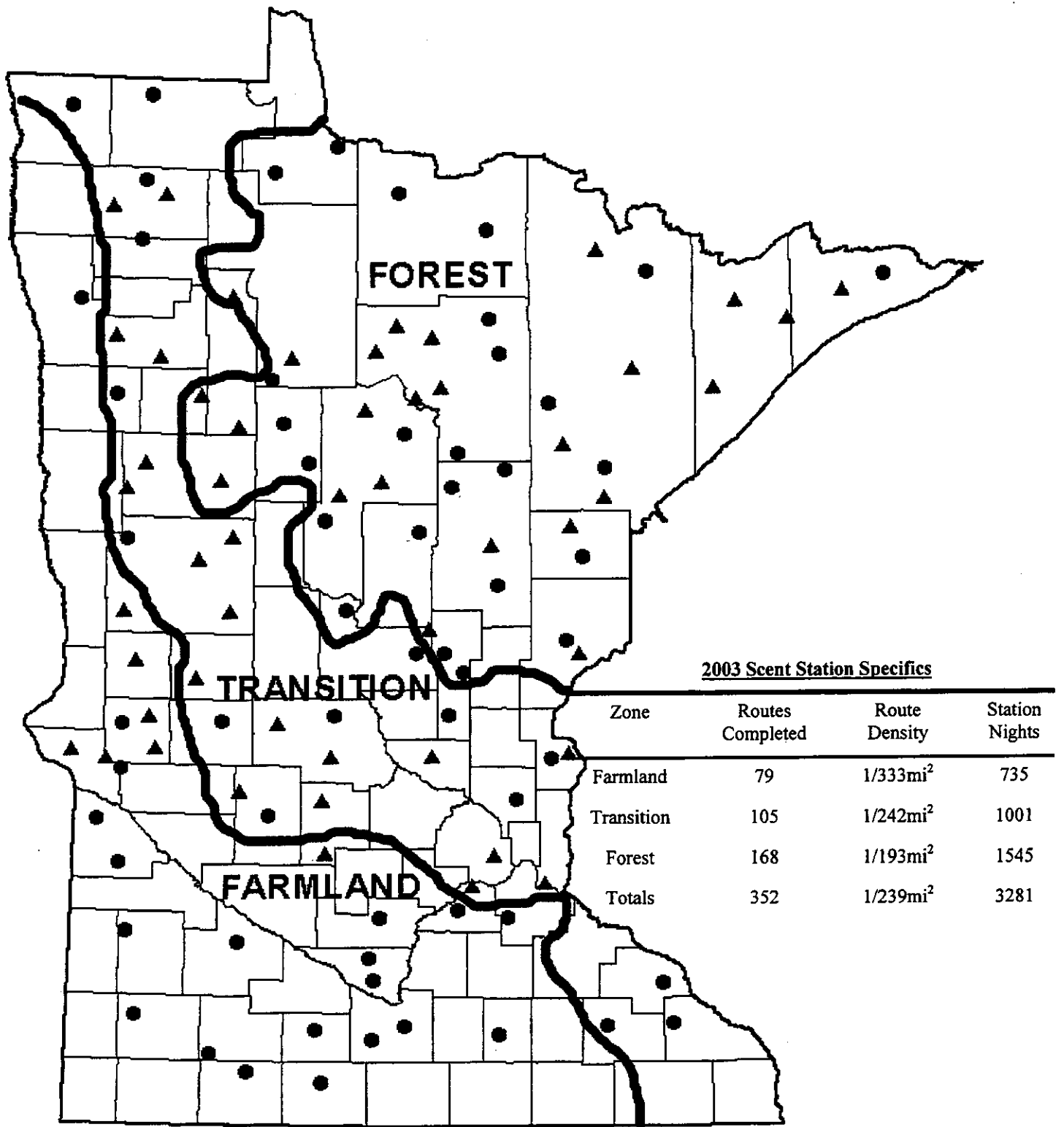


Figure 23. Approximate locations of scent station routes conducted by DNR Division of Wildlife (●) and interagency cooperators (▲), 2003. Each marked location may represent from 1-6 actual routes. Inset shows 2003 route specifics



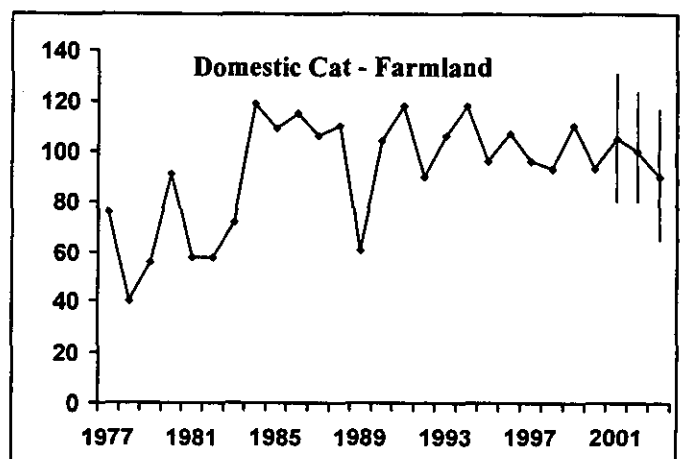
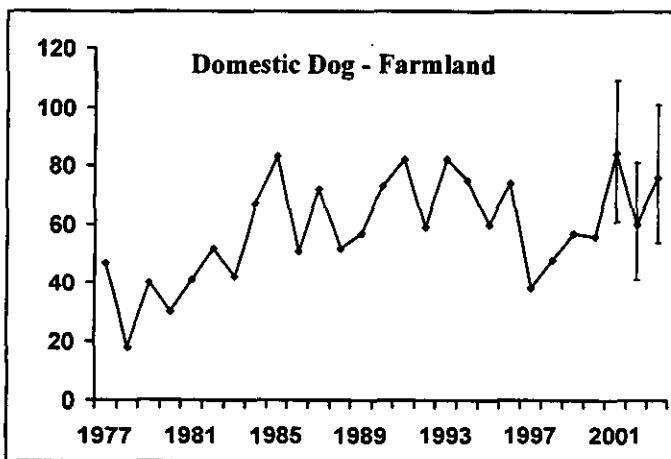
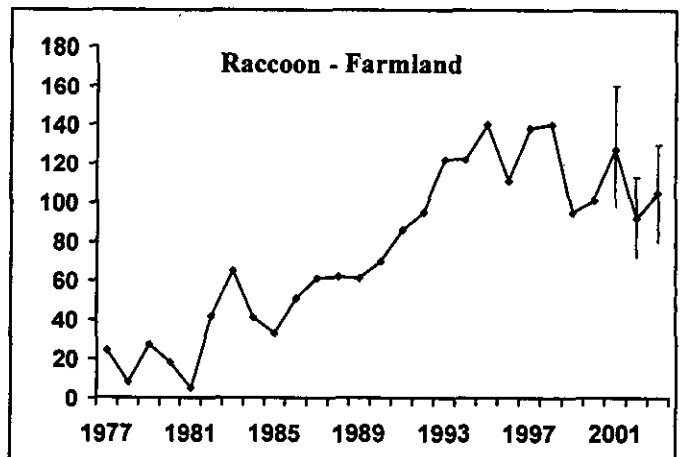
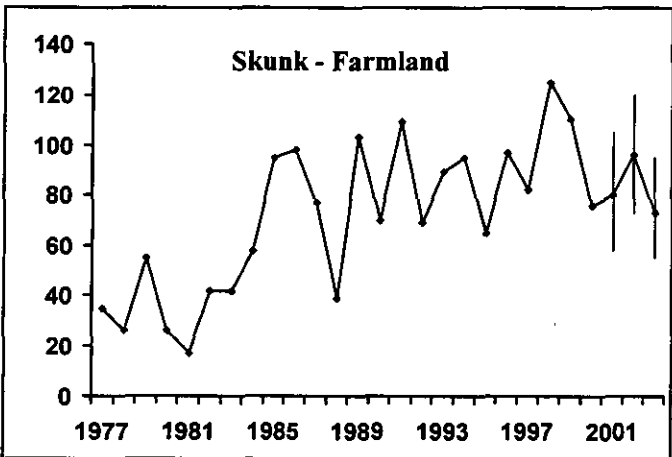
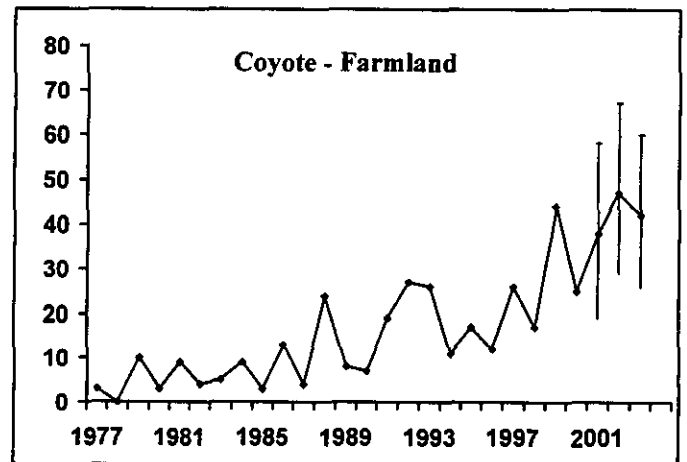
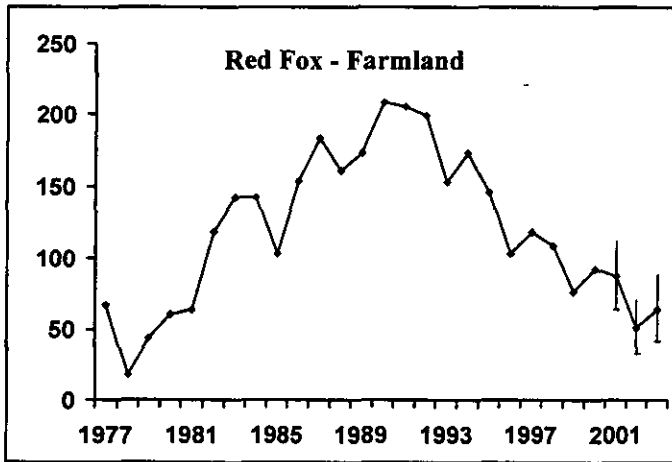


Figure 24. Scent station indices for selected species in the Farmland Zone of Minnesota, 1977-2003. Vertical bars indicate 95% confidence intervals.

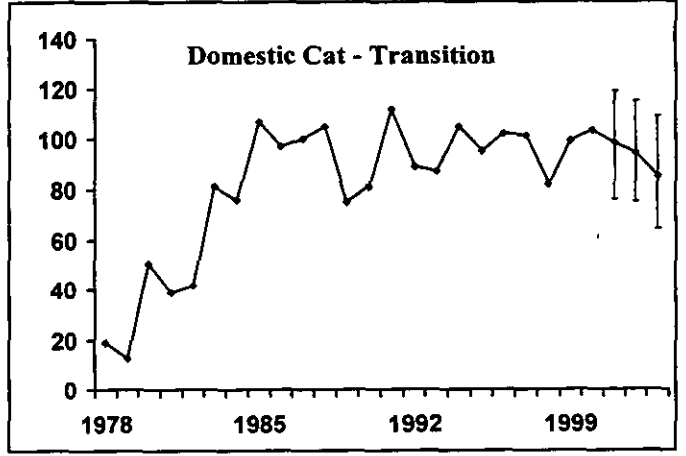
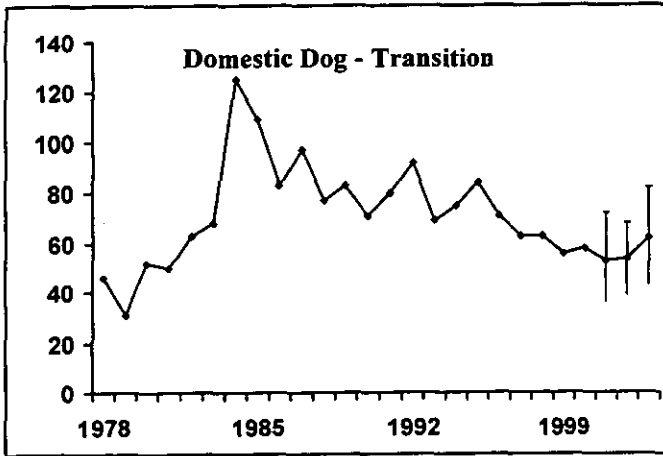
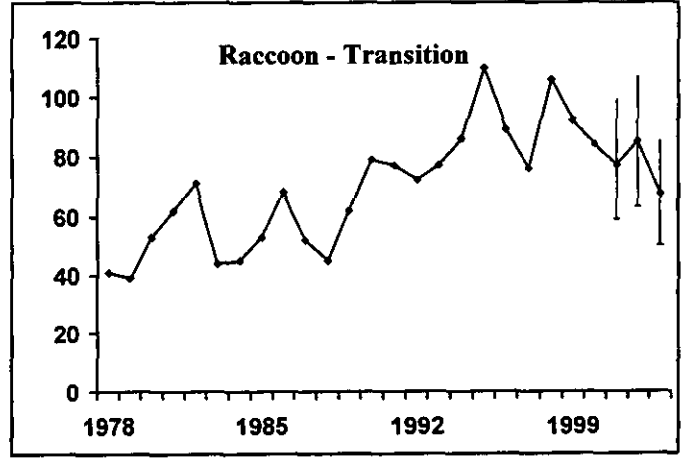
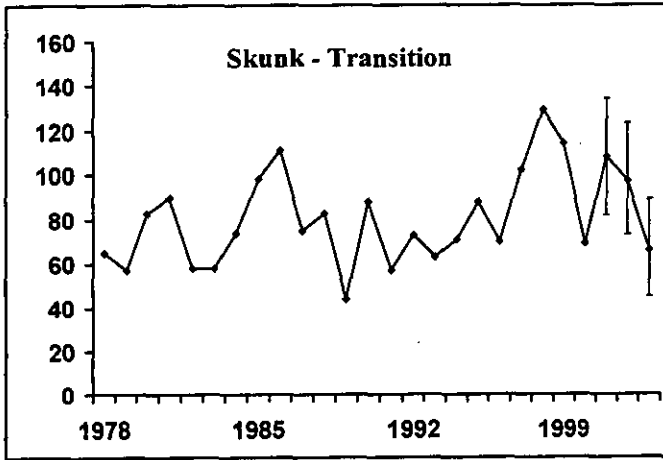
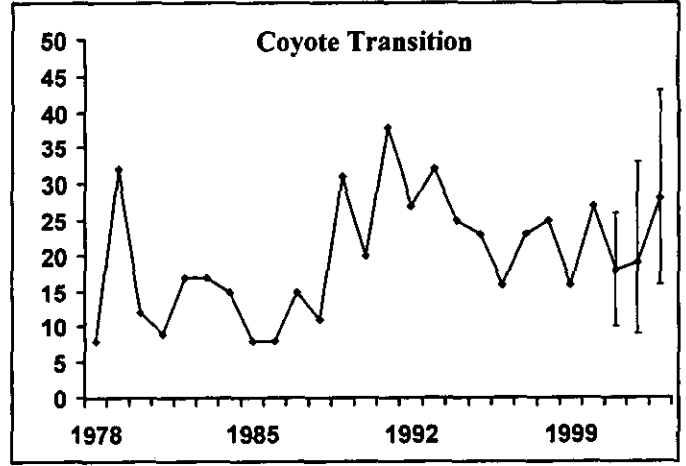
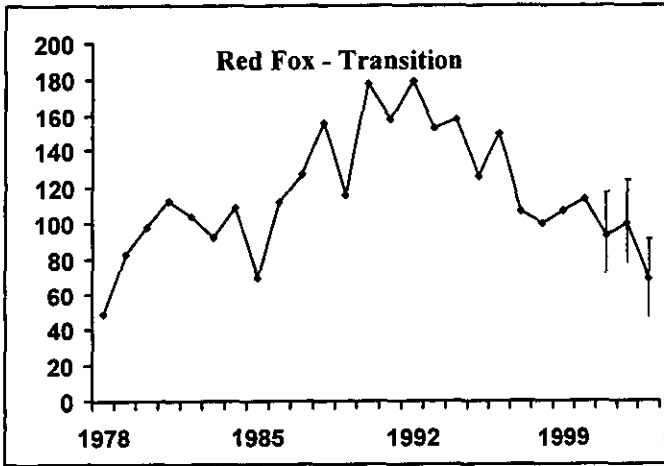


Figure 25. Scent station indices for selected species in the Transition Zone of Minnesota, 1978-2003. Vertical bars indicate 95% confidence intervals.

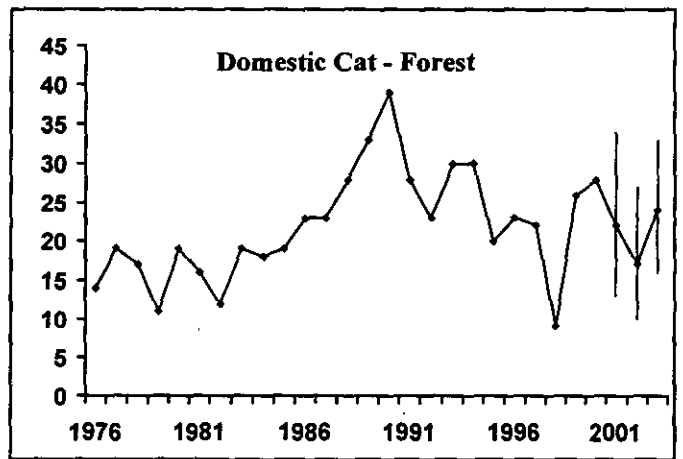
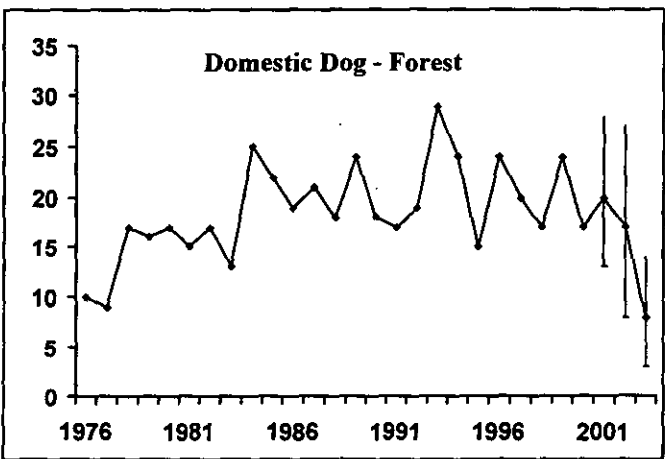
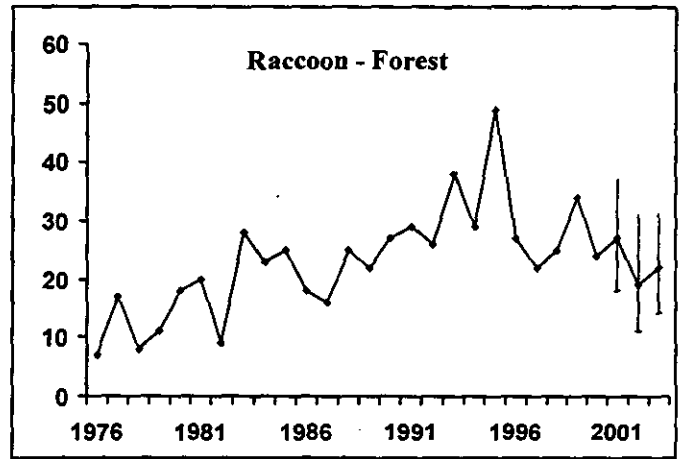
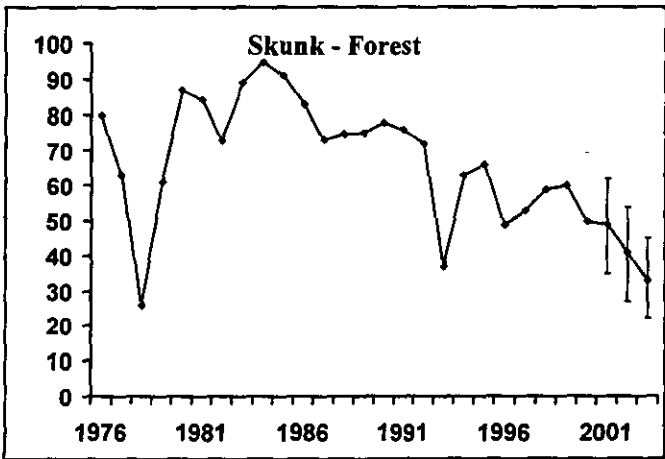
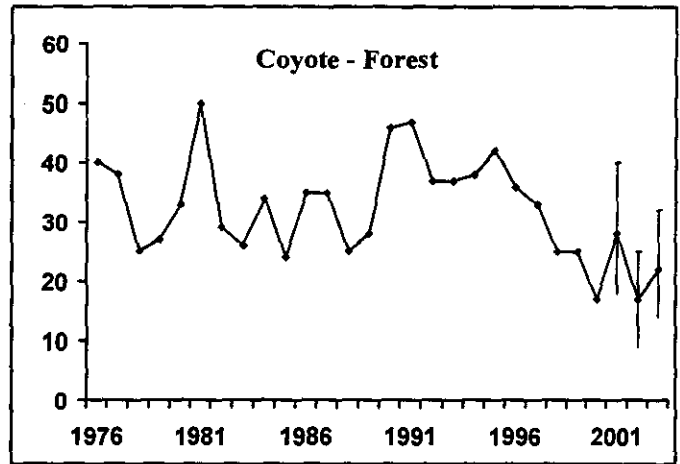
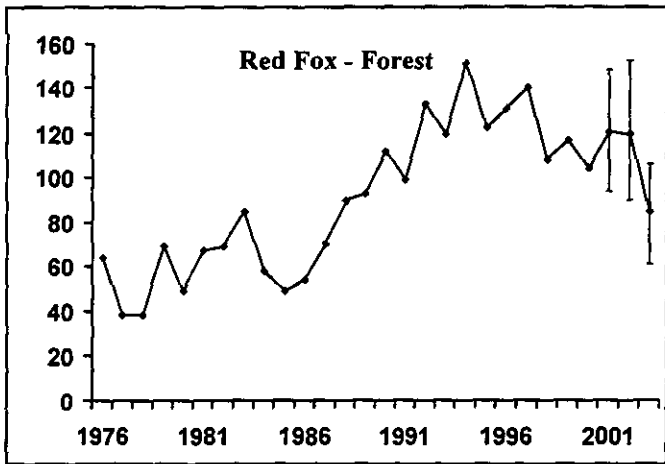


Figure 26. Scent station indices for selected species in the Forest Zone of Minnesota, 1976-2003. Vertical bars indicate 95% confidence intervals.

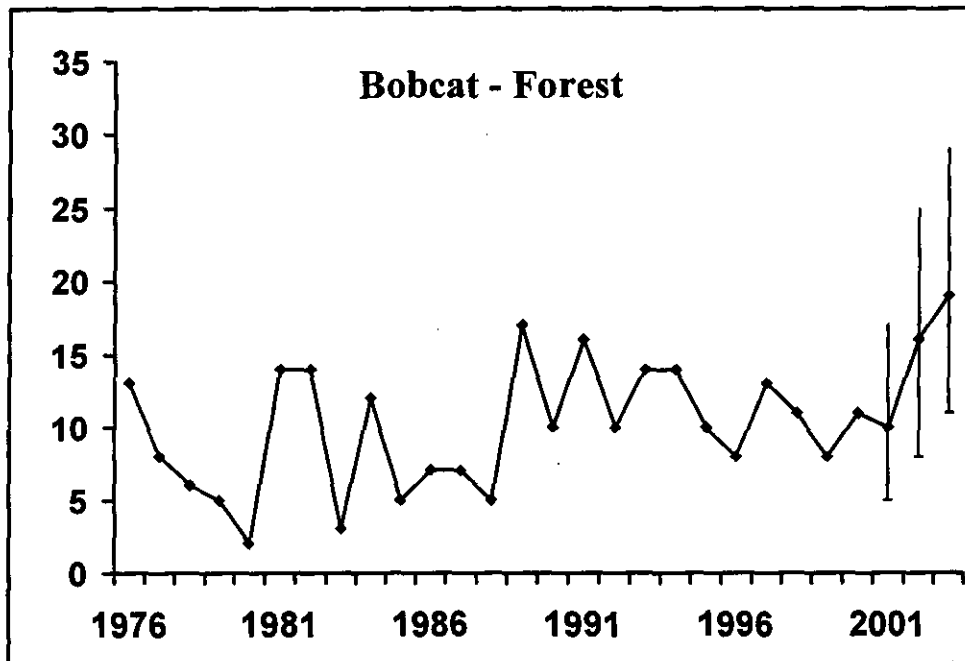
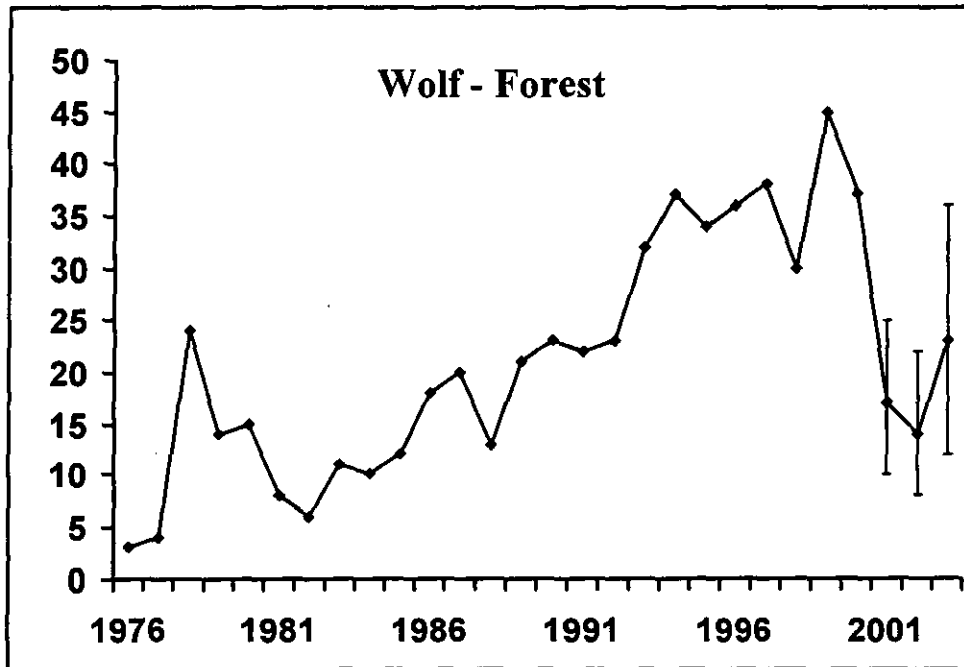


Figure 27. Scent station indices for wolf and bobcat in the Forest Zone of Minnesota, 1976-2003. Vertical bars indicate 95% confidence intervals.

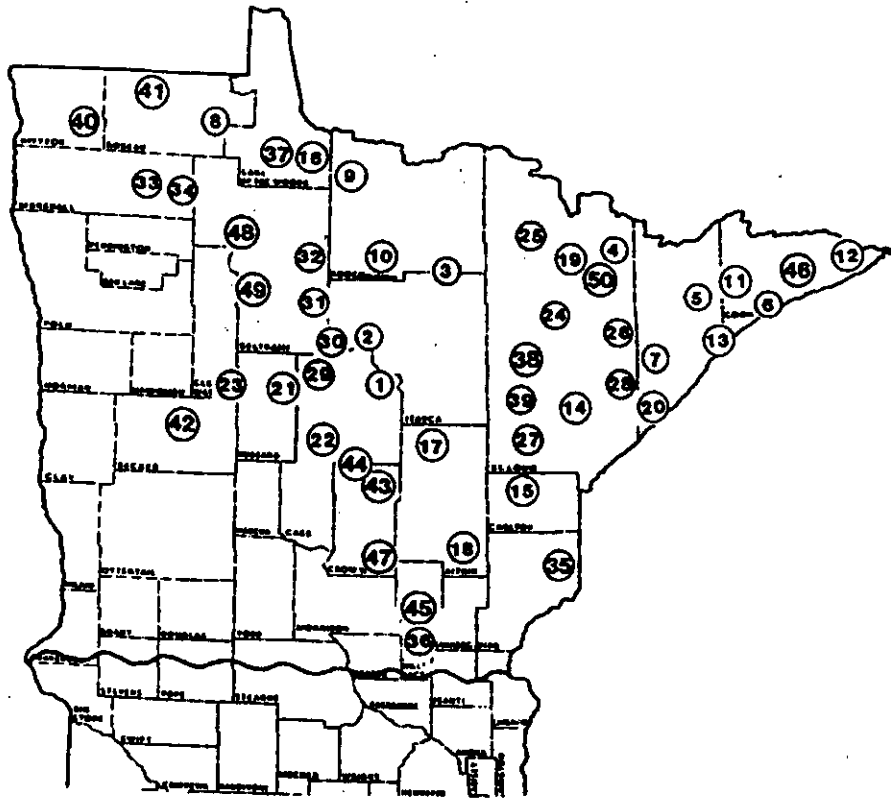


Figure 28. General locations of winter track routes, 2003.

### Winter Track Survey Routes, 1991-2003

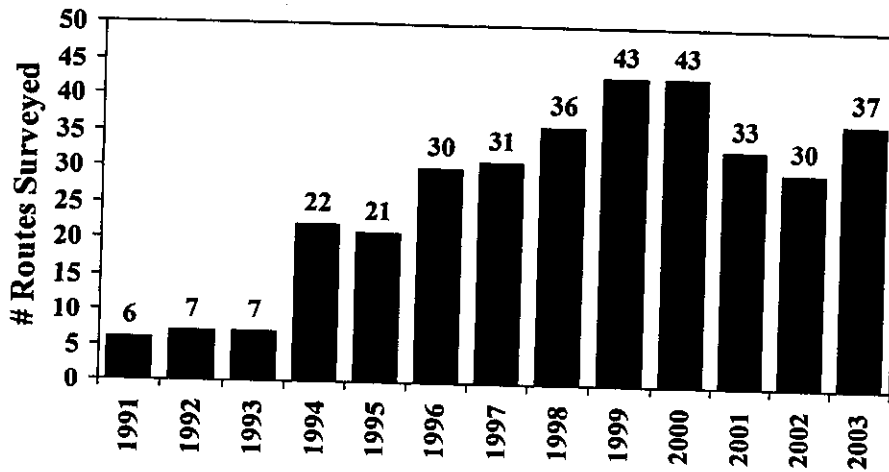


Fig. 29 Number of winter track routes surveyed, 1991-2003.

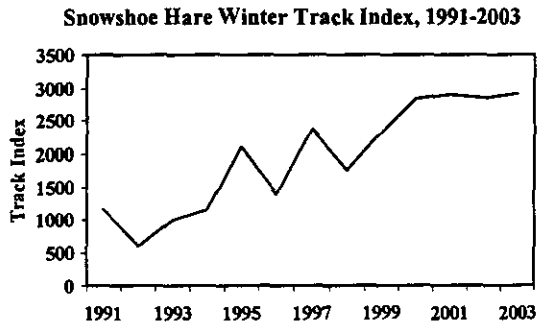
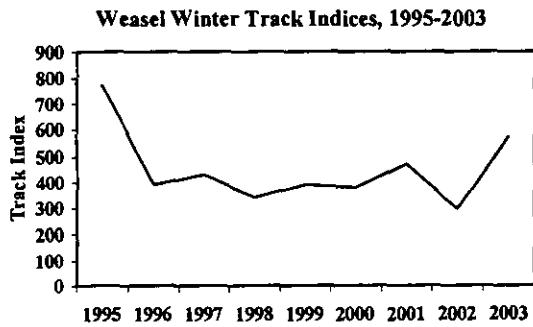
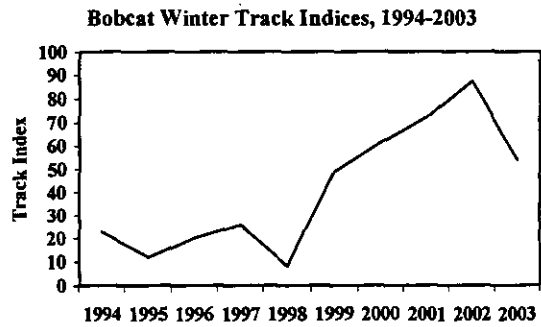
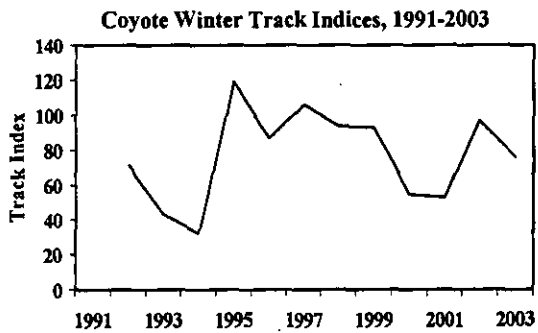
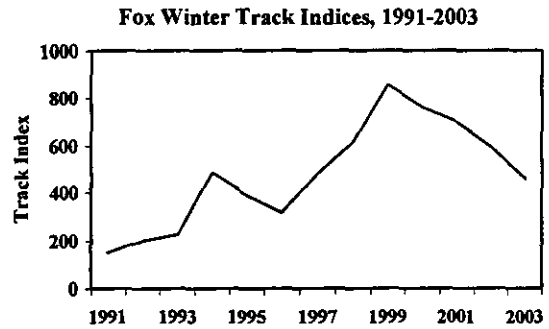
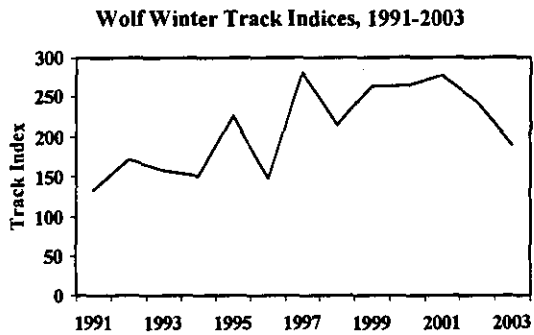
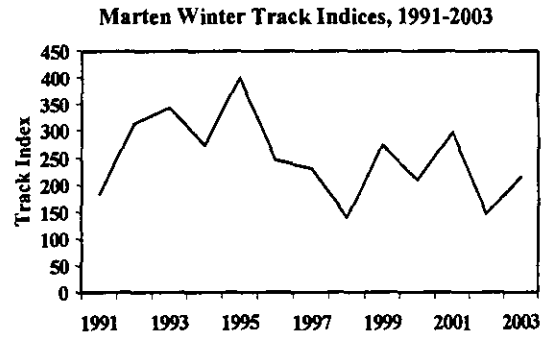
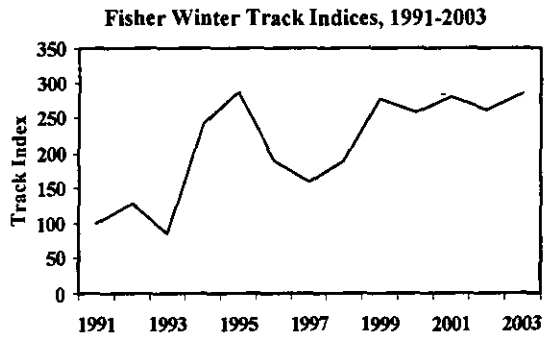


Figure 30. Winter track indices for selected species in Minnesota, 1991-2003.

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

Table 10. Mean number of ruffed grouse drums per stop by census zone, 1961-2004.

Year	Census Zone					Rangewide mean
	Northwest	North Central	Northeast	Central Hardwoods	Southeast	
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
2002	1.2	1.0	0.6	0.6	0.4	0.8
2003	1.2	1.0	0.6	0.8	0.6	0.9
2004	1.1	0.9	0.5	0.8	0.7	0.8



# RUFFED GROUSE 2003-2004

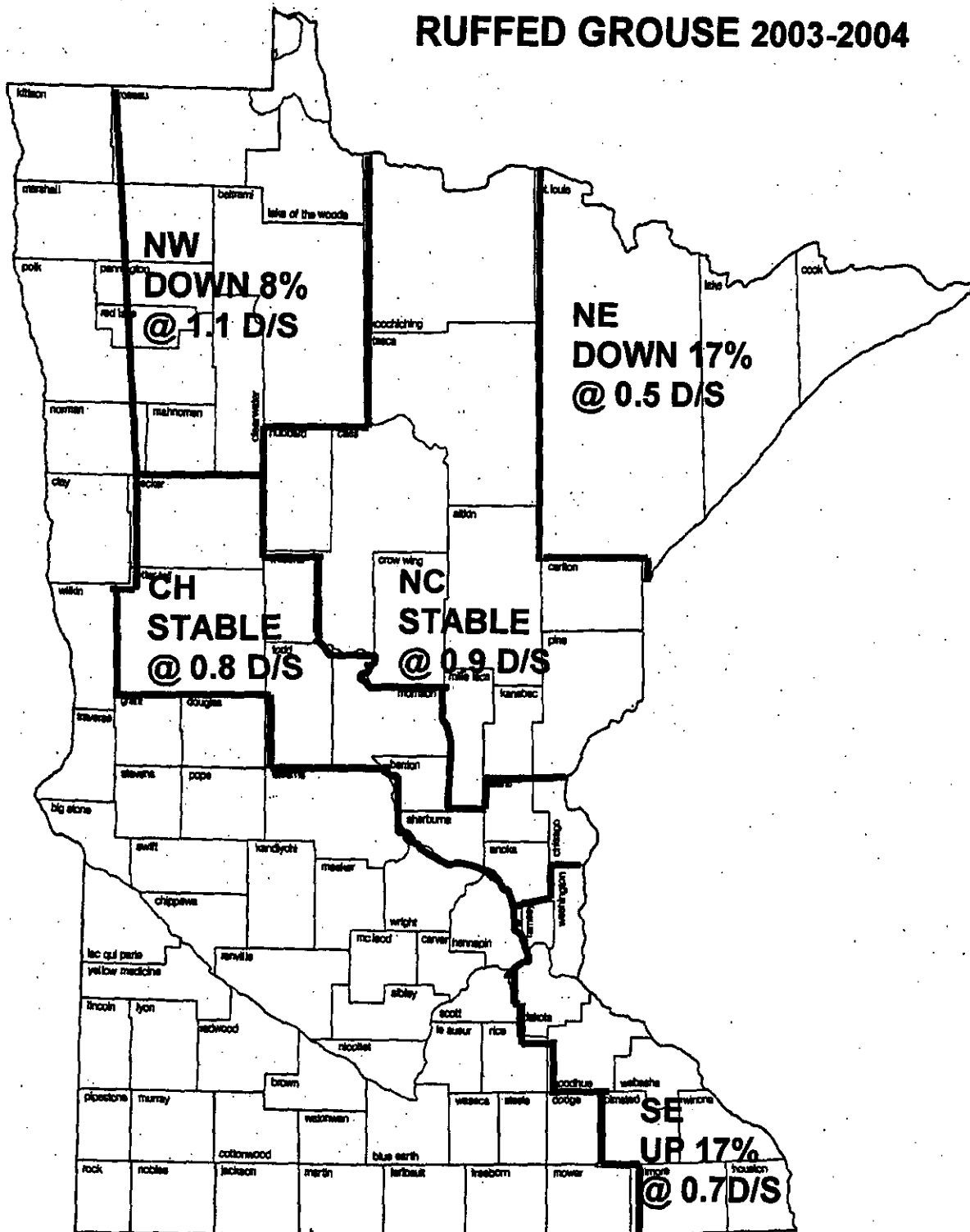


Figure 31. Changes in average numbers of ruffed grouse drums per stop on roadside counts, 2003-2004.

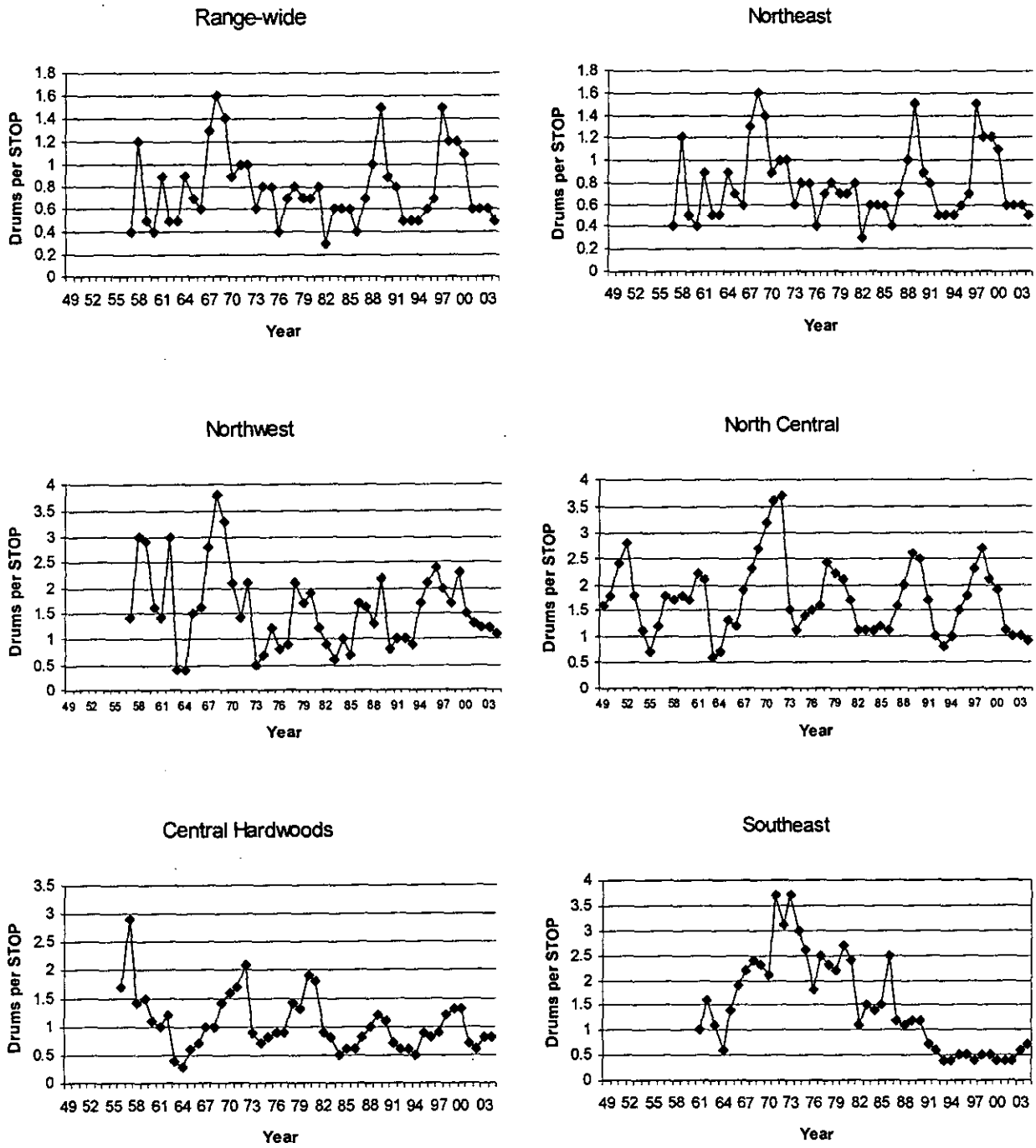


Figure 32. Summary of ruffed grouse drumming trends range-wide and in each of five survey zones, 1949-2004.

# SHARP-TAILED GROUSE 2003-2004

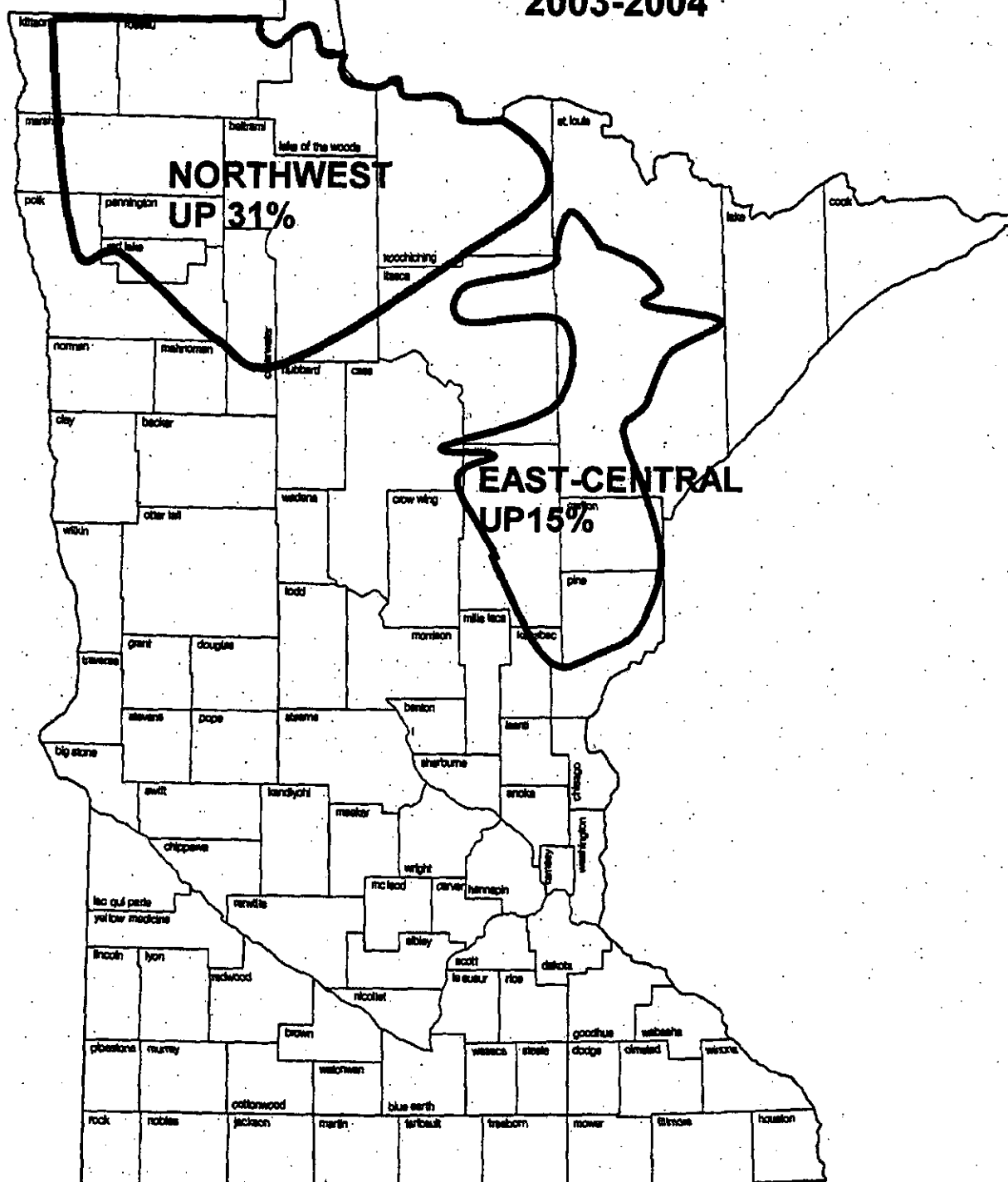


Figure 33. Changes in male sharp-tailed grouse counted on comparable dancing grounds in the Northwest and East-central ranges, 2003-2004.

Table 11. Number of snowshoe hares seen per 100 km of ruffed grouse drumming routes in the North, Northwest, and Northeast survey zones, 1974-2004.

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
2002	0.75
2003	1.80
2004	1.20

57

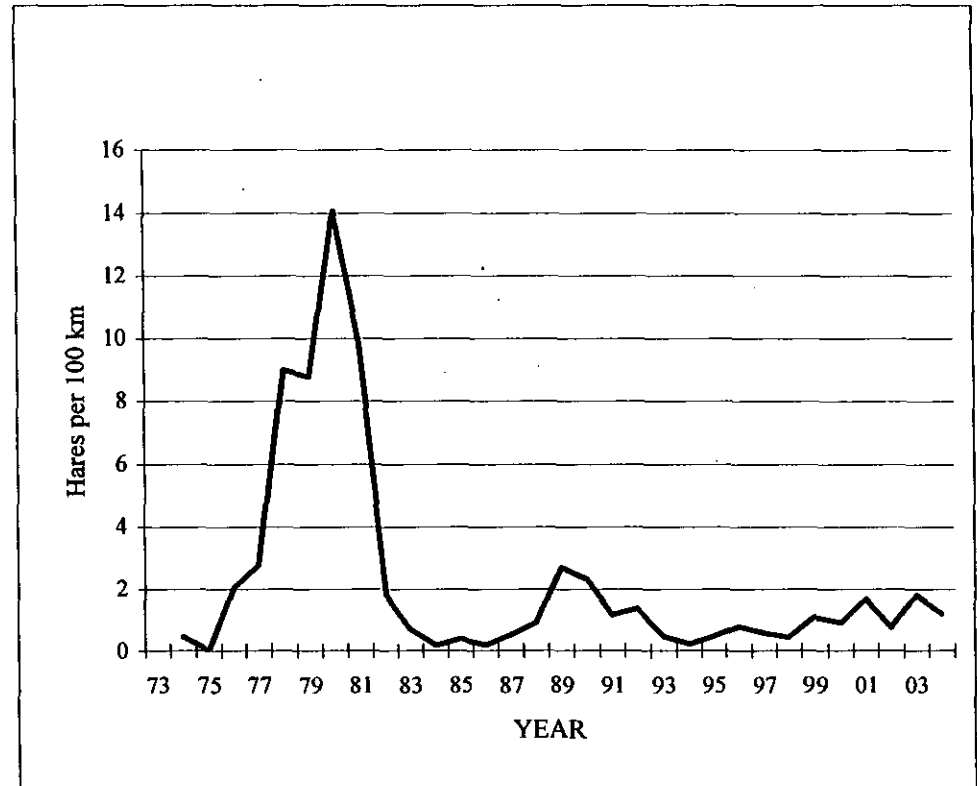


Figure 34. Snowshoe hare index (hares/100 km) based on hares seen on northern ruffed grouse drumming routes in Minnesota, 1974-2004.

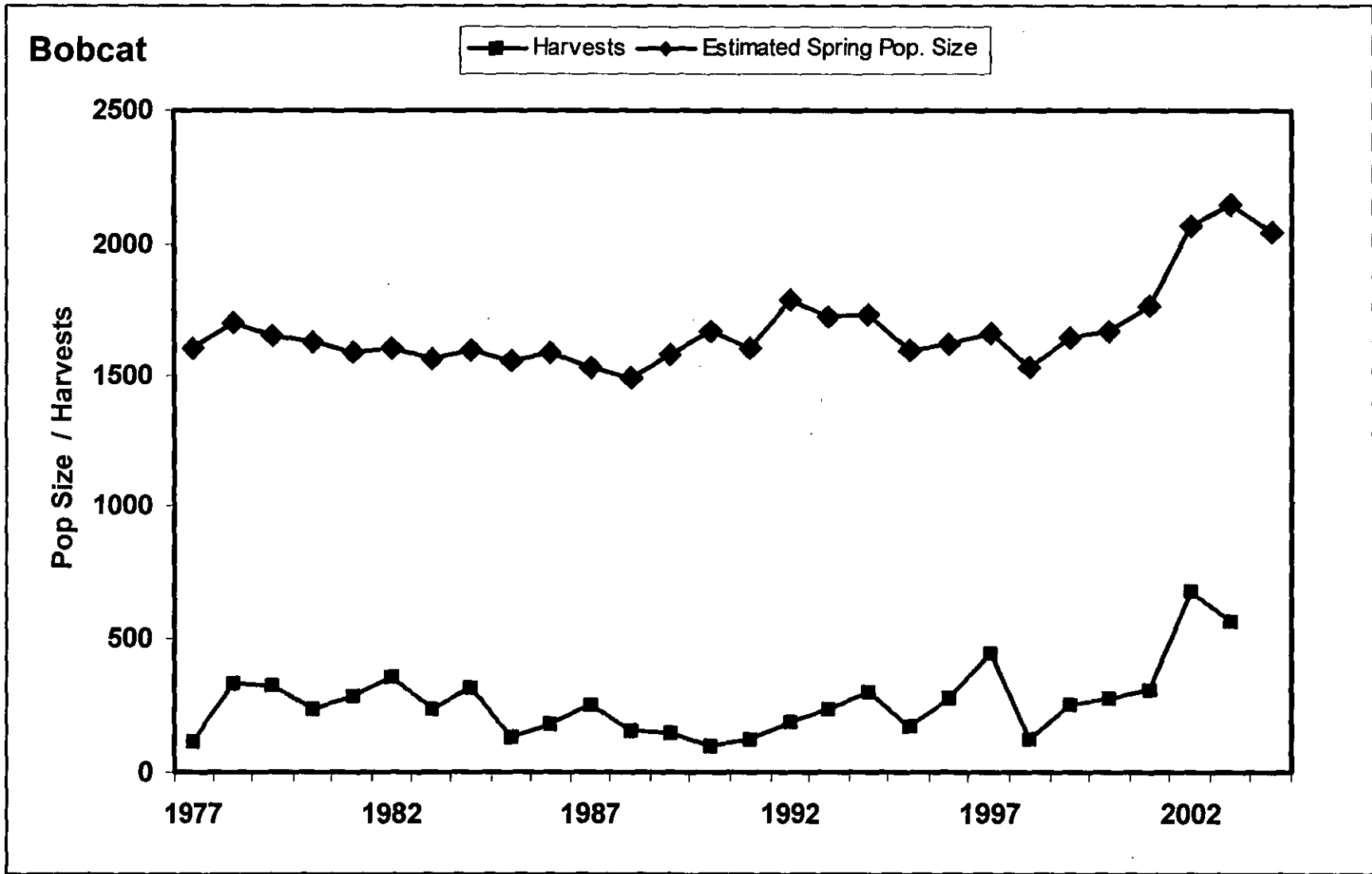


Figure 35. Population modeling for bobcat in Minnesota, 2004. Simulated harvest based on the previous 3-year average.



Table 12. Bobcat harvest, age structure, and population index data in Minnesota, 1987 to 2003.

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Season	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	11/24- 1/6	11/30- 1/5	11/29- 1/4
Limit	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Registered take	214	140	129	84	106	167	201	238	134	223	364	103	206	231	259	544	483
% autumn pop. taken <sup>1</sup>	11	8	6	5	6	9	11	14	9	13	20	6	12	13	13	31	18
Carcasses examined	163	114	119	62	93	151	161	187	96	164	270	77	163	183	213	475	425
% juveniles	33	49	39	20	35	28	32	26	31	35	35	29	18	31	30	27	25
% 1.7 yrs. old	16	18	17	34	33	22	20	16	15	20	16	26	24	26	21	25	13
% ≥ 2.7 yrs. old	51	42	44	46	32	50	48	58	54	45	49	45	58	43	49	48	62
Juv. : ≥2.7 yr. females	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	1.3	1.0	0.9
% male juveniles	44	58	49	58	59	55	51	64	57	51	60	59	55	54	52	66	61
% male 1.7 yrs.	52	62	53	80	55	45	45	43	71	30	37	60	59	59	51	49	46
% male ≥ 2.7 yrs.	48	46	56	44	70	53	52	45	79	49	43	60	62	50	53	46	53
Overall % males	48	54	53	59	61	53	50	50	71	46	48	60	60	53	52	52	54
Mean pelt price	\$101	\$68	\$48	\$43	\$37	\$28	\$43	\$36	\$34	\$33	\$30	\$28	\$24	\$33	\$46	\$72	\$96
Scent post index <sup>2</sup>	7	5	17	10	16	10	14	14	10	9	8	11	8	11	10	16	19
Winter track index <sup>3</sup>								23	12	20	26	8	49	61	72	87	54

<sup>1</sup> estimated from population model, includes accidental harvests of 10% 1977-1999

<sup>2</sup> index for autumn prior to harvest season

<sup>3</sup> index for winter during / after harvest season.

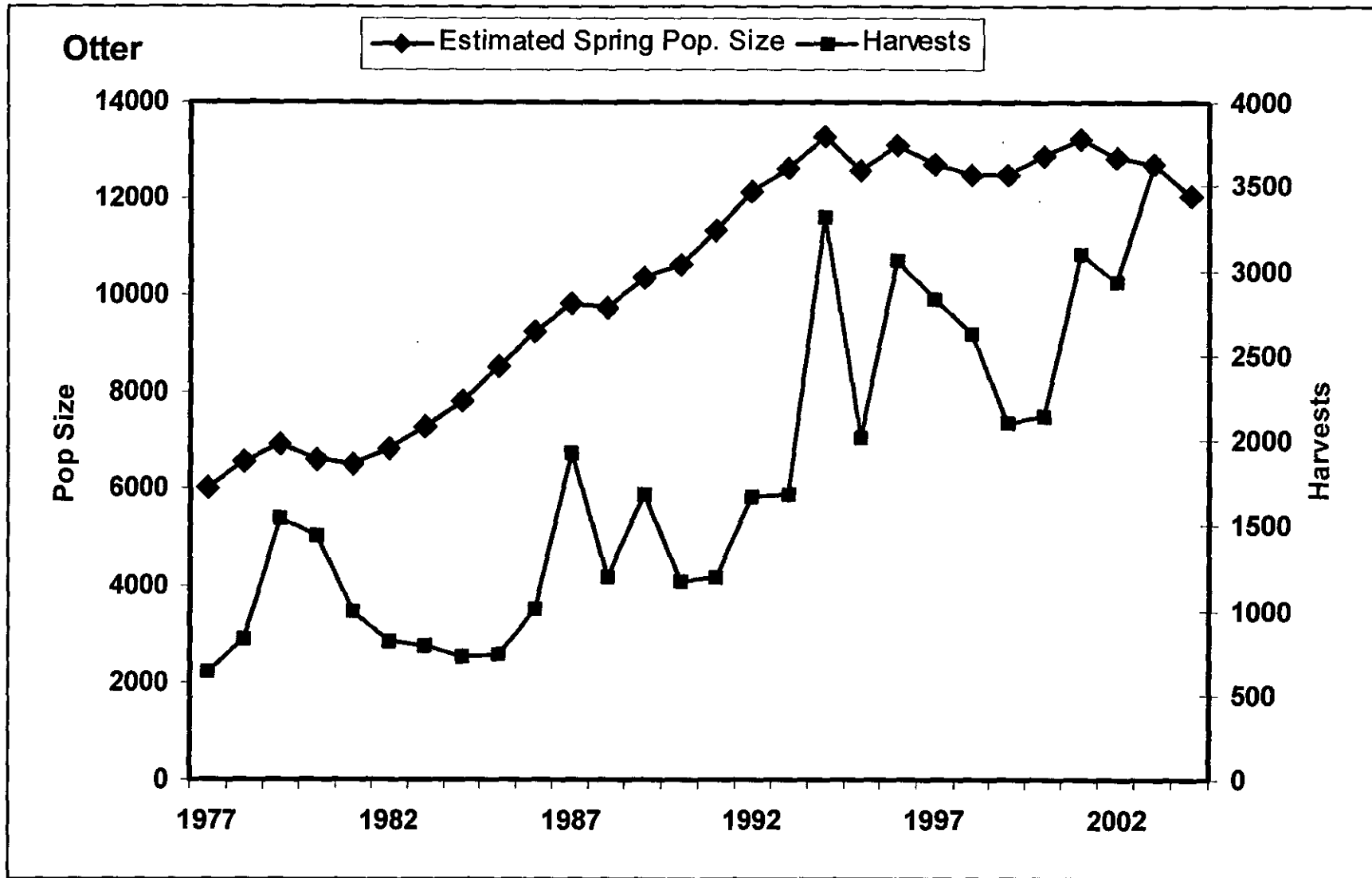


Figure 36. Population modeling summary for otter in Minnesota 2004. Simulated harvests are based on the previous 3-year average.

Table 13. Otter harvest, and pelt price data in Minnesota, 1987-2003.

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Season dates	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	10/27- 1/6	10/26- 1/5	10/25- 1/4
Limit	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4
Registered harvest	1,386	922	1,294	903	855	1,365	1,454	2,445	1,435	2,219	2,145	1,946	1635	1578	2314	2145	2766
% of autumn pop. harvested <sup>a</sup>	20	12	17	13	13	17	18	22	14	21	16	16	13	12	17	17	21
Mean pelt prices:																	
Otter	\$23	\$22	\$22	\$24	\$25	\$29	\$43	\$48	\$38	\$39	\$40	\$34	\$41	\$51	\$46	\$61	\$85
Beaver (fall)	\$17	\$14	\$12	\$9	\$9	\$7	\$11	\$14	\$13	\$19	\$16	\$11	\$12	\$15	\$13	\$10	\$13

<sup>a</sup> From population modeling; includes additional accidental harvests of 30% to 1991, and 22% after 1991.



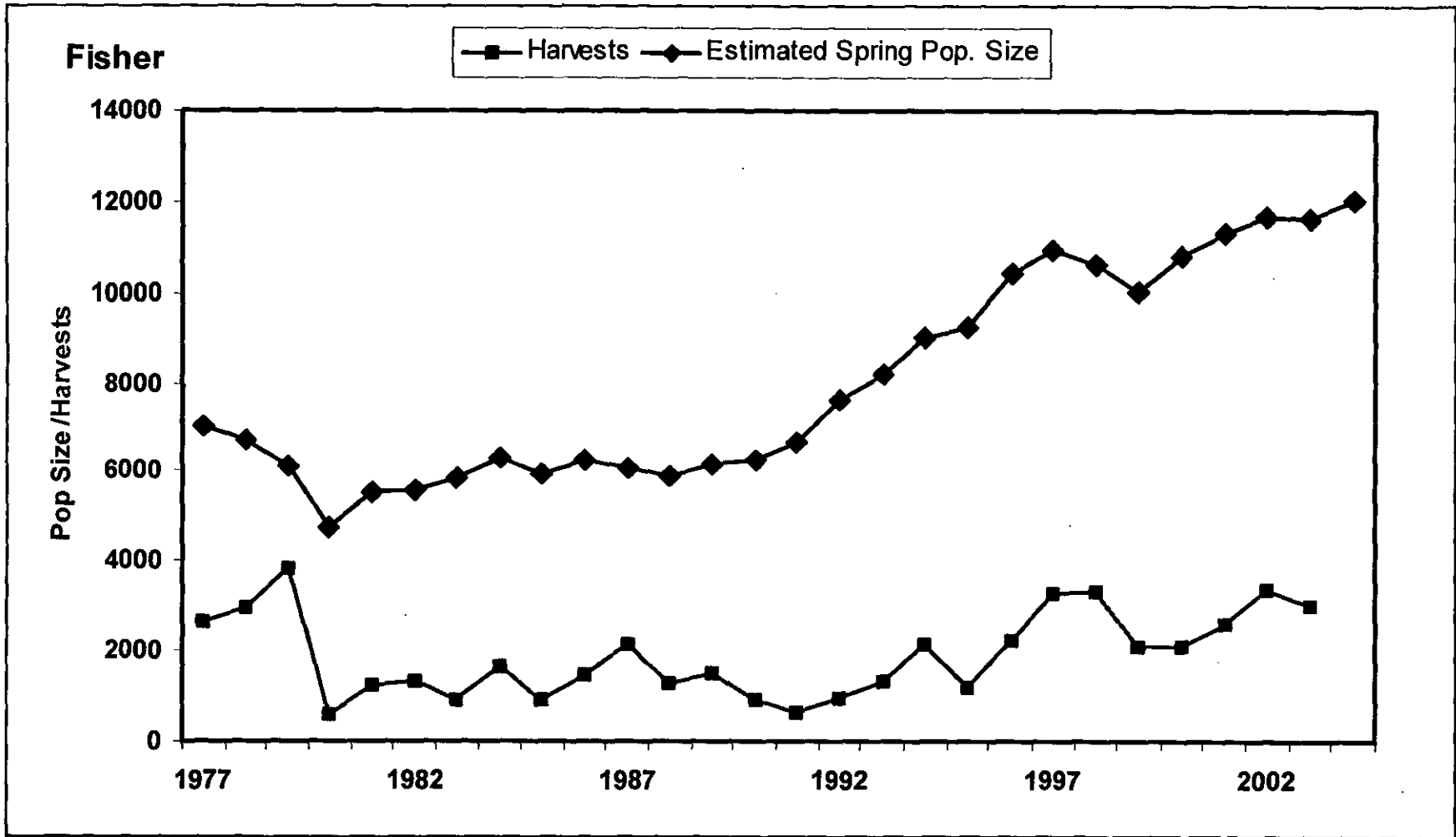


Figure 37. Population modeling summary for fisher in Minnesota, 2004. Simulated harvests are based on the previous 3-year average.

Table 14. Fisher harvest, carcass collection, and pelt price data in Minnesota, 1986-2003. Carcass collection ended in 1994.

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Season	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	11/24- 12/9	11/30- 12/15	11/29- 12/14
Limit	1	1	1	1	1	1	1	2	2	2	2	2	2	2	4 <sup>4</sup>	4 <sup>4</sup>	5 <sup>5</sup>	5 <sup>5</sup>
Registered Harvest	1,068	1642	1,025	1,243	746	528	777	1,158	1,771	942	1,773	2,761	2,695	1,725	1,674	2,145	2,660	2,517
% of available fall population harvested <sup>1</sup>	17	24	16	15	11	7	10	12	18	10	18	26	25	13	13	16	20	18
No. carcasses examined <sup>2</sup>	1186	1534	805	1024	592	410	629	937	1360	---	---	---	---	--	--	--	--	--
% juveniles	59	53	70	64	65	66	54	59	56	---	---	---	---	--	--	--	--	--
% 1.7 yrs.	24	15	15	19	14	21	25	22	18	---	---	---	---	--	--	--	--	--
% ≥ 2.7 yrs.	18	22	15	17	21	13	21	19	26	---	---	---	---	--	--	--	--	--
Juv.:adult female ratio	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	48	46	48	47	44	50	42	47	47	---	---	---	---	--	--	--	--	--
% male 1.7 yrs.	50	40	45	47	55	52	55	37	54	---	---	---	---	--	--	--	--	--
% male ≥ 2.7 yrs.	37	37	33	36	30	35	45	42	44	---	---	---	---	--	--	--	--	--
% males overall	46	43	45	45	43	48	46	44	48	---	---	---	---	--	--	--	--	--
Pelt price: males	\$84	\$84	\$54	\$26	\$35	\$21	\$16	\$14	\$19	\$16	\$25	\$31	\$19	\$19	\$20	\$23	\$27	\$27
females	\$162	\$170	\$100	\$53	\$46	\$48	\$29	\$28	\$30	\$25	\$34	\$34	\$22	\$20	\$19	\$23	\$25	\$26
Winter track index <sup>3</sup>						100	128	86	241	286	190	159	189	277	257	280	260	284

<sup>1</sup> estimated from population model, includes accidental harvests of 22% 1977-1992, and 11% 1993-1999

<sup>2</sup> may exceed registration totals due to accidental catches, Indian Reservation season framework, etc.

<sup>3</sup> index for winter during / after harvest season.

<sup>4</sup> combined limit in 2000 of any combination of marten and fisher totaling 4.

<sup>5</sup> combined limit of any combination of marten and fisher totaling 5.

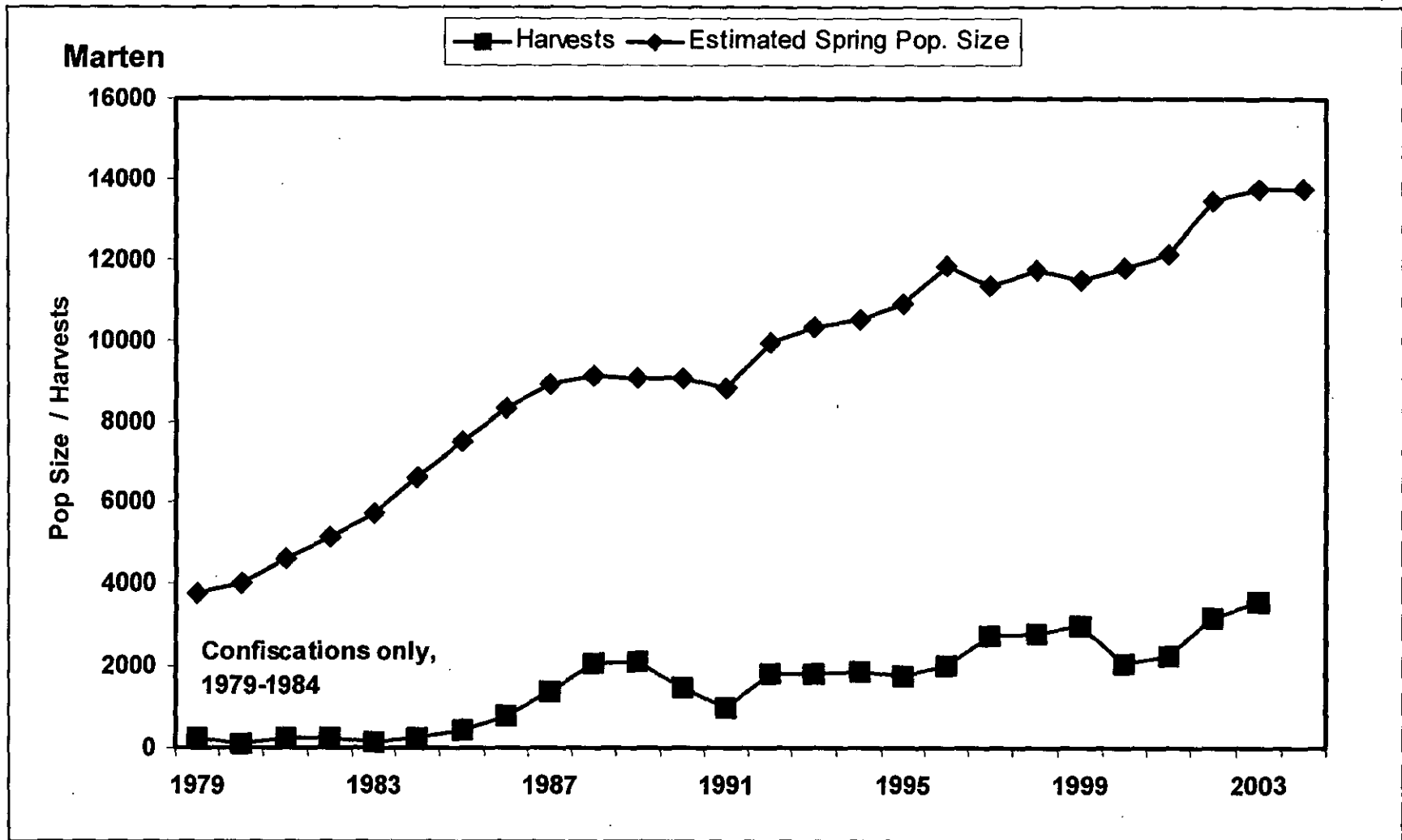


Figure 38. Population modeling summary for pine marten in Minnesota, 2004. Simulated harvests are based on the previous 3-year average.

Table 15. Pine marten harvest, carcass collection, and pelt price data in Minnesota, 1988-2003.

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Season	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	11/24- 12/9	11/30- 12/15	11/29- 12/14
Limit	2	2	2	1	2	2	2	2	2	2	2	4 <sup>3</sup>	4 <sup>4</sup>	4 <sup>4</sup>	5 <sup>5</sup>	5 <sup>5</sup>
Registered take	2,072	2,119	1,349	656	1,601	1,436	1,527	1,500	1,625	2,261	2,299	2,423	1629	1940	2839	3214
% of available fall population harvested <sup>1</sup>	19	20	15	11	15	15	15	13	16	21	20	18	14	17	19	20
No. carcasses examined <sup>2</sup>	1,977	1,014	1,375	716	1,661	1,396	1,452	1,393	1,372	2,238	1,577	2,013	1598	1895	2451	2391
% juveniles	66	68	48	74	65	57	58	60	48	61	57	67	56	62	39	48
% 1.7 yrs.	11	12	18	9	18	20	15	18	22	13	18	12	25	15	30	17
% ≥ 2.7 yrs.	23	20	34	17	17	23	27	22	30	26	25	21	19	23	31	35
juv.:adult female ratio	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	11:1	3.1:1	4.0:1
% male juveniles	58	57	59	69	63	61	62	63	62	60	62	65	62	66	57	57
% male 1.7 yrs.	50	63	54	71	70	71	76	68	69	60	66	66	69	73	63	65
% male ≥ 2.7 yrs.	66	65	61	72	75	67	67	66	67	63	65	67	66	75	61	66
% males overall	59	59	59	70	66	64	66	65	65	61	63	66	64	69	60	62
Pelt price: male	\$50	\$48	\$44	\$40	\$28	\$36	\$34	\$28	\$34	\$28	\$20	\$25	\$28	\$24	\$28	\$30
female	\$43	\$47	\$41	\$27	\$25	\$30	\$28	\$21	\$29	\$22	\$16	\$21	\$21	\$23	\$27	\$27
Winter track index <sup>6</sup>				183	314	343	273	400	247	231	139	274	210	296	147	216

<sup>1</sup> estimated from population model, includes accidental harvests of 40% 1985-1987 and 1991, of 20% 1988-1990 and 1992-1998, and of 15% in 1999 to present.

<sup>2</sup> may exceed registration totals due to harvests by Indians, accidental catches, etc.

<sup>3</sup> "combined" limit in 1999 of 4 marten, not to include more than 2 fisher (limit could be all marten)

<sup>4</sup> combined limit in 2000 of any combination of marten and fisher totaling 4

<sup>5</sup> combined limit of any combination of marten and fisher totaling 5.

<sup>6</sup> population index for winter during/after harvest season.

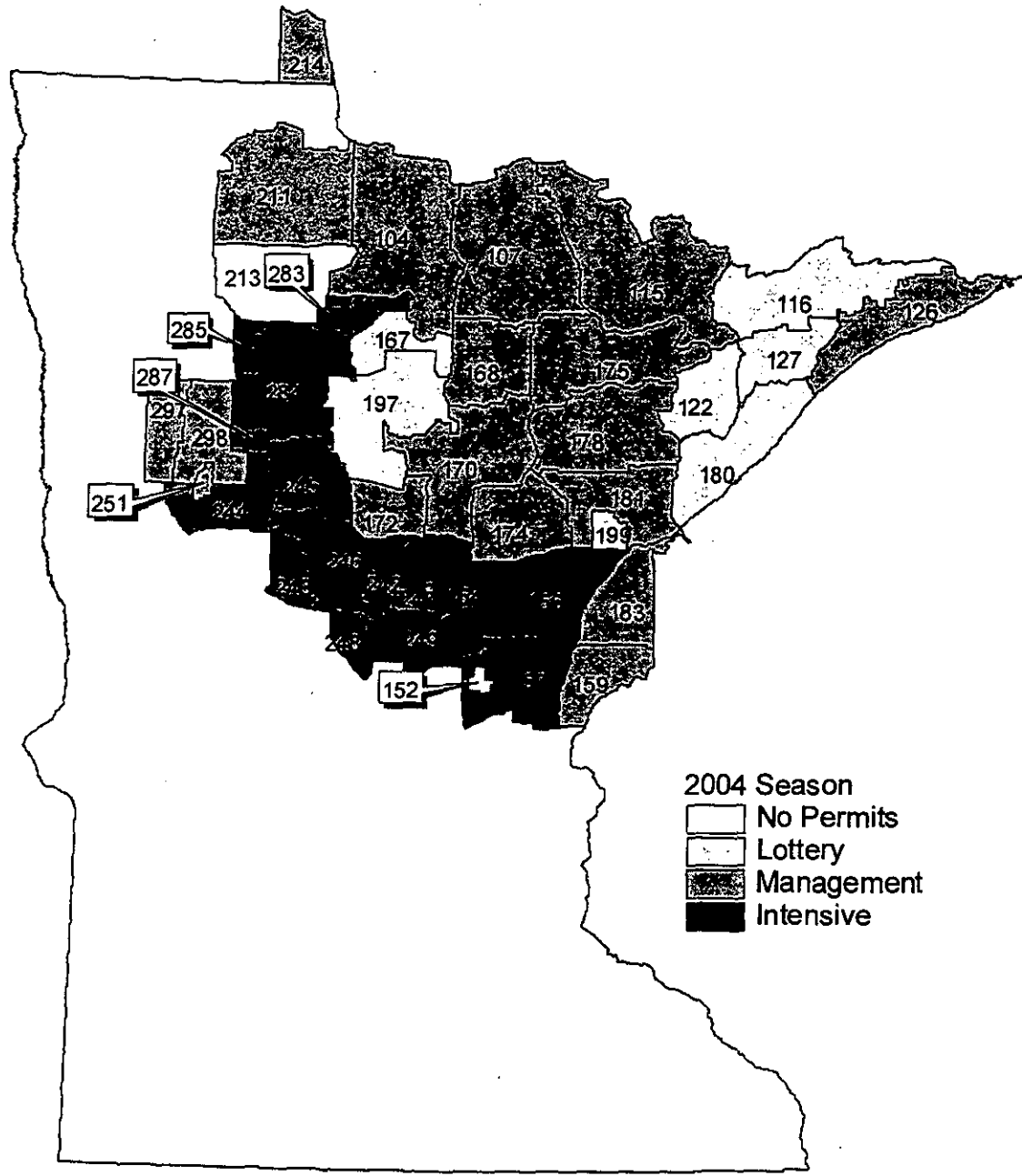


Figure 39. Either sex deer permit areas in the Forested zone, 2004. Permit areas 283 and 285 were combined with 284 for modeling purposes. Permit areas 213, 214, and 287 were not modeled.

Table 16. Spring (pre-fawning) white-tailed deer density as simulated from modeling in each permit area in Minnesota's Forested zone, 1995-2004.

Permit Area	Area (sq. mi.)	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Change
104	2078	8	5	4	5	5	6	6	7	8	7	-9%
107	1895	10	8	7	8	10	12	12	13	14	13	-6%
110	198	23	15	11	15	16	17	18	19	19	17	-9%
115	1872	19	14	13	15	17	19	18	20	21	18	-14%
116	1158	1	1	1	1	1	1	1	1	1	1	0%
122	620	5	3	3	3	4	4	4	4	5	4	-10%
126	940	4	3	3	3	3	4	4	4	4	4	-14%
127	562	5	3	3	3	4	4	4	4	5	4	-10%
152	61	16	13	11	13	13	13	13	14	15	17	10%
154	761	15	13	13	15	17	19	18	19	18	16	-9%
156	826	12	11	10	11	13	14	14	15	16	16	-3%
157	890	20	19	18	21	23	25	25	27	27	27	-3%
159	568	23	21	21	24	26	28	26	27	30	30	3%
167	440	23	15	11	15	16	17	18	19	19	17	-9%
168	724	12	9	9	11	14	15	14	16	16	17	3%
170	1315	11	9	9	11	13	15	14	15	16	14	-13%
172	451	21	19	18	22	27	31	30	32	34	31	-7%
174	835	10	8	8	10	11	12	12	13	14	13	-5%
174	835	10	8	8	10	11	12	12	13	14	13	-5%
175	1266	11	8	7	9	10	11	11	12	12	12	-6%
178	1264	11	7	7	8	10	11	11	12	12	12	-6%
180	1059	8	6	5	6	7	8	8	9	10	10	-2%
180	1059	8	6	5	6	7	8	8	9	10	10	-2%
181	1009	14	10	10	11	13	14	14	14	15	14	-7%
181	1009	14	10	10	11	13	14	14	14	15	13	-14%
183	707	16	12	11	13	15	16	15	15	15	11	0%
197	960	12	8	7	8	9	10	10	11	11	11	0%
197	960	12	8	7	8	9	10	10	11	11	7	-7%
211	1831	7	4	3	4	4	5	6	7	8	7	-7%
242	209	21	19	18	22	27	31	30	32	34	31	-7%
242	209	21	19	18	22	27	31	30	32	34	31	-7%
243	314	33	30	27	31	35	39	38	40	41	39	-5%
243	314	33	30	27	31	35	39	38	40	41	39	-5%
244	586	34	25	23	27	31	36	38	41	43	43	-2%
244	586	34	25	23	27	31	36	38	41	43	43	-2%
245	583	26	20	19	23	28	32	32	35	36	32	-9%
245	583	26	20	19	23	28	32	32	35	36	32	-9%
246	758	26	24	21	24	26	29	27	28	29	28	-5%
246	758	26	24	21	24	26	29	27	28	29	28	-5%
247	229	21	19	18	22	27	31	30	32	34	31	-7%
247	229	21	19	18	22	27	31	30	32	34	31	-7%
248	213	19	17	15	19	20	22	21	23	24	24	-1%
248	213	19	17	15	19	20	22	21	23	24	24	-1%
248	213	19	17	15	19	20	22	21	23	24	24	-1%
249	502	15	14	12	15	17	19	18	19	20	19	-5%
249	502	15	14	12	15	17	19	18	19	20	19	-5%
249	502	15	14	12	15	17	19	18	19	20	19	-5%
251	56	26	19	17	19	21	24	24	27	30	29	-3%
251	56	26	19	17	19	21	24	24	27	30	29	-3%
251	56	26	19	17	19	21	24	24	27	30	29	-3%
284	1531	20	13	11	14	17	19	20	22	23	21	-8%
284	1531	20	13	11	14	17	19	20	22	23	21	-8%
284	1531	20	13	11	14	17	19	20	22	23	21	-8%
297	439	4	3	3	3	4	4	5	5	5	6	6%
297	439	4	3	3	3	4	4	5	5	5	6	6%
297	439	4	3	3	3	4	4	5	5	5	6	6%
298	620	12	9	7	9	10	11	11	13	15	14	-3%
298	620	12	9	7	9	10	11	11	13	15	14	-3%
298	620	12	9	7	9	10	11	11	13	15	14	-3%

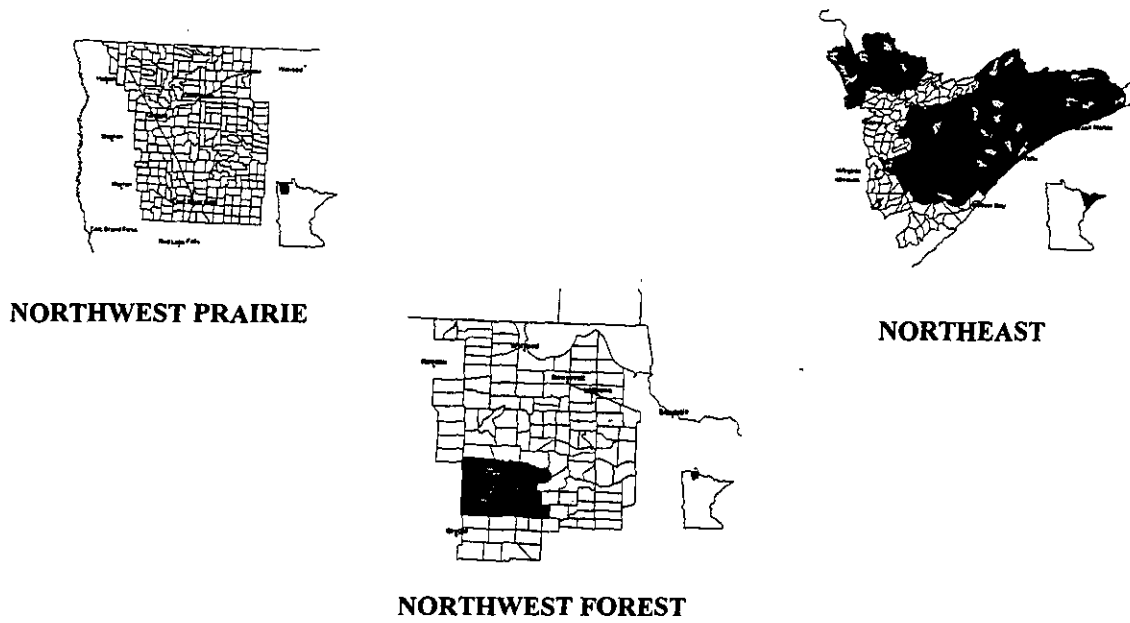


Figure 40. Aerial moose survey area boundaries.

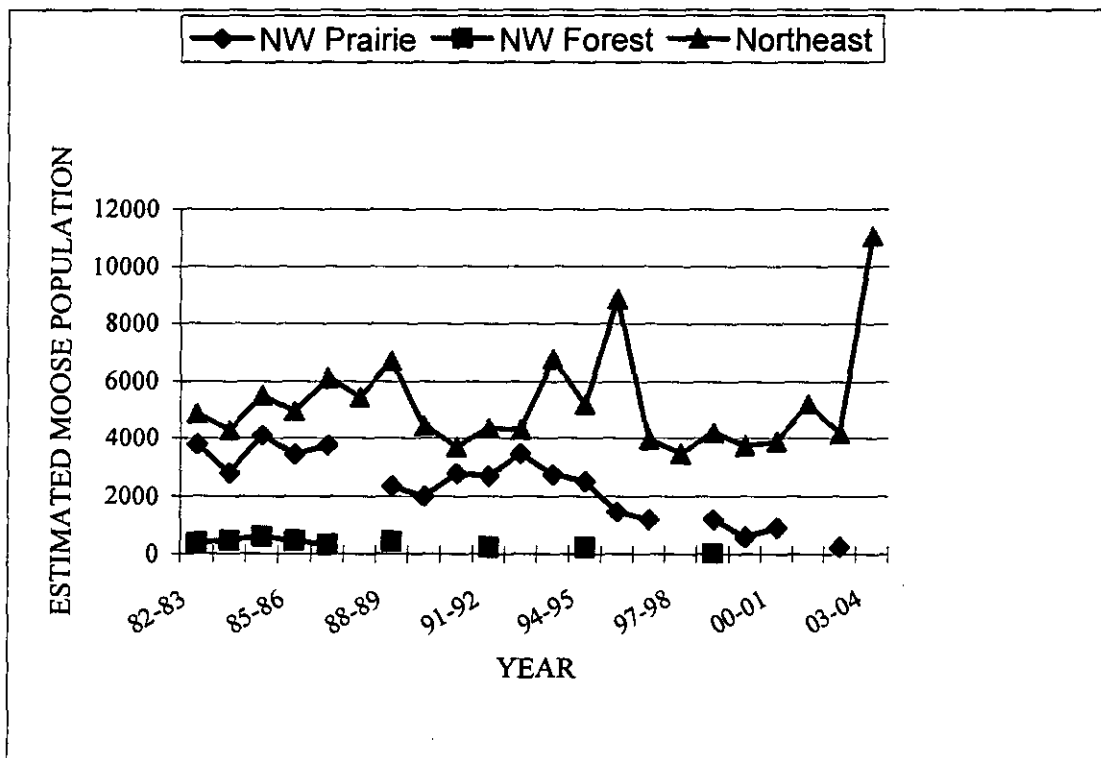


Figure 41. Moose population trends by survey area in northern Minnesota. Trend lines are broken where survey information was not collected.

Table 17. Moose population estimates from aerial moose survey in Minnesota, 1982-83 to 2003-04.

Year	Population Estimate by Survey Area (+90% CI)		
	Northwest Prairie	Northwest Forest	Northeast
1982-83	3772 ( $\pm$ 930)	370 ( $\pm$ 124)	4877 ( $\pm$ 999)
1983-84	2784 ( $\pm$ 567)	446 ( $\pm$ 139)	4274 ( $\pm$ 925)
1984-85	4086 ( $\pm$ 518)	578 ( $\pm$ 148)	4451 ( $\pm$ 774)
1985-86	3415 ( $\pm$ 412)	433 ( $\pm$ 100)	4918 ( $\pm$ 1029)
1986-87	3740 ( $\pm$ 747)	307 ( $\pm$ 83)	5994 ( $\pm$ 1438)
1987-88	no survey	no survey	5492 ( $\pm$ 1090)
1988-89	2328 ( $\pm$ 474)	419 ( $\pm$ 153)	6938 ( $\pm$ 2502)
1989-90	1985 ( $\pm$ 435)	no survey	4492 ( $\pm$ 1227)
1990-91	2771 ( $\pm$ 817)	no survey	3572 ( $\pm$ 1670)
1991-92	2678 ( $\pm$ 629)	223 ( $\pm$ 65)	4362 ( $\pm$ 1323)
1992-93	3452 ( $\pm$ 640)	no survey	4292 ( $\pm$ 1371)
1993-94	2735 ( $\pm$ 491)	no survey	6768 ( $\pm$ 1807)
1994-95	2497 ( $\pm$ 674)	229 ( $\pm$ 88)	5193 ( $\pm$ 1516)
1995-96	1436 ( $\pm$ 474)	no survey	8854 ( $\pm$ 9513)
1996-97	1170 ( $\pm$ 359) <sup>†</sup>	no survey	3960 ( $\pm$ 1416)
1997-98	no survey	no survey	3464 ( $\pm$ 1247)
1998-99	1,160 ( $\pm$ 384)	11 ( $\pm$ 8)	4186 ( $\pm$ 1423)
1999-00	560 ( $\pm$ 233)	no survey	3733 ( $\pm$ 942)
2000-01	883 ( $\pm$ 253)	no survey	3879 ( $\pm$ 1094)
2001-02	no survey	no survey	5214 ( $\pm$ 1199)
2002-03	237 ( $\pm$ 173)	no survey	4161 ( $\pm$ 1540)
2003-04	no survey	no survey	11,059 ( $\pm$ 3649)*
change since last survey			+ 166 %

\* The aerial survey protocol was changed and the survey was conducted using a helicopter rather than a fixed wing aircraft. Increased estimate reflects these changes, not an increase in moose numbers.



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

Table 18. Estimates of Minnesota mallard breeding populations, 1975-2004.

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
	2002	145,191	2.53	367
	2003	115,974	2.42	280
	2004	158,416	2.37	375

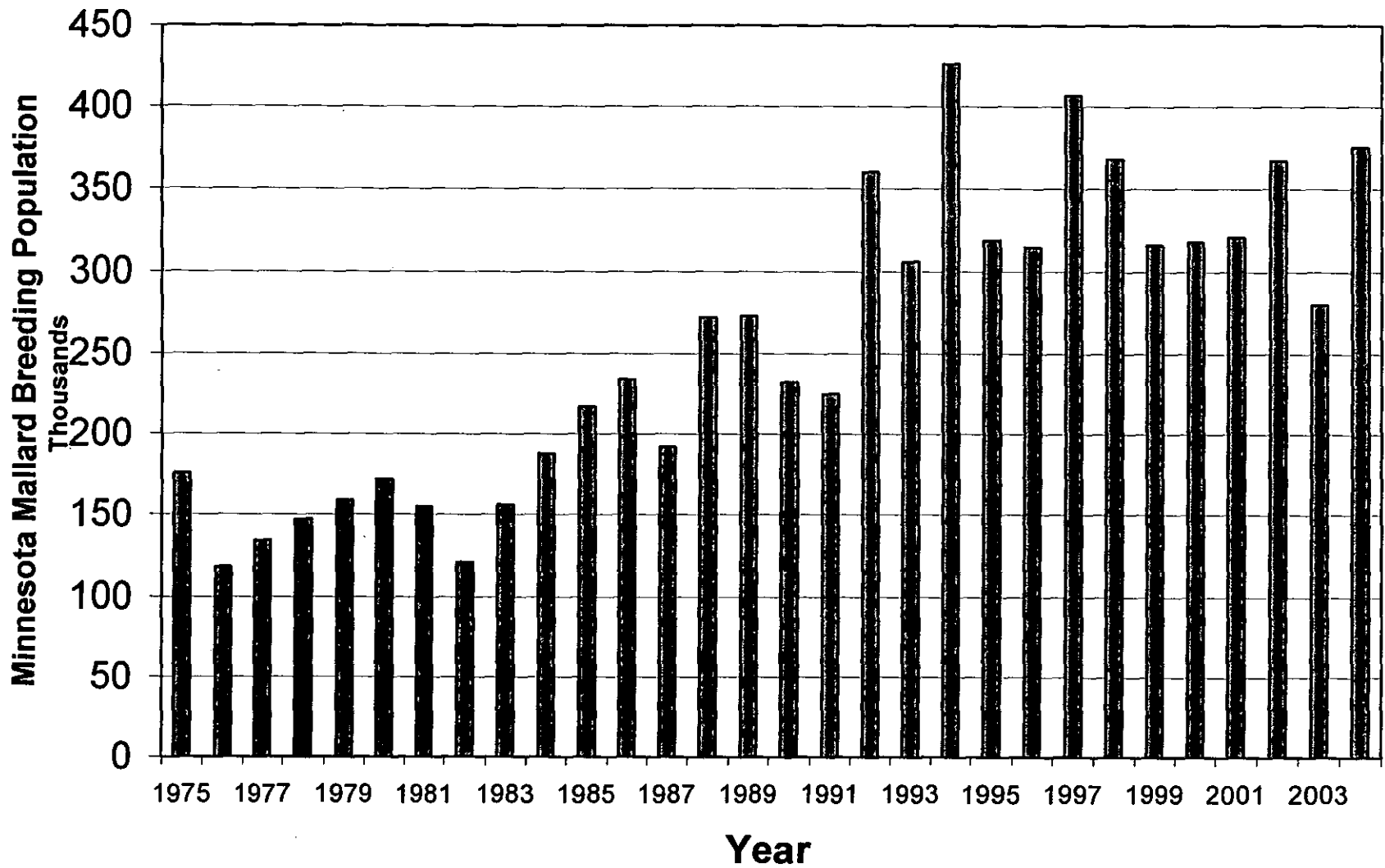


Figure 42. Minnesota mallard Breeding populations, 1975-2004



Table 19. Estimates of Minnesota Blue-winged teal breeding populations, 1975-2004.

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	
2002	91,982	4.67	430	
2003	46,759	4.13	193	
2004	94,152	3.75	353	

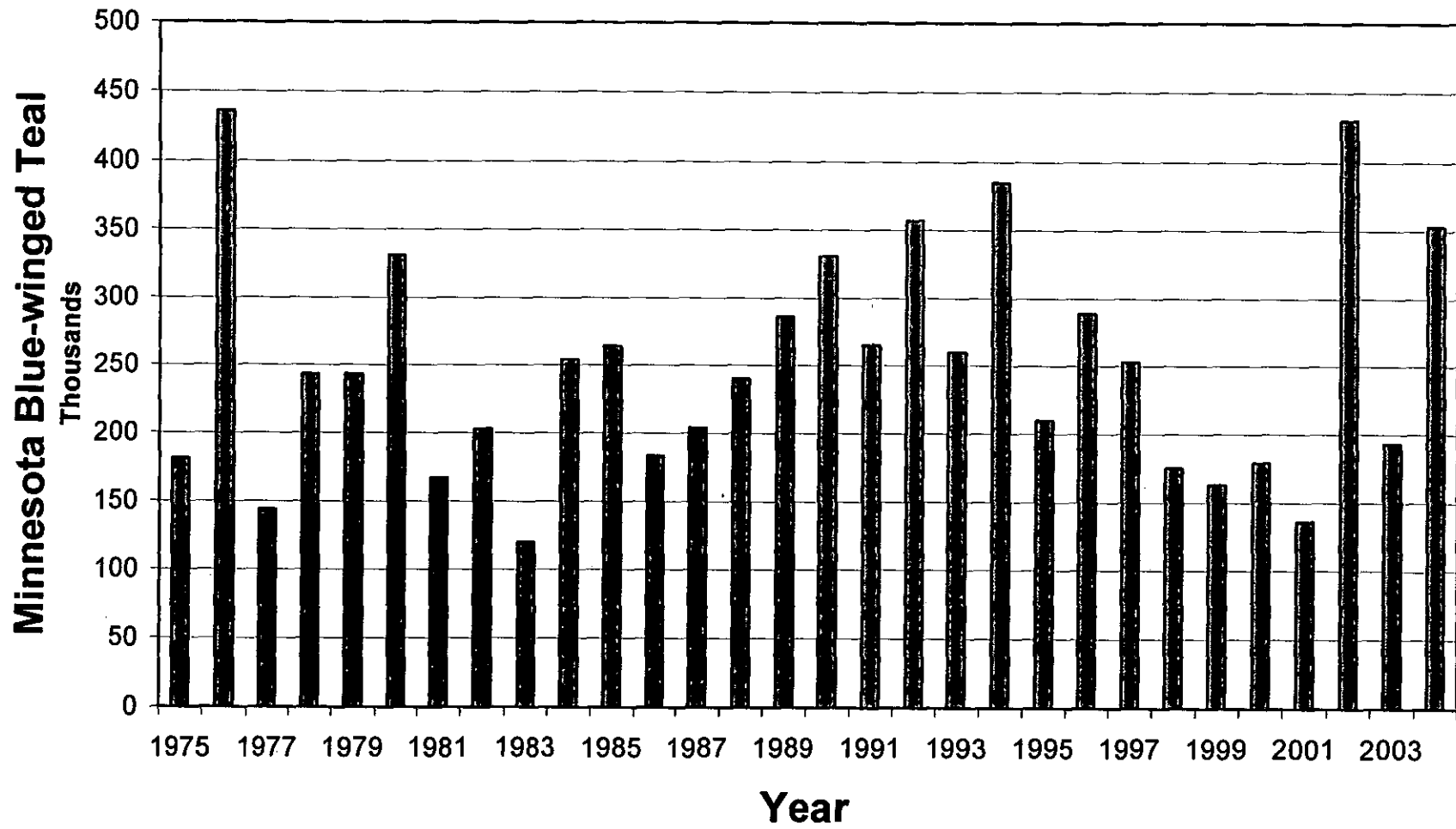


Figure 43. Minnesota blue-winged teal breeding populations, 1975-2004.

Table 20. Canada goose population indices (in thousands) of the eastern prairie flock, 1971-2004 (taken from: U.S. Fish and Wildlife Service/Canadian Wildlife Service, 2004. Waterfowl population status, 2004. July 2004. 53pp).

Year	Population <sup>a,b</sup>
1971-72	125,000
1972-73	138,000
1973-74	120,000
1974-75	144,000
1975-76	216,000
1976-77	164,000
1977-78	180,000
1978-79	99,000
1979-80	n.a.
1980-81	125,000
1981-82	132,000
1982-83	155,000
1983-84	136,000
1984-85	158,000
1985-86	195,000
1986-87	203,000
1987-88	209,000
1988-89	210,000
1989-90	232,000
1990-91	212,000
1991-92	202,000
1992-93	157,000
1993-94	211,000
1994-95	205,000
1995-96	190,000
1996-97	199,000
1997-98	126,000
1998-99	207,000
1999-00	275,000
2000-01	215,000
2001-02	216,000
2002-03	229,000
2003-04	291,000

<sup>a</sup> Surveys conducted in Spring.

<sup>b</sup> Indirect or preliminary estimate.

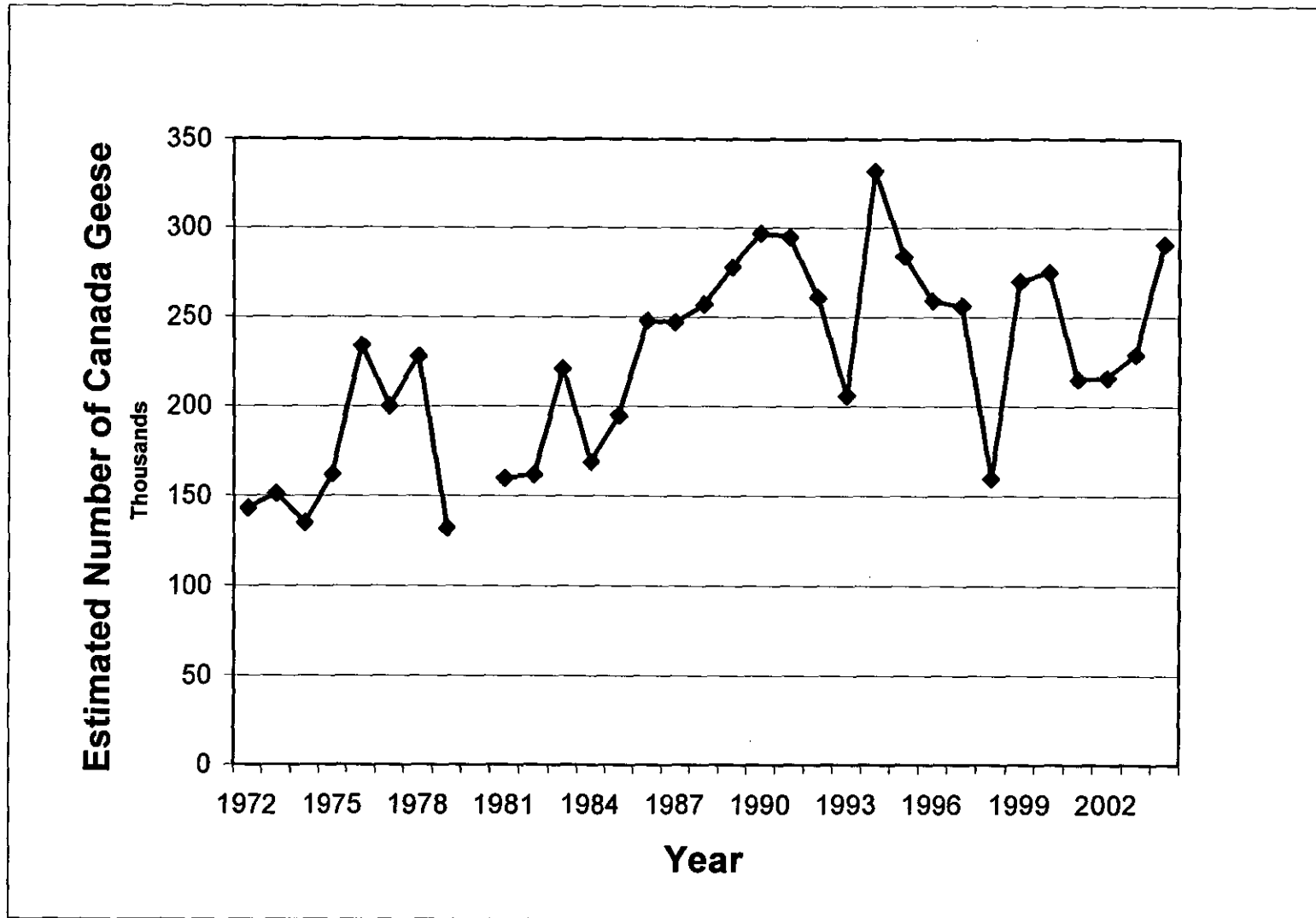


Figure 44. Breeding ground survey estimates of the Eastern Prairie Population of Canada geese, 1972-2004. (from: U.S. Fish and Wildlife Service/Canadian Wildlife Service reports 2004. Waterfowl population status, 2004. July 2004. 53 pp). Surveys conducted in spring. Indirect or preliminary estimates. Data not available for 1980.

Table 21. Estimates for EPP components and the population, 1973-2004. 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).

YEAR	Singles (x2)		Pairs (x2)		Geese in groups		Singles + Pairs		Total EPP*		Productive	
	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI
73	47952	8596	68630	14380	21063	7073	116581	18573	137644	18185		
74	35597	6608	61062	12716	23213	6859	96659	17136	119871	15887		
75	63995	11549	57542	9623	22815	8902	121536	18313	144353	17471		
76	70596	13556	97791	15596	48153	14684	168388	22089	216541	25350		
77	45459	9648	65348	12810	52961	14159	110808	19518	163769	21393		
78	27286	7131	83911	12659	68529	18475	111197	16696	179725	23504		
79	26850	6348	45989	9497	26537	9808	72839	12640	99377	15056		
80		No survey conducted in 1980										
81	31331	6787	47534	10109	46614	15183	78865	14480	125479	19462		
82	43020	8137	53407	8762	35375	12044	96427	13538	131802	16971		
83	27010	5836	65806	10061	62324	13944	92817	12215	155140	18159		
84	48636	8483	63369	9747	23500	8539	112004	14661	135505	15488	60309	9722
85	42983	9345	62613	10204	52846	14754	105595	16347	158442	20226	62419	11276
86	57014	10227	69365	12235	68395	15997	126379	18534	194773	22588	63848	11466
87	50297	9421	95557	14904	57332	15707	145854	19726	203186	23614	59710	10864
88	57739	8843	79245	11977	72199	21870	136984	17619	209183	26456	65079	9942
89	62557	9722	69545	11590	78067	17802	132103	16710	210169	23362	66416	10085
90	66729	10550	96669	12977	68439	15962	163398	18391	231836	23120	79555	11652
91	66190	12847	101237	15160	44381	15107	167427	23004	211809	24962	80607	15048
92	61950	9722	96456	14145	44139	11414	158406	19859	202545	20612	73739	11445
93	71553	10344	64690	11126	21229	7739	136242	16391	157473	17049	82761	11339
94	67681	11212	68556	11424	74545	18790	136237	17107	210782	24683	77668	11816
95	51117	8843	87859	12621	65603	21468	138976	17386	204578	26426	58452	9869
96	55304	9573	85671	13801	49388	15283	140975	19653	190363	22709	66679	10952
97	55536	9031	74578	11897	68795	20295	130539	18049	199336	25199	72347	11673
98	57161	10413	42137	8341	26606	11056	99298	15643	125904	17327	64269	11507
99	65242	10273	74250	12391	67256	13132	139492	18586	206748	20773	76585	11590
2000	32800	6927	97238	15795	145089	34685	130038	19345	275127	38736	40813	7898
2001	38656	8762	83570	13324	93135	23506	122237	17247	215361	28405	51899	9548
2002	66807	10731	84866	13142	64630	20161	151964	19095	216303	26351	81715	11997
2003	64806	10731	57565	11169	106815	29682	122382	18062	229187	33480	70708	11382
2004	41897	7265	103596	16244	145160	32258	145493	19835	290653	36840	48088	7898

\*The total EPP estimate and estimate of singles+pairs are derived separately from the estimates of individual components, minor rounding error results.



**MN Canada Goose Breeding  
Population**  
Thousands

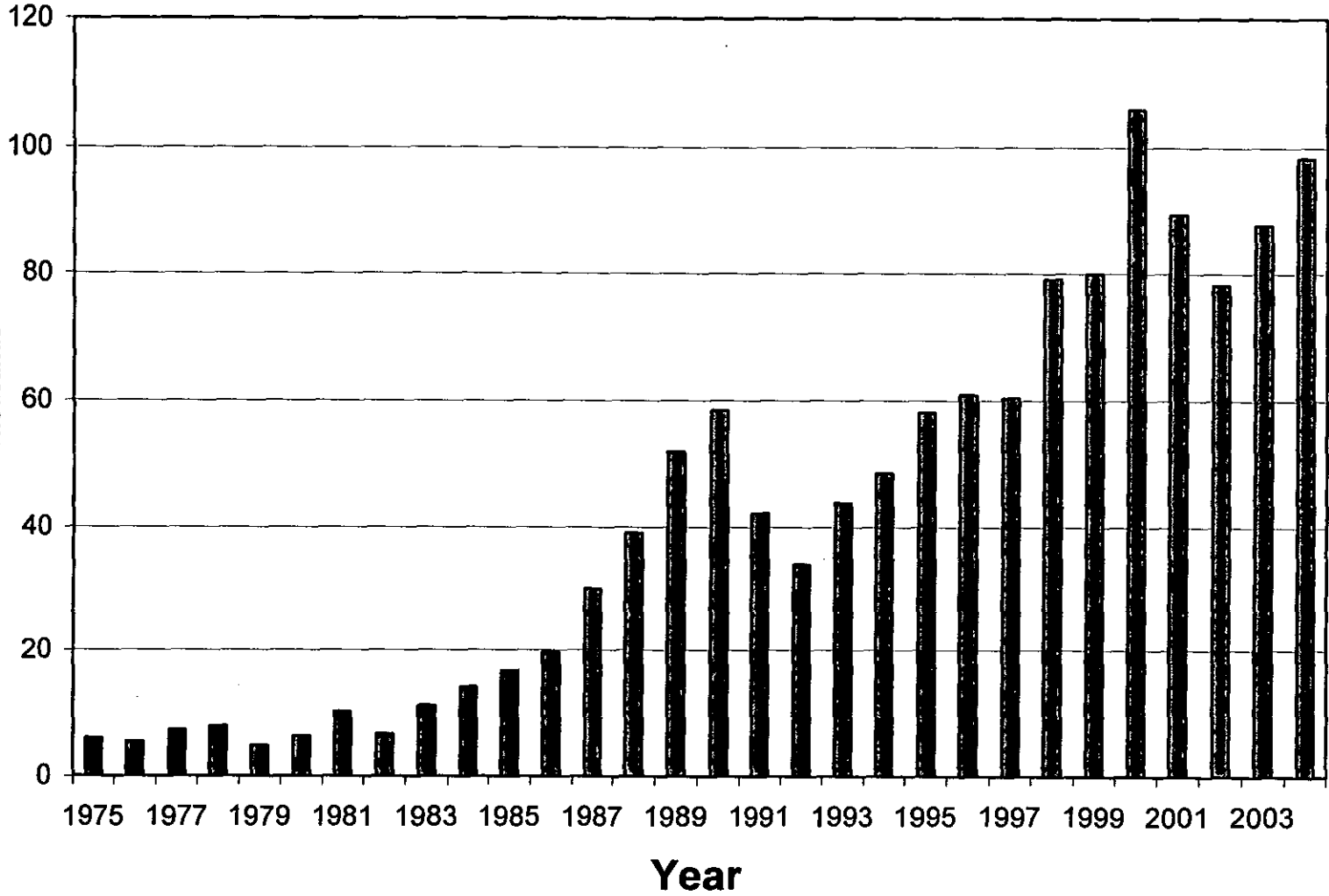


Figure 45. Minnesota Canada goose breeding population, 1975-2004 (from: Cordts, S. 2004 waterfowl breeding population survey for Minnesota. Minnesota Department of Natural Resources and U.S. Fish and Wildlife Service. Unpublished report. 17 pp.)

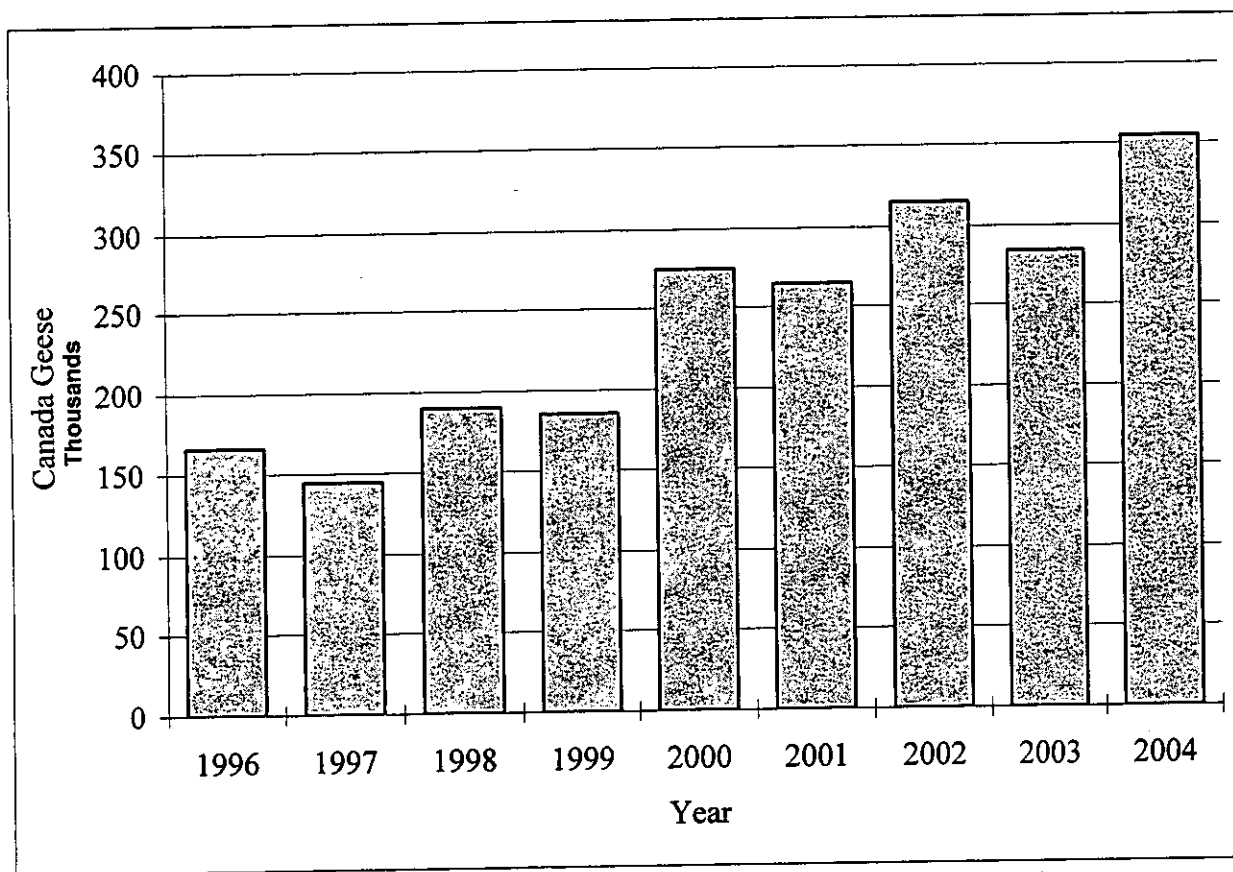


Figure 46. Estimated number of Canada geese in 9 goose management blocks (GMB) 1996-2004. Surveys were from a fixed wing aerial survey during May in Minnesota, 1996-2000. Does not include Metro or Northeast GMBs. 2001- 2004 data are from a helicopter survey during April in Minnesota. Does not include Metro GMB or Lake and Cook counties in the Northeast.

Table 22. Estimated number of May ponds (adjusted for visibility) in Prairie Canada (portions of Alberta, Saskatchewan and Manitoba) 1961-2004 and north-central U.S. (North Dakota, South Dakota and Montana) 1974-2004. (from: U.S. Fish and Wildlife Service/Canadian Wildlife Service, 2004. Waterfowl population status, 2004. July 2004. 53pp).

Year	Ponds (thousands)	
	Prairie Canada	North Central U.S. <sup>a</sup>
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	2,747	1,893
2002	1,439	1,281
2003	3,522	1,668
2004	2,513	1,407
Average	3,368	1,524
2004	2,513	1,407
% Change in 2004 from:		
2003	- 29	- 16
Long term Average	- 25	- 8

<sup>a</sup> No comparable survey data available for the north-central U.S. during 1961-73.

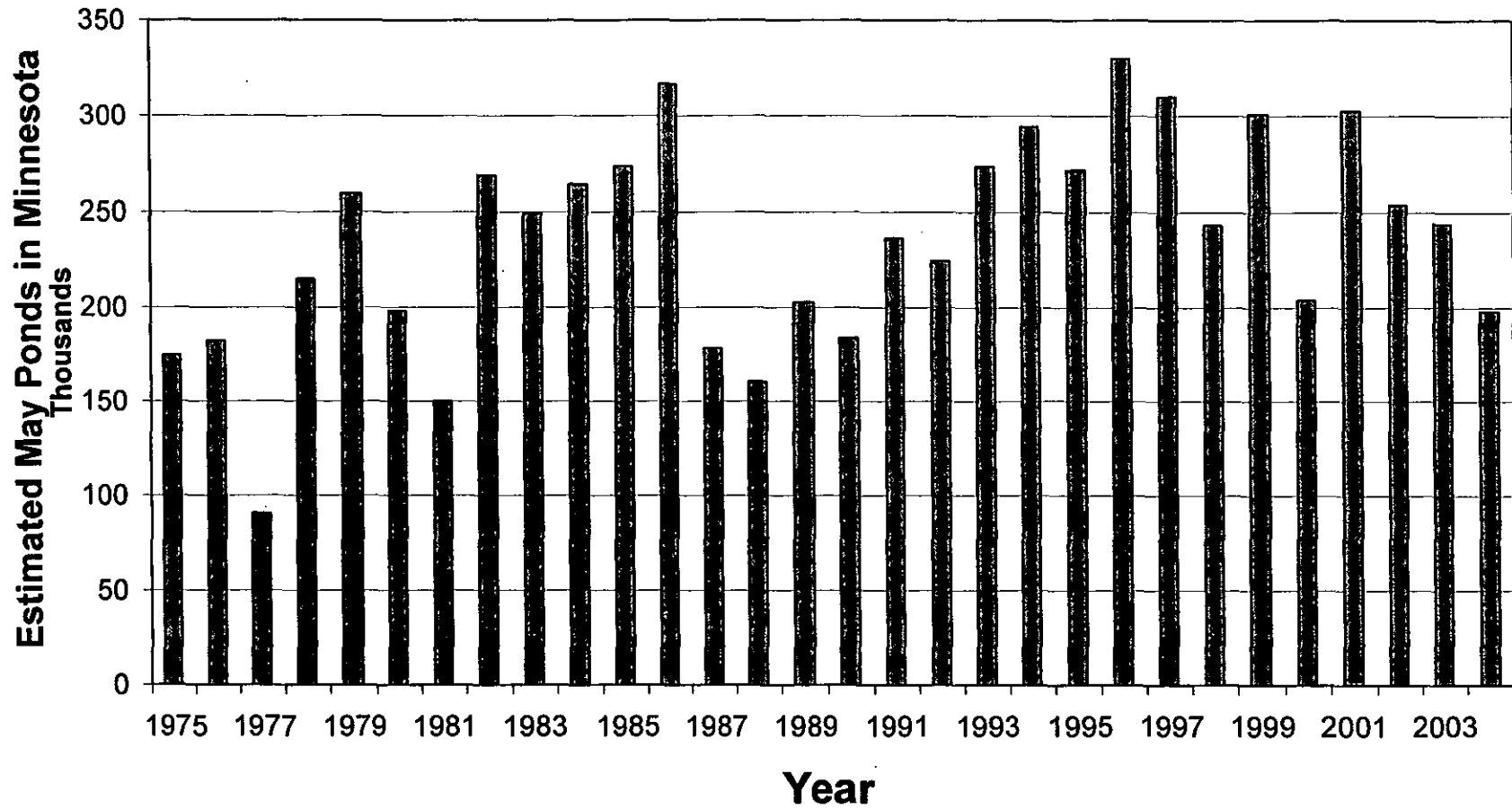


Figure 47. Estimated number of May ponds for Minnesota, 1975-2004.

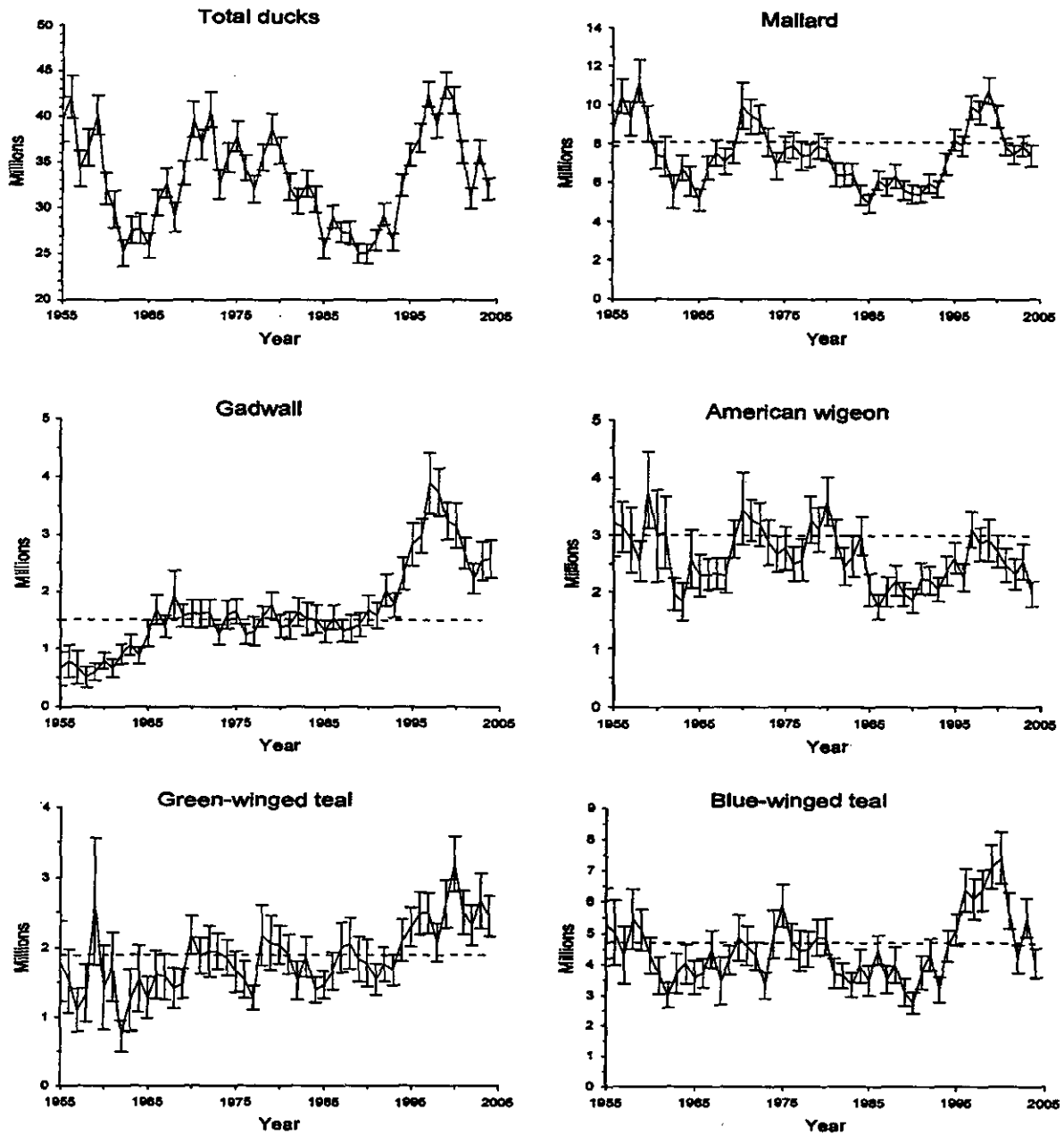


Figure 48. Estimates of North American breeding populations of selected ducks and number of water areas in May in Prairie Canada and Northcentral U.S. (from: U.S. Fish and Wildlife Service/Canadian Wildlife Service 2004. Waterfowl population status, 2004 July 2004. 53 pp).

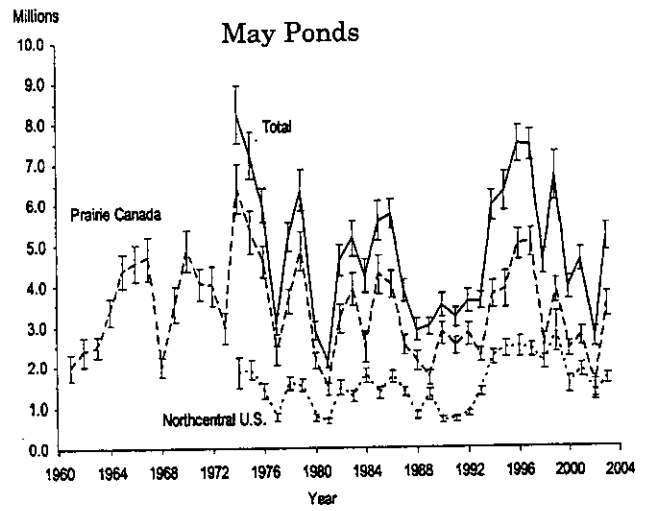
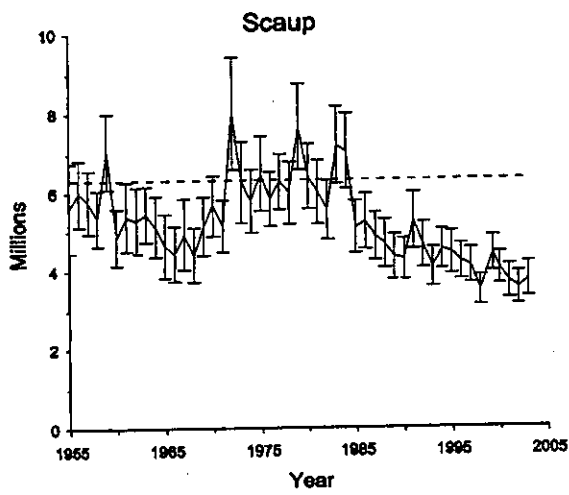
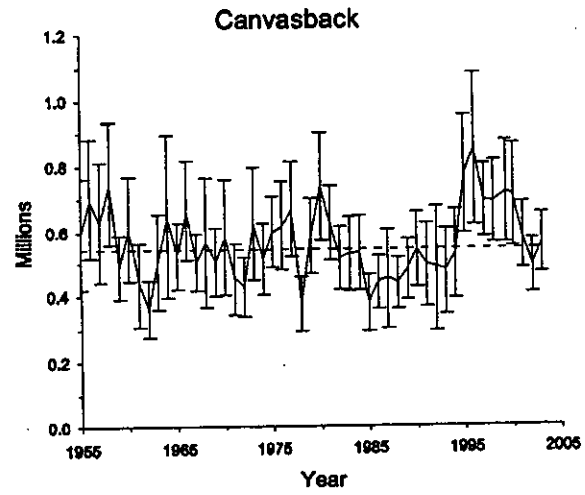
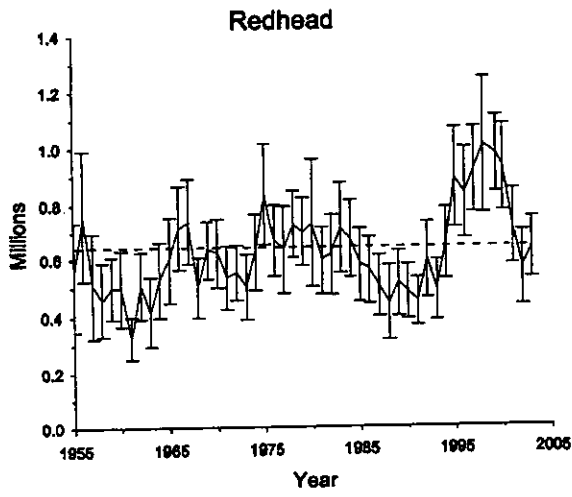
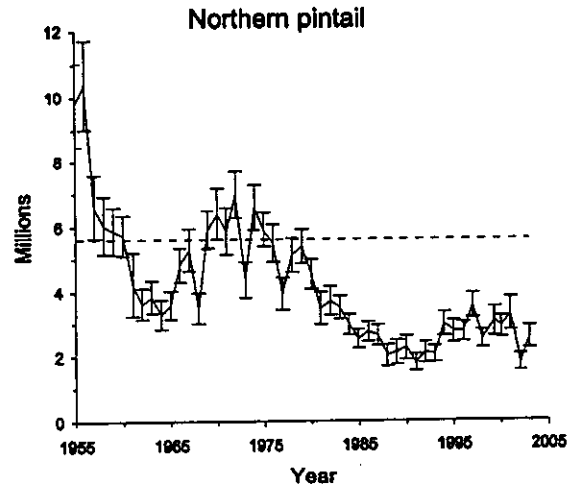
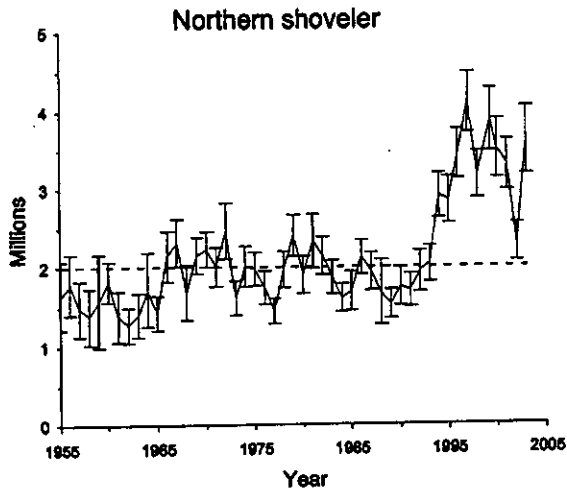


Figure 48. (continued)



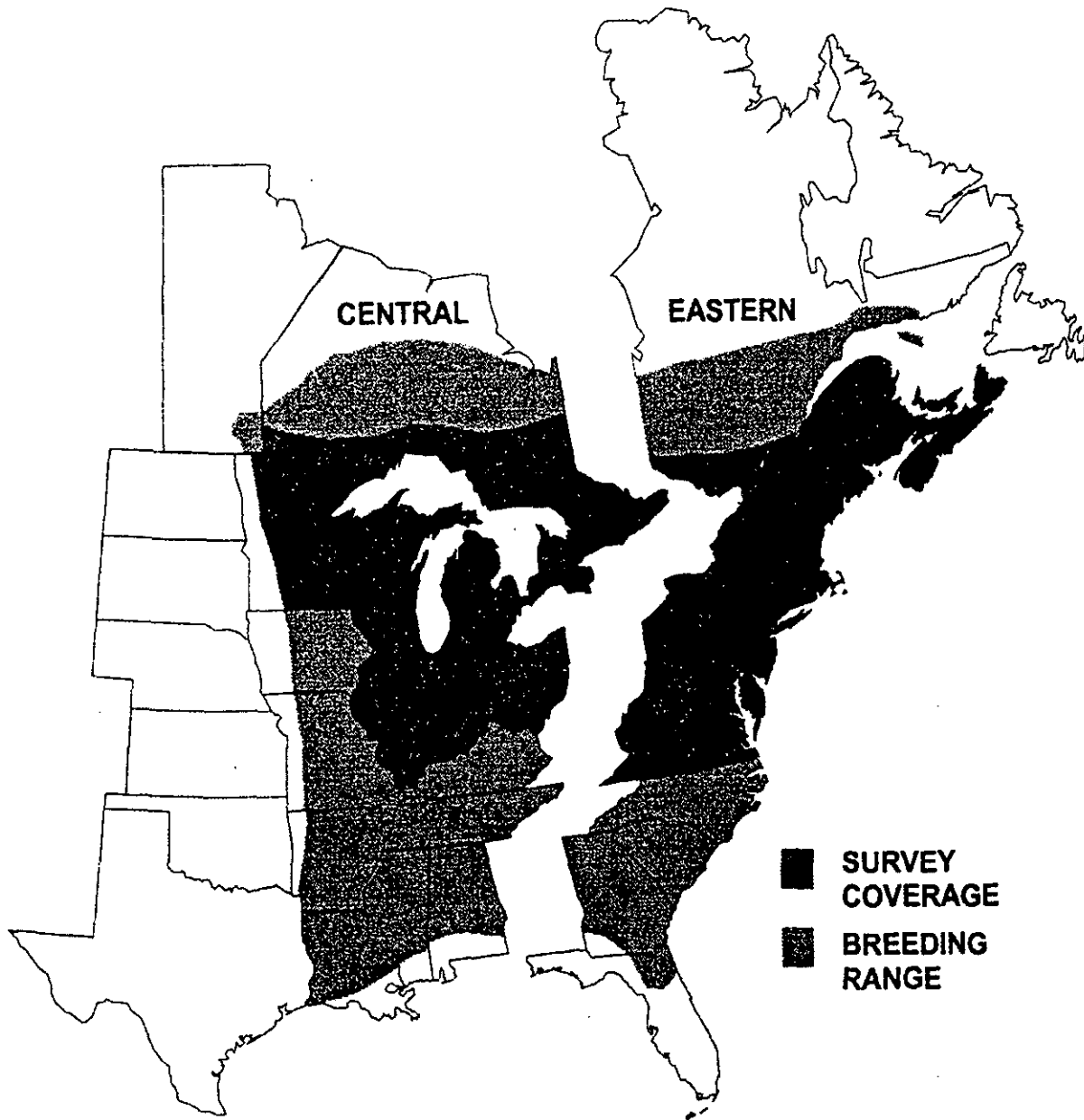


Figure 49. Woodcock management regions, breeding range, singing-ground survey coverage, (from: Kelley, J.R., Jr., 2004. American woodcock population status, 2004. U.S. Fish and Wildlife Service, Laurel, MD. 15pp.)



Table 24. Trends (% change per year <sup>a</sup>) 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., 2004. American woodcock population status, 2004. U.S. Fish and Wildlife Service, Office of Migratory Bird Management, Laurel, MD. 15pp).

Management Unit/State	2 year N <sup>c</sup>	(2003-04) % Change	Routes Run <sup>b</sup>	9 year N	(1995-04) % Change	36 year N	(1968-04) % Change
CENTRAL	190	4.8	329	397	-0.3	618	-1.8***
IL	4	-11.9*** <sup>d</sup>	17	6	14.2	24	25.1
IN	0		10	6	-3.9	38	-7.0**
MB <sup>e</sup>	9	-6.0	15	21	-3.7	21	-3.5**
MI	55	-4.2	89	109	-1.0	144	-1.7***
MN	54	1.2	72	76	0.1	100	-1.1**
OH	12	133.6*	21	25	-5.1*	55	-6.3***
ON	9	15.9	40	81	1.5	136	-1.8***
WI	46	15.2	65	73	-0.2	100	-1.9***

<sup>a</sup> Mean of weighted route trends within each State, Province, or Region. To estimate the total percent change over several years, use:  $100(\% \text{ change}/100+1)^y-100$  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.

<sup>b</sup> Total number of routes surveyed in 2004 for which data were received by 1 June.

<sup>c</sup> Number of comparable routes (2003 versus 2004) with at least 2 non-zero counts.

<sup>d</sup> 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  $N < 10$ .

<sup>e</sup> Manitoba began participating in the Singing-ground survey in 1990.

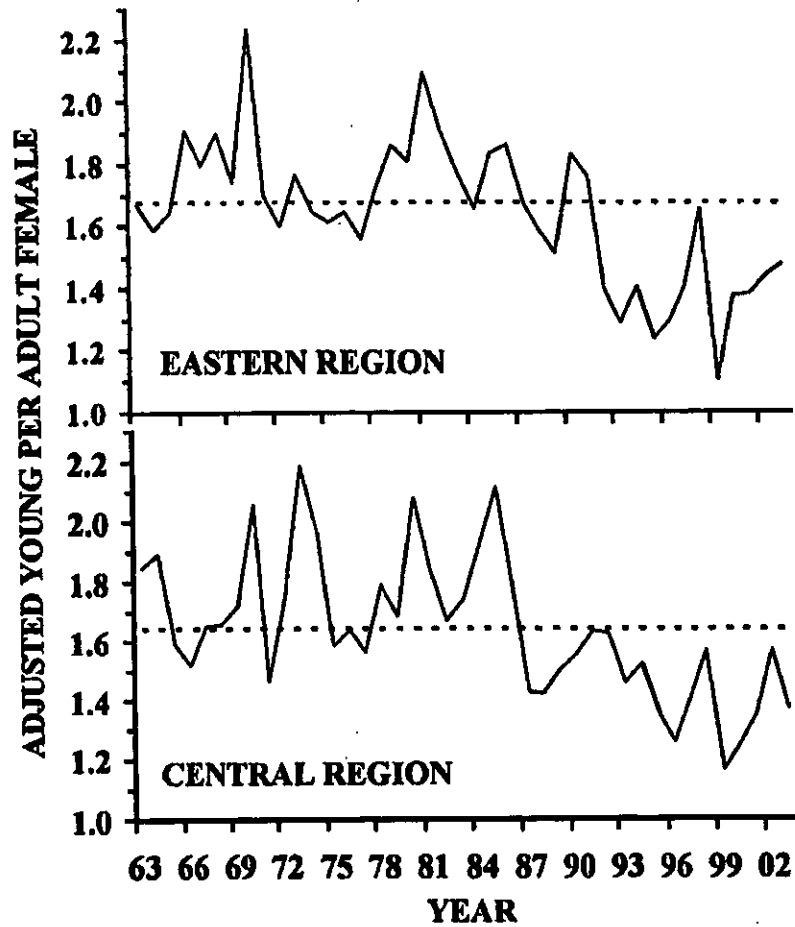


Figure 50. Adjusted index of American woodcock recruitment, 1963-2003. Dashed line is the index based on all 1963-2002 average. (from: Kelley, J.R., Jr. 2004. American woodcock population status, 2004. U.S. Fish and Wildlife Service, Laurel, MD. 15pp).

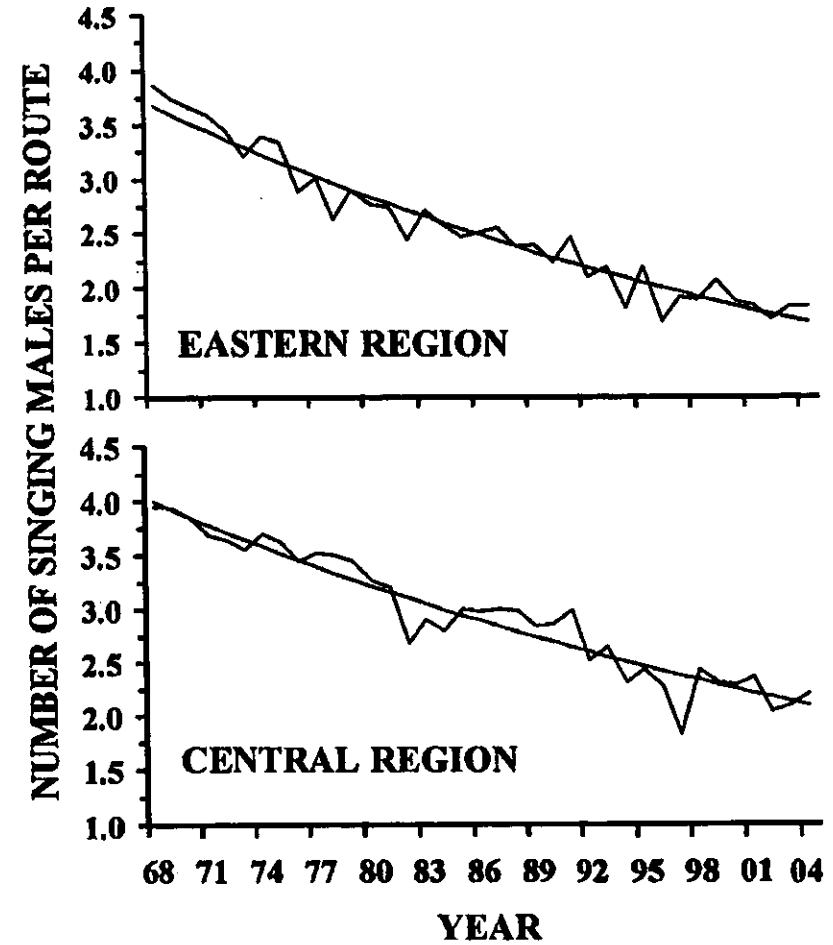


Figure 51. American woodcock singing ground survey long term trends and annual indices, 1968-04. (from: Kelley, J.R., Jr. 2004. American woodcock population status, 2004. U.S. Fish and Wildlife Service, Laurel, MD. 15pp)

Table 25. Preliminary estimates of woodcock hunter numbers, days afield, and harvest for selected states, from the 2002-03 and 2003-04 Harvest Information Program surveys. (from: Kelley, J.R., Jr. 2004. American woodcock population status, 2004. U.S. Fish and Wildlife Service, Laurel, MD. 17pp).

Management Unit / State	Active woodcock hunters		Days afield		Harvest	
	2002-03	2003-04	2002-03	2003-04	2002-03	2003-04
Central Region	n.a. <sup>a</sup>	n.a.	428,200 ± 26%	369,900 ± 16%	187,500 ± 24%	213,500 ± 23%
IL	3,000 ± 90%	2,400 ± 79%	6,400 ± 88%	12,200 ± 112%	9,000 ± 110%	2,200 ± 90%
IN	1,700 ± 114%	700 ± 97%	24,200 ± 172%	6,000 ± 134%	6,900 ± 161%	1,800 ± 31%
MI	25,200 ± 18%	35,100 ± 14%	135,400 ± 23%	159,000 ± 18%	78,300 ± 26%	121,500 ± 30%
MN	8,200 ± 66%	14,300 ± 38%	49,300 ± 92%	48,700 ± 43%	9,200 ± 31%	29,900 ± 84%
OH	5,200 ± 108%	3,400 ± 88%	23,200 ± 138%	10,300 ± 86%	3,100 ± 45%	2,500 ± 78%
WI	17,600 ± 30%	16,100 ± 30%	58,900 ± 26%	65,600 ± 33%	33,900 ± 34%	30,300 ± 35%

<sup>a</sup> Regional estimates of hunter numbers cannot be obtained due to the occurrence of individual hunters being registered in the Harvest Information Program in more than one state.

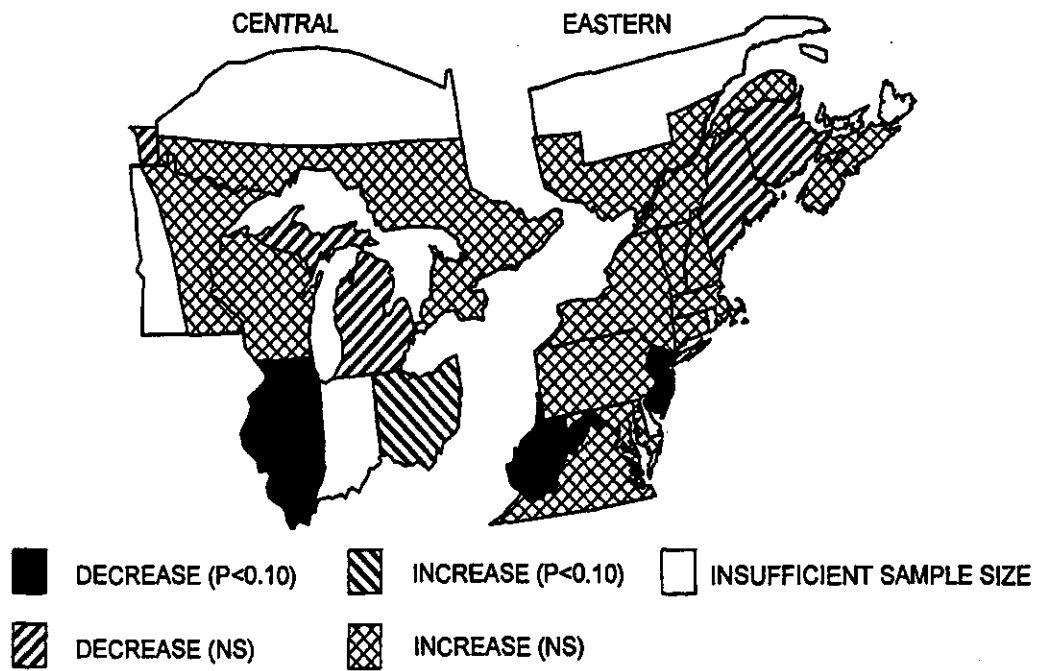


Figure 52. Short-term trends in number of American woodcock heard on the Singing-ground Survey; 2003-04. (from: Kelley, J.R., Jr. 2004. American woodcock population status, 2004. U.S. Fish and Wildlife Service, Laurel, MD. 15pp)

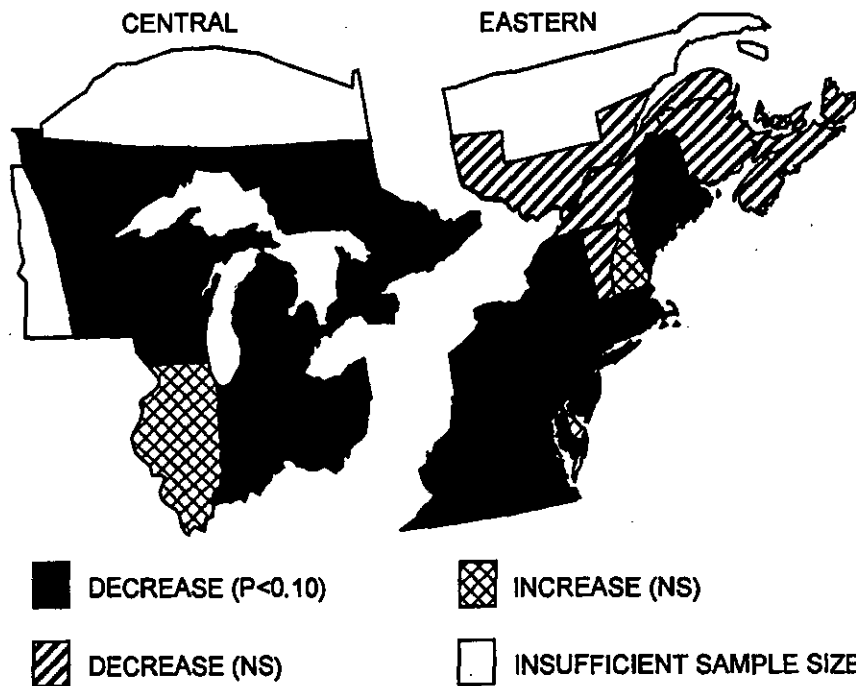


Figure 53. Long-term trends in number of American woodcock heard on the Singing-ground Survey; 1968-04. (from: Kelley, J.R., Jr. 2004. American woodcock population status, 2004. U.S. Fish and Wildlife Service, Laurel, MD. 15pp)

A HISTORY OF MINNESOTA WATERFOWL REGULATIONS,  
1915-2004

Wetland Wildlife Populations and Research

102 23rd Street  
Bemidji, MN 56601  
(218) 755-2973

Table 26. Minnesota Waterfowl Hunting Regulations 1915-2004.

DUCK SEASON																							Mergansers	Cool Daily Bag	
Dates					Shooting Hours			Bag Limits														Daily Bag			Inc. no more hooded
Year	Open	Day	Close	Length	Open	Start	End	Last Day 4 P.M.	Acqu. Fowl	Ducks			Species Restrictions												
										Daily	Pass.	Bonus	MAL	M&F	BLK	PIN	WDK	CAN	RED	RUD	BUP	SCAUP			
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	10	10	closed	closed		12		
1932	01-Oct	Sat	30-Nov	61	noon	1/2 hr before	sunset			12	24						closed	8	8	closed	closed		12		
1933	01-Oct	Sun	30-Nov	61	noon	1/2 hr before	sunset			12	24						closed	5	5	closed	closed		12		
1934	03-Oct	Wed	11-Nov	40	noon	sunrise	sunset			10	10						closed			closed	closed		10		
1935	21-Oct	Mon	19-Nov	30	noon	7 am	4 pm			10	10						closed	closed	closed	closed	closed		10		
1936	10-Oct	Sat	08-Nov	30	noon	7 am	4 pm			10	10						closed	closed	closed	closed	closed		12		
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				15		
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				25		
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	28-Nov	55	noon	1/2 hr before	sunset			4	8						closed					1	10		
1954	02-Oct	Sat	25-Nov	55	noon	1/2 hr before	sunset			4	8						closed					1	10		
1955	08-Oct	Sat	18-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	10		
1958	04-Oct	Sat	12-Dec	70	noon	1/2 hr before	sunset			4	8						closed	2	2			5	10		
1959	07-Oct	Wed	25-Nov	50	noon	sunrise	sunset			3	6						1	or 1	or 1			5	3		
1960	08-Oct	Sat	16-Nov	40	noon	1/2 hr before	sunset			4	8						1	closed	closed			5	6		
1961	14-Oct	Sat	12-Nov	30	noon	sunrise	sunset			2	4						1	closed	closed			5	6		
1962	13-Oct	Sat	06-Nov	25	noon	sunrise	sunset			2	4	2/4 ls	1		or 1		2	closed	closed			5	6/6		
1963	05-Oct	Sat	08-Nov	35	noon	sunrise	sunset			3	6						2	closed	closed			5	8/16		
1964	03-Oct	Sat	11-Nov	40	noon	sunrise	sunset			4	8						2/2	2/2	or 2/2			5/10	10/20		
1965	09-Oct	Sat	17-Nov	40	noon	sunrise	sunset			4	8	early test	1/2			1/2	2/2	2/2	or 2/2			5/10	10/20		

Table 26. (Continued)

DUCK SEASON																							Mergansers	Coot			
Dates				Shooting Hours			Last Day 4 P.M.	Aque Fowl	Ducks			Bag limits								Daily Bag	Inc. no more hooded	Daily Bag					
Year	Open	Day	Close	Length	Openery	Start			End	Daily	Pos.	Bonus	MAL	Mal F	BLK	PIN	WDK	CAN	RED				RUD	BOF	SCAUP	Daily	Inc. no more
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				
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	18-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	Sat	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				
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	28-Sep	Sat	17-Nov	50	noon	1/2 hr before	sunset	19-Oct		5	10		3/8	2/2	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	2/2	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	18-Oct		5	10		3/6	2/2	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		3/8	2/2	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	2/2	1/2	2/4	1/2	1/2				5/10	1/2	15/30			
1984	28-Sep	Sat	17-Nov	50	noon	1/2 hr before	sunset	19-Oct		5	10		3/6	2/2	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	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																								
	08-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	2-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	9-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	7-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	6-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			
2002	28-Sep	Sat	26-Nov	60	noon	1/2 hr before	sunset	5-Oct		6	12		4/8	2/4	1/2	1/2/c	2/4	closed	2/4		3/6	5/10	1/2	15/30			
2003	27-Sep	Sat	25-Nov	60	noon	1/2 hr before	sunset	11-Oct		6	12		4/8	2/4	1/2	1/2/c	2/4	1/2/c	2/4		3/6	5/10	1/2	15/30			
2004	25-Sep	Sat	23-Nov	60	9 am	1/2 hr before	sunset	9-Oct		6	12		4/8	2/4	1/2	1/2/c	2/4	1/2/c	2/4		3/6	5/10	1/2	15/30			

Table 26. (Continued)

Statewide Regulations (excluding special zones)										Goose Season										
Year	Overall			Snow/Blue Gooses		Bag Limit / Poss.														
	Open	Close	Days	Open	Close	Aggr.	Canada	W/F												
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 26. (Continued)

Year	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.			Open	Close	Days	Cago Bag	Open	Close	Days	Cago Bag	Open	Close	Days	Cago Bag	Quota	Harvest Index	Date Quota 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	15-Nov	45			5/5	1/2	or 2/2	02-Oct	10-Dec	70	1									8000	7813	not reached	45				
		23-Oct	06-Dec																									
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	10-Oct	9	1/2	1750			
																					16-Oct	05-Nov	21		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	09-Oct	9	1/2	1750			
																					15-Oct	04-Nov	21		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	08-Oct	9	1/2	7000			
																					14-Oct	03-Nov	21		16000	12513	not reached	30

Table 26. (Continued)

Goose Season																									
White Geese					Canada Geese																				
Year	Open	Close	Days	Bag Poss.	Remainder of State				Northwest Zone				West Zone & Northwest Zones				WC and LQP Zone				Lad. qu. Parle Harvest Index				
					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	5-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	9-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	3-Nov	20	1/2	10000	7188	not reached	20
													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	9-Oct	7-Nov	30	1/2	16000	10336	not reached	30
2000	30-Sep	24-Dec	86	20/40	30-Sep	08-Dec	70	2/4					Both	30-Sep	08-Nov	40	1/2	7-Oct	5-Nov	30	1/2	16000	2684	not reached	30
2001	29-Sep	23-Dec	86	20/40	29-Sep	07-Dec	70	2/4					Both	29-Sep	07-Nov	40	1/2	6-Oct	14-Nov	40	1/2	12000	7469	not reached	40
2002	28-Sep	22-Dec	86	20/40	28-Sep	06-Dec	70	2/4					Both	28-Sep	06-Nov	40	1/2	5-Oct	13-Nov	40	1/2	LQP Zone/Index dropped			
2003	27-Sep	21-Dec	86	20/40	27-Sep	05-Dec	70	2/4					Both	27-Sep	05-Nov	40	1/2	11-Oct	19-Nov	40	1/2				
2004	25-Sep	19-Dec	86	20/40	25-Sep	23-Nov	60	2/4					NW	25-Sep	03-Nov	40	1/2	21-Oct	14-Nov	25	1/2				
					25-Sep	23-Nov	60	2/4					W	25-Sep	29-Oct	35	1/2								

Table 26. (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, SHO, 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, SHO, 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, SHO, 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 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 restrictions 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	Minnesota delayed opening date by 1 week to protect local breeding ducks.
1956	Minnesota delayed opening date, Commissioner negotiated 1 extra duck in the bag for a 1 week delay in opening and 15 days off the season length.
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 (8 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.

Table 26. (Continued)

Year	Other Regulations
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 28-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.
1977	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 hunt 21 Sep. (youth 15 & under accompanied by nonhunting adult, ducks, merg., 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 5 in Metro & SW, 2 in remainder, Late CG Dec 13-22 in TCGZ, FF/AGZ, OCGZ, bag 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 hunt 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 & WC, daily bag 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 18 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, SE=Dec 15-24) except LQP and WC, daily limit 5 except SE Zone 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 20-day canvasback season (Oct. 13-Nov.1); Longer season in LQP/WC goose zones, lower quota in LQP; Late CG season statewide (Dec. 8-17, SE=Dec 14-23) except LQP/WC, limit 5 except SE limit 2.
2002	Youth waterfowl hunting day 14 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 Closed canvasback season; 30-day pintail season (Sept. 28-Oct. 27); Late CG season statewide (Dec. 7-16, SE=Dec 13-22) except LQP/WC, daily limit 5 except SE limit 2. Motorized decoy use prohibited to take waterfowl, except geese, on public waters on Youth hunting day and from the opening day through Oct. 5.
2003	Youth waterfowl hunting day 20 Sep inc. 5 CGoose except 1 CG in NW, TC Metro, and SE zones, Carlos Avery WMA, and Swan Lake area; Sept. Canada goose hunt 8-22 Sep. statewide except NW Sept. 6-15, bag limit 5 CG except 2 in NW & SE; 30-day canvasback season (Oct. 11-Nov 9); 30-day pintail season (Sept. 27-Oct. 26); Late CG season statewide (Dec. 6-15, SE=Dec 12-21) except WC, daily limit 5 except SE limit 2. Motorized decoy use prohibited to take waterfowl, except geese, on public waters on Youth hunting day and from the opening day through Oct. 11., LQP Goose Zone and Harvest Index dropped.
2004	Youth waterfowl hunting day 18 Sep inc. 5 CGoose except 1 CG in NW, TC Metro, and SE zones, Carlos Avery WMA, and Swan Lake area; Sept. Canada goose hunt 4-22 Sep. statewide except NW Sept. 4-15, bag limit 5 CG except 2 in NW & SE; 30-day canvasback season (Oct. 9-Nov 7); 30-day pintail season (Sept. 25-Oct. 24); Late CG season statewide Dec. 4-13; Southeast Dec 10-19 except WC, daily limit 5 except SE limit 2. Motorized decoy use prohibited to take waterfowl, except geese, on public waters on Youth hunting day and from the opening day through Oct. 9.

HUNTING HARVEST STATISTICS

Division of Wildlife  
500 Lafayette Road, Box 7  
Saint Paul, MN 55155 - 4007  
(651) 296-3344

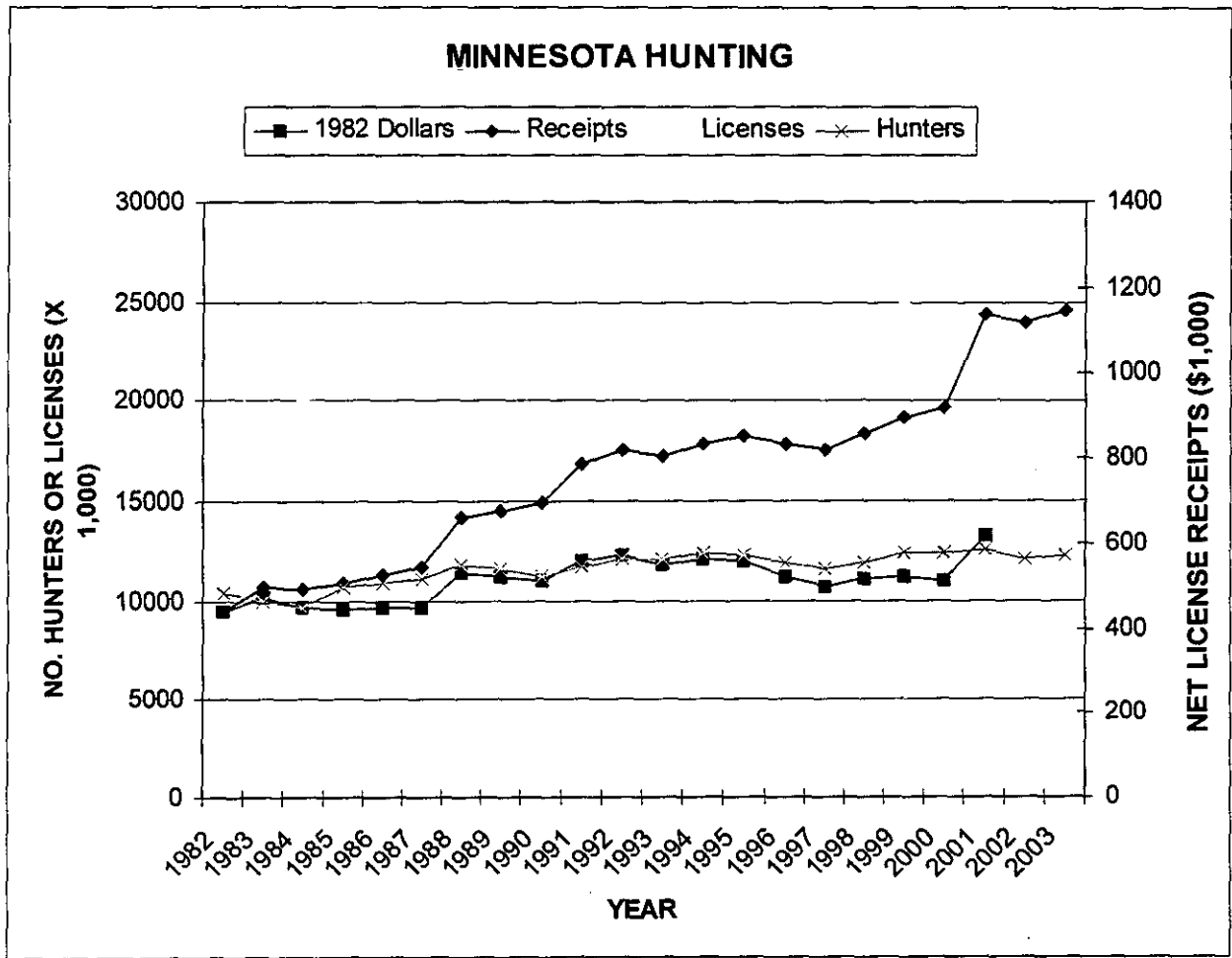


Figure 54. Minnesota hunting trends, 1982-2003.

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, 2001, 2002, and 2003* U.S. Dept. of Commerce. Tables for gross domestic product chain-weighted price indexes to convert receipts into 1982 dollars are no longer available due to revisions in base year data.

Table 27. Small game hunter response to mail surveys, 1979 - 80 through 2003 - 04.

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 <sup>a</sup>	10,893	735	7,790	76.7
1990 - 91 <sup>a</sup>	5,000	394	3,467	75.3
1991 - 92 <sup>a</sup>	5,050	387	3,541	75.9
1992 - 93 <sup>a</sup>	5,000	288	3,625	76.9
1993 - 94 <sup>a</sup>	5,011	282	3,320	70.2
1994 - 95 <sup>a</sup>	5,000	387	3,353	72.7
1995 - 96 <sup>a</sup>	5,000	321	3,293	70.4
1996 - 97 <sup>a</sup>	5,000	170	3,334	69.0
1997 - 98 <sup>a</sup>	5,000	198	3,234	67.3
1998 - 99 <sup>a</sup>	5,000	200	3,153	65.7
1999 - 00 <sup>a</sup>	5,001	180	3,349	69.5
2000 - 01 <sup>a</sup>	5,000	184	3,001	62.3
2001 - 02 <sup>a</sup>	6,000	225	3,667	64.0
2002 - 03 <sup>a</sup>	6,000	363	3,862	68.5
2003 - 04 <sup>a</sup>	6,400	381	3,972	66.0

<sup>a</sup> Includes resident and non-resident licenses, and excludes duplicate licenses.

Table 28. Use of small game hunter licenses, 1993-94 through 2003-2004.

		Returns from mail survey	Projections from license sales
1993-94	Hunted	2,787 ( 84.0%)	232,365
	Did not hunt	<u>533 ( 16.0%)</u>	<u>44,260</u>
		3,320 (100.0%)	276,625
1994-95	Hunted	2,826 ( 84.6%)	244,654
	Did not hunt	<u>516 ( 15.4%)</u>	<u>44,535</u>
		3,342 (100.0%)	289,189
1995-96	Hunted	2,714 ( 84.6%)	252,775
	Did not hunt	<u>494 ( 15.4%)</u>	<u>46,014</u>
		3,208 (100.0%)	298,789
1996-97	Hunted	2,631 ( 79.6%)	237,476
	Did not hunt	<u>674 ( 20.4%)</u>	<u>60,861</u>
		3,305(100.0%)	298,337
1997-98	Hunted	2,604 ( 80.7%)	246,285
	Did not hunt	<u>622 ( 19.3%)</u>	<u>58,901</u>
		3,226 (100.0%)	305,186
1998-99	Hunted	2,612 ( 82.8%)	265,215
	Did not hunt	<u>541 ( 17.2%)</u>	<u>55,093</u>
		3,153 (100.0%)	320,308
1999-00	Hunted	2,689 ( 80.7%)	264,237
	Did not hunt	<u>644 ( 19.3%)</u>	<u>63,194</u>
		3,333 (100.0%)	327,431
2000-01	Hunted	2,254 ( 78.7%)	252,518
	Did not hunt	<u>610 ( 21.3%)</u>	<u>68,344</u>
		2,864 (100.0%)	320,862
2001-02	Hunted	2,849 ( 77.7%)	231,589
	Did not hunt	<u>610 ( 21.3%)</u>	<u>66,466</u>
		3,665 (100.0%)	298,055
2002-03	Hunted	2,962 ( 76.7%)	221,455
	Did not hunt	<u>900 ( 23.3%)</u>	<u>67,274</u>
		3,862 (100.0%)	288,729
2003-04	Hunted	3,085 ( 78.2%)	232,206
	Did not hunt	<u>862 ( 21.8%)</u>	<u>64,733</u>
		3,947 (100.0%)	296,939

Includes resident and non-resident information. Excludes duplicates.



Table 29. Estimated number of hunters (thousands) for various species, 1991-92 through 2003-04.

	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Ducks	100	107	109	118	119	114	122	117	122	109	109	112	101
Canada goose	56	61	62	70	73	75	79	77	80	77	76	79	75
Other geese	6	6	9	7	10	6	5	6	5	7	7	6	7
American coot	5	5	6	7	9	6	7	5	6	4	4	4	4
Common snipe	4	3	2	2	2	2	2	2	2	2	1	2	1
Rails / gallinules	<1	<1	1	1	1	<1	<1	<1	<1	<1	<1	1	<1
Crow	12	11	10	12	15	13	11	11	14	14	11	13	12
American woodcock	27	21	17	21	21	18	17	19	19	16	11	12	13
Ring-necked pheasant	122	105	88	92	96	88	80	88	93	100	85	91	105
Ruffed grouse	146	124	102	107	116	118	127	142	139	121	101	91	94
Spruce grouse	16	13	11	12	14	11	11	11	11	9	9	7	9
Sharp-tailed grouse	14	10	8	7	8	7	8	8	8	10	8	6	7
Gray partridge	27	17	15	14	12	11	8	10	10	8	7	7	8
Gray squirrel	36	32	32	35	35	33	27	30	31	27	26	25	29
Fox squirrel	23	22	23	24	23	20	16	18	20	17	15	15	20
Eastern cottontail	31	24	21	21	23	19	14	19	18	20	17	16	21
White-tailed jackrabbit	6	5	4	4	5	4	3	3	3	2	3	2	3
Snowshoe hare	12	8	5	6	5	4	4	7	7	5	6	6	6
Raccoon (Sept 03 - Feb 04)	10	9	9	10	10	10	9	9	6	6	6	6	6
Raccoon <sup>†</sup> (March 03-Aug 03)				3	5	4	3	4	3	5	4	4	5
Red fox (Sept 03-Feb 04)	22	19	16	15	15	11	9	9	8	10	6	7	7
Red fox <sup>†</sup> (March 03-Aug 03)				3	4	3	2	3	2	2	3	2	2
Gray fox	4	3	3	2	3	n.a.	2	2	2	1	1	1	2
Coyote	13	14	14	11	15	13	10	11	11	16	11	12	15
Badger	<1	1	1	1	<1	1	1	<1	<1	1	<1	1	<1

Crow season added in 1989.

<sup>†</sup> Raccoon and red fox season changed to year round beginning May 1994.

Table 30. Estimated take per hunter, for respondents reporting that they hunted a particular species, 1990-91 through 2003-04.

	Estimated take per hunter													
	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Ducks	7.0	8.0	8.1	7.6	8.1	9.7	9.6	9.9	9.5	8.4	8.9	9.1	9.2	9.0
Canada geese	2.3	2.6	2.5	2.5	2.4	2.5	3.2	2.9	2.8	3.5	3.9	4.0	3.3	3.9
Other geese	1.2	1.0	0.9	1.1	0.8	0.9	1.4	2.3	1.0	1.2	2.2	1.2	1.9	1.7
American coot	3.6	2.7	4.7	2.7	3.2	3.1	3.8	4.1	4.7	4.0	2.7	4.5	4.6	2.8
Common snipe	3.0	3.7	2.9	1.9	1.3	1.6	2.8	2.6	2.9	1.6	1.3	1.3	1.5	1.8
Rails/gallinules	1.0	7.6	1.7	1.5	1.3	2.3	1.0	0.7	0.5	0.2	3.7	0.6	2.6	0.5
Crow *	5.5	7.6	6.2	5.0	9.4	8.5	7.3	6.6	9.3	4.4	6.9	7.7	5.6	6.7
American woodcock	3.9	3.5	4.7	4.0	3.5	3.9	3.2	3.4	3.3	2.8	2.8	2.3	2.4	2.4
Ring-necked pheasant	4.6	4.6	3.9	3.8	3.5	4.2	3.9	3.1	3.5	3.7	3.7	3.2	3.9	4.9
Ruffed grouse	7.1	6.6	4.4	2.8	3.5	3.9	4.5	5.2	6.7	4.9	5.1	3.3	2.8	3.8
Spruce grouse	2.4	2.0	1.7	1.2	1.9	1.8	1.4	2.3	2.4	1.8	2.5	1.1	1.6	2.1
Sharp-tailed grouse	2.4	2.4	2.0	1.4	1.2	1.3	1.2	1.7	2.6	1.6	1.6	1.2	1.3	1.7
Gray partridge	3.7	3.8	2.9	2.4	1.8	2.2	2.2	1.9	2.5	1.9	2.1	1.5	1.7	2.8
Gray squirrel	5.8	4.9	4.6	5.5	5.4	4.9	4.9	4.9	5.0	4.3	5.3	5.6	5.2	6.0
Fox squirrel	5.1	4.6	4.2	4.5	4.2	4.6	3.8	4.4	3.3	3.5	3.9	4.1	4.5	4.2
Eastern cottontail	4.3	4.1	3.1	3.6	3.6	4.3	3.4	4.5	4.6	3.2	3.9	3.6	3.3	4.3
White-tailed jackrabbit	1.3	1.7	2.1	2.4	1.5	1.5	2.6	1.6	2.5	1.9	2.8	2.6	1.6	2.4
Snowshoe hare	4.6	5.9	3.2	3.2	3.2	2.0	2.3	2.0	3.5	3.1	5.2	3.3	1.9	2.2
Raccoon (Sept 03 - Feb 04)	9.6	7.5	8.6	8.9	15.9	14.7	21.3	13.8	16.6	10.9	7.6	9.4	10.0	8.5
Raccoon <sup>†</sup> (March 03-Aug 03)					8.0	11.3	24.4	5.1	5.8	6.4	7.8	4.4	5.4	4.7
Red fox (Sept 03-Feb 04)	3.4	3.6	3.3	3.6	2.8	3.1	3.0	1.4	1.3	1.2	1.9	1.2	1.5	1.8
Red fox <sup>†</sup> (March 03-Aug 03)					1.4	1.5	1.3	0.8	1.2	0.6	0.9	1.5	1.7	0.6
Gray fox	1.4	1.0	1.3	0.8	0.6	1.0	n.a.	1.3	0.9	0.9	0.7	0.4	0.4	0.4
Coyote	1.6	2.1	1.5	1.3	1.1	1.8	2.3	1.6	1.3	1.3	1.8	1.1	1.2	1.3
Badger	1.4	2.2	0.9	0.7	1.4	1.4	2.1	0.9	4.3	1.1	0.8	0.6	1.7	0.7

\* Crow season added in 1989.

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

Table 31. Mean Harvest for successful hunters and hunter success rates (%), 1993 - 94 through 2003 - 04.

	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Ducks	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)	10.6 (85.6)	10.6 (86.7)	10.4 (86.7)
Canada geese	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)	5.3 (76.3)	4.6 (72.0)	5.1 (76.0)
Other geese	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)	2.8 (43.8)	4.4 (42.5)	2.7 (65.3)
American coot	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)	7.5 (60.4)	6.4 (71.2)	3.7 (76.9)
Common snipe	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)	2.4 (52.9)	2.6 (60.0)	2.3 (78.9)
Rails / gallinules	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)	1.5 (40.0)	3.8 (66.7)	1.0 (50.0)
Crow	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)	8.6 (89.4)	6.3 (89.0)	7.9 (85.3)
American woodcock	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)	3.4 (68.3)	3.6 (65.6)	3.3 (71.8)
Ring-necked pheasant	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)	4.7 (66.4)	5.5 (71.7)	6.3 (77.2)
Ruffed grouse	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)	4.8 (68.5)	4.3 (63.8)	5.1 (73.5)
Spruce grouse	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)	2.3 (47.2)	3.4 (48.0)	3.3 (62.9)
Sharp-tailed grouse	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)	2.4 (49.5)	3.5 (38.8)	3.3 (52.2)
Gray partridge	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)	2.5 (58.3)	2.8 (59.1)	4.1 (68.9)
Gray squirrel	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)	6.6 (84.4)	6.1 (86.2)	7.0 (85.3)
Fox squirrel	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)	5.3 (77.7)	5.9 (76.4)	5.1 (82.6)
Eastern cottontail	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)	4.7 (77.7)	4.7 (70.5)	5.2 (84.2)
White-tailed jackrabbit	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)	5.2 (50.0)	2.7 (60.6)	3.3 (72.5)
Snowshoe hare	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)	4.4 (75.0)	2.9 (67.1)	3.5 (60.8)
Raccoon (Sept 03-Feb 04)	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)	10.0 (93.6)	11.6 (86.3)	9.6 (88.5)
Raccoon <sup>†</sup> (March 03-Aug 03)		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)	4.9 (90.2)	5.9 (91.7)	5.6 (85.2)
Red fox (Sept 03-Feb 04)	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)	2.7 (44.9)	3.1 (49.0)	3.5 (51.0)
Red fox <sup>†</sup> (March 03-Aug 03)		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)	2.8 (54.5)	3.6 (46.7)	1.1 (51.7)
Gray fox	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)	1.4 (26.3)	1.8 (23.5)	1.3 (30.0)
Coyote	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)	2.4 (47.3)	3.2 (36.6)	2.7 (48.8)
Badger	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)	1.0 (60.0)	2.8 (60.0)	1.0 (66.7)

<sup>†</sup> Raccoon and red fox season changed to year round beginning May 1994.

Table 32. Statewide small game hunting license sales and estimated hunter harvest, 1992-93 through 2003-04.

	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Small game license sales <sup>a</sup>	297,941	276,625	289,189	298,425	298,337	305,186	320,308	327,431	320,862	298,055	288,729	296,939
Federal duck stamp sales	108,332	110,738	149,428	132,546	132,738	138,331	134,098	134,138	135,884	140,980 <sup>c</sup>	144,851 <sup>c</sup>	
State duck stamp sales	104,064	104,839	116,346	122,092	122,634	126,009	126,488	128,245	121,709	118,590	119,677	118,757
Pheasant stamp sales	117,934	94,443	104,621	105,093	95,866	85,093	99,664	106,945	114,440	97,665	102,097	121,456
Estimated harvest <sup>b</sup> (thousands)												
Ducks <sup>c</sup>	864	824	955	1,162	1,098	1,206	1,119	1,021	969	990	1,024	914
Canada goose <sup>c</sup>	150	156	166	180	241	230	218	285	301	308	257	290
Other geese <sup>c</sup>	5	9	6	9	8	11	6	6	15	8	11	13
American coot <sup>c</sup>	23	15	22	28	23	29	25	25	10	17	20	11
Common snipe	9	4	2	3	5	4	5	3	3	2	3	3
Rails/gallinules	<1	1	1	1	<1	<1	<1	<1	1	<1	2	<1
Crow	69	51	114	130	96	74	106	60	96	88	72	82
American woodcock	100	68	74	82	58	58	63	54	45	27	28	30
Ring-necked pheasant	411	332	319	398	341	248	309	339	375	267	358	511
Ruffed grouse	543	288	371	457	533	654	946	685	619	332	249	351
Spruce grouse	21	12	23	25	16	25	27	19	23	9	12	18
Sharp-tailed grouse	20	11	9	10	8	13	22	14	16	10	9	12
Gray partridge	49	35	26	26	24	16	24	19	17	10	11	22
Gray squirrel	147	178	187	169	158	131	149	132	140	146	134	175
Fox squirrel	92	105	99	105	75	68	57	71	65	63	67	85
Eastern cottontail	73	75	77	100	65	65	89	59	78	63	52	93
White-tailed jack rabbit	11	9	7	7	10	4	7	6	7	8	4	7
Snowshoe hare	24	16	19	11	10	8	25	21	27	22	11	12
Raccoon (Sept 03-Feb 04)	77	79	163	155	207	124	143	65	49	59	60	50
Raccoon <sup>d</sup> (Mar 03- Aug 03)			24	55	99	17	2	16	36	18	19	22
Red fox (Sept 03- Feb 04)	63	63	42	48	33	13	13	10	19	7	11	13
Red fox <sup>d</sup> (Mar 03- Aug 03)			4	6	4	2	3	1	2	4	4	1
Gray fox	4	2	1	3	n.a.	3	1	2	1	1	1	1
Coyote	21	18	13	26	30	16	14	13	29	12	14	20
Badger	<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 32, 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.

<sup>a</sup> Duplicate licenses not included.

<sup>b</sup> Estimates based upon response of hunters to questionnaires.

<sup>c</sup> U.S. Fish and Wildlife Service HIP harvest estimates for 2003 are:

Ducks . . . . . 884,500

Canada geese . . . . . 282,495

Other geese . . . . . 0

<sup>d</sup> Raccoon and red fox seasons changed to year round beginning May, 1994.

<sup>e</sup> Federal duck stamps sold have not been audited for non-hunting stamp purchasers.

# Small Game

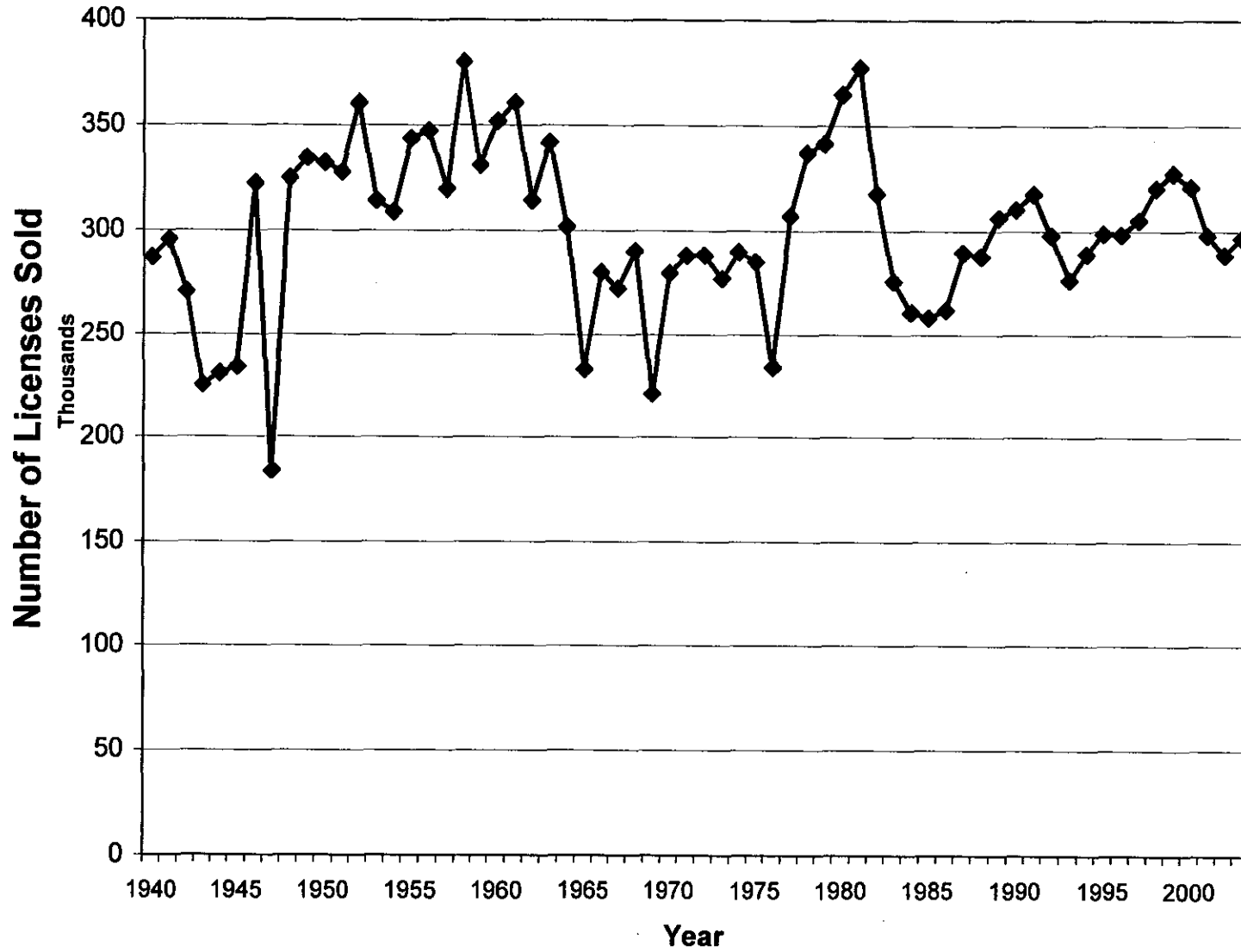


Figure 55. Numbers of Minnesota small game licenses sold, 1940 – 2003

Table 33. Mail survey results of nonresident small game hunters, 1991-92 through 2003-04.

	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
<b>Nonresident licenses issued<sup>a</sup></b>	4,852	4,718	3,809	4,435	4,993	5,488	6,361	7,155	7,572	7,001	5,843	5,852	6,291
<b>Questionnaires:</b>													
Number mailed	114	170	229	182	205	51	269	200	199	98	124	130	123
Number not delivered	8	8	21	7	14	4	18	17	16	6	9	9	17
Number (percent) returned	89 (83)	32 (82)	149 (72)	128 (73)	140 (73)	32 (68)	183 (73)	117 (64)	136 (74)	56 (61)	77 (67)	75 (66)	68 (64)
<b>Estimated nonresidents and (percent) of all nonresidents hunting:</b>													
Ducks	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)	2,727 (47)	2,263 (39)	2,498 (40)
Canada goose	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)	1,169 (20)	1,092 (19)	1,388 (24)
Ruffed grouse	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)	1,169 (20)	2,029 (35)	2,313 (40)
Ring-necked pheasant	1,743 (36)	894 (19)	741 (20)	832 (19)	820 (16)	515 (9)	731 (11)	612 (8)	947 (13)	625 (9)	935 (16)	1,404 (24)	2,128 (36)
Raccoon <sup>b</sup>	55 (1)	0 (0) <sup>c</sup>	26 (1)	0 (0) <sup>c</sup> *	107 (2) *	172 (3)	35 (1)	0 (0) <sup>c</sup>	56 (1)	250 (4)	0 (0)	0 (0)	0 (0)
<b>Estimated nonresident take:</b>													
Ducks	11,340	17,442	13,574	15,696	26,713	6,346	15,967	26,663	26,391	18,253	42,225	17,556	17,855
Canada goose	1,363	3,610	2,122	2,287	4,173	1,544	4,905	4,587	6,960	5,001	13,400	5,852	5,736
Ruffed grouse	18,100	10,758	4,985	7,242	9,415	23,153	16,072	27,886	23,384	24,003	6,622	9,207	9,437
Ring-necked pheasant	6,324	4,110	3,042	4,366	3,638	1,887	2,505	1,712	4,844	4,001	3,740	7,647	9,344
Raccoon	327	0	26	0	3,638	8,061	70	0	724	3,375	0	0	0

<sup>a</sup> Excludes duplicate licenses and nonresident shooting preserve licenses.

<sup>b</sup> 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.

<sup>c</sup> In 1990, 1992, 1994, 1998, 2001, 2002 and 2003 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

	<u>Resident</u>	<u>Nonresident</u>	<u>Number of nonresident raccoon licenses</u>
1992 <sup>c</sup>	9	0	20
1993	9	1	24
1994 <sup>c</sup>	16	0	*
1995	12	34	*
1996	23	47	52
1997	15	2	58
1998 <sup>c</sup>	18	0	56
1999	11	13	48
2000	8	13	51
2001	10	0	48
2002	11	0	46
2003	10	0	44

Table 34. Species composition of the Minnesota waterfowl harvest, 2002 and 2003 (from: Harvest Information Program. Preliminary estimates of waterfowl harvest and hunter activity in the United States during the 2003 hunting season. U.S. Fish and Wildlife Service Adm. Rep., Office of Migratory Bird Management, Laurel, Maryland. July 2004. 33 pp.). Note: All hunter activity and harvest estimates are preliminary, pending final counts of the number of migratory bird hunters in each state and complete audits of all survey response data.

Species	Minnesota Harvest					Mississippi Flyway Harvest		
	2002	% of Harvest	2003	% of Harvest	Percent change in Harvest 02-03	2002	2003	Percent change Harvest 02-03
Mallard	278,399	29.47	303,995	34.37	+ 9	2,423,134	2,571,468	+ 6
Domestic mallard	0	0	1,666	0.19		7,123	6,018	- 15
American black duck	1,862	0.20	833	0.09	- 55	47,465	33,971	- 28
Black x mallard	0	0	416	0.05		5,646	5,316	- 6
Gadwall	47,486	5.03	47,057	5.32	- 1	673,853	858,504	+ 27
American wigeon	22,812	2.41	15,408	1.74	- 32	147,440	124,228	- 16
Green-winged teal	79,144	8.38	100,776	11.39	+ 27	548,398	724,851	+ 32
Blue-winged /cinnamon teal	130,820	13.85	92,448	10.45	- 29	451,246	611,188	+ 35
Northern shoveler	11,173	1.18	18,323	2.07	+ 64	128,638	209,872	+ 63
Northern pintail	18,622	1.97	18,323	2.07	- 2	102,481	123,318	+ 20
Wood duck	135,010	14.29	129,926	14.68	- 4	720,392	779,488	+ 8
Redhead	13,967	1.48	11,660	1.32	- 16	28,995	37,828	+ 30
Canvasback	466	0.05	2,915	0.33	+525	604	11,259	+1764
Greater scaup	5,587	0.59	416	0.05	- 93	30,216	14,469	- 52
Lesser scaup	49,814	5.27	34,147	3.86	- 31	185,381	153,617	- 17
Ring-necked duck	94,972	10.05	72,459	8.19	- 24	250,330	239,855	- 4
Goldeneye	16,294	1.72	9,578	1.08	- 41	37,405	32,612	- 13
Bufflehead	19,553	2.07	10,411	1.18	- 47	81,526	89,254	+ 9
Ruddy duck	2,328	0.25	833	0.09	- 64	4,715	13,202	+ 180
Scoters	0	0	833	0.09		2,611	5,033	+ 93
Hooded merganser	12,570	1.33	9,578	1.08	- 24	60,048	55,608	- 7
Other mergansers	3,724	0.39	2,499	.028		11,335	9,844	- 13
Total Duck Harvest (retrieved kill)	944,600 ± 9%	100	884,500 ± 10%		- 6	5,974,100 ± 5%	6,759,100 ± 9%	+ 13

<sup>a</sup> Sum of all species does not equal total because of rounding error.

<sup>b</sup> No percentage change.

Table 35. Top 10 states in number of **adult duck hunters**, 2003, and number of hunter-days and retrieved duck kill, in each (from: Martin, E.M., and P.I. Padding. 2004. Harvest Information Program: Preliminary estimates of waterfowl harvest and hunter activity during the 2002 and 2003 hunting seasons. U.S. Fish and Wildlife Service Adm. Rep., Division of Migratory Bird Management, Harvest Surveys Section, Laurel, Maryland. July 2004. 33 pp). **Note:** All hunter activity and harvest estimates are preliminary, pending final counts of the number of migratory bird hunters in each state, and complete audits of all survey response data.

State	Number of active duck hunters	Duck hunter days afield	Total duck harvest	Seasonal duck harvest per hunter
Minnesota	87,900	548,300	884,500	10.1
Arkansas	72,300	595,500	1,129,800	15.6
Wisconsin	69,600	468,200	677,400	9.7
Louisiana	65,800	581,300	1,344,300	20.4
Texas	61,100	379,200	815,800	13.4
Michigan	50,900	292,000	367,100	7.2
California	43,100	406,900	1,013,100	23.5
North Dakota	37,100	197,700	496,800	13.4
Illinois	33,400	330,100	471,000	14.1
Missouri	33,000	238,900	472,600	14.4
Mississippi Flyway		4,033,400 ± 4%	6,759,100 ± 9%	
United States		7,444,000 ± 4%	13,402,300 ± 6%	



Table 36. Top 10 states in number of **adult goose hunters**, 2003, and number of hunter-days and retrieved goose kill, in each (from: Martin, E.M., and P.I. Padding. 2004. Harvest Information Program: Preliminary estimates of waterfowl harvest and hunter activity during the 2002 and 2003 hunting seasons. U.S. Fish and Wildlife Service Adm. Rep., Division of Migratory Bird Management, Harvest Surveys Section, Laurel, Maryland. July 2004. 33 pp). **Note:** All hunter activity and harvest estimates are preliminary, pending final counts of the number of migratory bird hunters in each state, and complete audits of all survey response data.

State	Number of active goose hunters	Goose hunter days afield	Total goose harvest	Seasonal goose harvest per hunter
Minnesota	70,000	431,700	286,800	4.1
Wisconsin	65,700	425,500	151,200	2.3
Texas	47,000	149,700	299,400	6.4
Michigan	45,800	247,700	191,700	4.2
Pennsylvania	41,300	260,900	194,000	4.7
California	38,000	241,400	118,300	3.1
Illinois	28,600	234,000	139,000	4.9
North Dakota	27,600	128,900	149,800	5.4
Ohio	25,500	159,000	88,200	3.5
Maryland	23,400	149,000	138,400	5.9
Mississippi Flyway		2,360,700 ± 9%	1,528,800 ± 7%	
United States		4,720,100 ± 5%	3,828,100 ± 5%	

Table 37. Ranking of the Six Most Numerically Important Species in Minnesota regular season duck harvest, 1961 – 2003.  
From the Federal Parts Collection survey data.

Year	Rank Position / % of Harvest												Combined % of Total Harvest
	1	%	2	%	3	%	4	%	5	%	6	%	
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

Table 37. (continued)

Year	Rank Position / % of Harvest												Combined % of Total Harvest
	1	%	2	%	3	%	4	%	5	%	6	%	
2000	Mallard	32.82	Wood Dk	15.57	BW Teal	13.71	Ringneck	12.27	GW Teal	7.54	Gadwall	3.25	85.16
2001	Mallard	38.96	BW Teal	15.13	Wood Dk	12.20	Ringneck	10.02	GW Teal	5.96	L. Scaup	4.53	86.80
2002	Mallard	29.47	Wood Dk	14.29	BW Teal	13.85	Ringneck	10.05	GW Teal	8.38	L. Scaup	5.27	81.31
2003	Mallard	34.37	Wood Dk	14.69	GW Teal	11.39	BW Teal	10.45	Ringneck	8.19	Gadwall	5.32	84.41
Avg. % of Harvest		31.5		16.4		12.7		9.8		7.3		5.6	83.1
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:													
<u>Rank 1</u>		<u>Rank 2</u>		<u>Rank 3</u>		<u>Rank 4</u>		<u>Rank 5</u>		<u>6</u>			
Mallard-43		Wood Dk-22		Ringneck-13		Ringneck-14		GW Teal-13		GW Teal-14			
		Ringneck-13		BW Teal- 11		GW Teal- 10		L. Scaup-11		Wigeon -9			
		BW Teal- 5		Wood Dk- 10		BW Teal- 8		BW Teal- 9		L. Scaup- 10			
		L. Scaup- 3		GW Teal- 5		L. Scaup- 6		Wood Dk- 5		BW Teal- 6			
				L. Scaup- 4		Wood Dk- 5		Wigeon - 2		Wood Dk- 1			
								Ringneck- 3		Bufflehead- 1			
										Gadwall- 2			

Table 38. Spring turkey hunting summary, 1978-04.

Year	Area of open hunt zone (mi <sup>2</sup> )	Number of permit applicants	Number of permits available	Odds of drawing a permit <sup>a</sup>	Number of permits given	Number of persons hunting <sup>b</sup>	Registered turkey harvest	% success <sup>c</sup>
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 <sup>d</sup>	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 <sup>‡</sup>	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
2002	7,123 <sup>‡</sup>	42,415	24,136	**	22,607	21,477	6,516	30.3
2003	7,364 <sup>‡</sup>	44,415	25,016	**	22,770	21,632	7,650	33.6
2004	8,098 <sup>‡</sup>	48,059	27,600	**	25,261	23,998	8,434	33.4

<sup>a</sup> Calculated with total permits available to be given, and not adjusting for undersubscribed zones and time periods.

<sup>b</sup> 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.

<sup>c</sup> Registered turkey harvest divided by number actually hunting, expressed as %.

<sup>d</sup> Legislation allows NON-RESIDENT hunters.

\*\* Computerized preference drawing began Spring 1990.

‡ Open hunt zone area now calculated using deer permit zones.

❖ Total estimated huntable square miles (forest cover buffered by 50 meters with non-huntable areas removed).

Table 39. Spring Wild Turkey harvest in Minnesota, by permit area, 2004.

Permit Area	Harvest			Unknown	Percent (%) Juveniles	Total	Hunter Success (%) <sup>a</sup>
	Number of Permits Issued	Number of Adults	Number of Juveniles				
157	33	7	3	0	30.0	10	30.3
159	37	4	3	0	42.9	7	18.9
221	116	50	6	0	10.7	56	48.3
223	441	137	24	0	14.9	161	36.5
225	654	139	38	0	21.5	177	27.1
227	372	106	29	0	21.5	135	36.3
228	289	98	16	0	14.0	114	39.4
235	104	23	8	0	25.8	31	29.8
236	568	186	36	0	16.2	222	39.1
244	111	32	4	0	11.1	36	32.4
248	34	11	1	0	8.3	12	35.3
249	73	14	2	0	12.5	16	21.9
337	390	105	32	0	23.4	137	35.1
338	501	136	41	0	23.2	177	35.3
339	500	131	46	0	26.0	177	35.4
341	1,442	435	102	0	19.0	537	37.2
342	1,480	321	86	0	21.1	407	27.5
343	1,115	432	63	0	12.7	495	44.4
344	775	163	48	0	22.7	211	27.2
345	1,378	232	67	0	22.4	299	21.7
346	2,021	409	129	0	24.0	538	26.6
347	1,136	284	57	0	16.7	341	30.0
348	1,270	254	78	0	23.5	332	26.1
349	2,620	621	159	0	20.4	780	29.8
410	223	93	12	0	11.4	105	47.1
411	224	68	29	0	29.9	97	43.3
412	255	97	18	0	15.7	115	45.1
414	75	33	1	0	2.9	34	45.3
415	409	130	25	0	16.1	155	37.9
416	78	25	6	0	19.4	31	39.7
417	223	76	13	0	14.6	89	39.9
418	365	135	29	0	17.7	164	44.9

Table 39. (Continued)

Permit Area	Harvest						Hunter Success (%)
	Number of Permits Issued	Number of Adults	Number of Juveniles	Unknown	Percent (%) Juveniles	Total	
419	228	48	17	0	26.2	65	28.5
420	35	15	1	0	6.3	16	45.7
422	33	7	0	0	0.0	7	21.2
425/435 <sup>b</sup>	365	149	21	0	12.4	170	46.6
426	35	7	1	0	12.5	8	22.9
427	77	22	4	0	15.4	26	33.8
428	104	31	6	0	16.2	37	35.6
429	140	24	4	0	14.3	28	20.0
431	36	10	10	0	50.0	20	55.6
433	41	18	2	0	10.0	20	48.8
440	457	111	38	0	25.5	149	32.6
442	1,190	367	103	0	21.9	470	39.5
443	536	125	40	0	24.2	165	30.8
446/447	35	18	1	0	5.3	19	54.3
448	41	26	3	1	10.0	30	73.2
449	36	21	1	0	4.5	22	61.1
450	40	7	0	0	0.0	7	17.5
451/452/453	46	24	5	0	17.2	29	63.0
454/455/456/458	79	20	5	0	20.0	25	31.6
457	37	6	1	0	14.3	7	18.9
459	106	34	7	0	17.1	41	38.7
461	587	169	58	0	25.6	227	38.7
462	580	156	43	18	19.8	217	37.4
463	154	39	21	0	35.0	60	39.0
464	183	44	12	0	21.4	56	30.6
465	213	51	19	0	27.1	70	32.9
466	255	84	9	0	9.7	93	36.5
467	280	80	16	0	16.7	96	34.3
Unknown		48	8	0	14.3	56	
Total	25,261	6,748	1,667	19	19.8	8,434	33.4

<sup>a</sup> Success rate not adjusted for non-participants.

<sup>b</sup> Includes only a small portion of permit area 425.

# 2004 Spring Wild Turkey Permit Areas

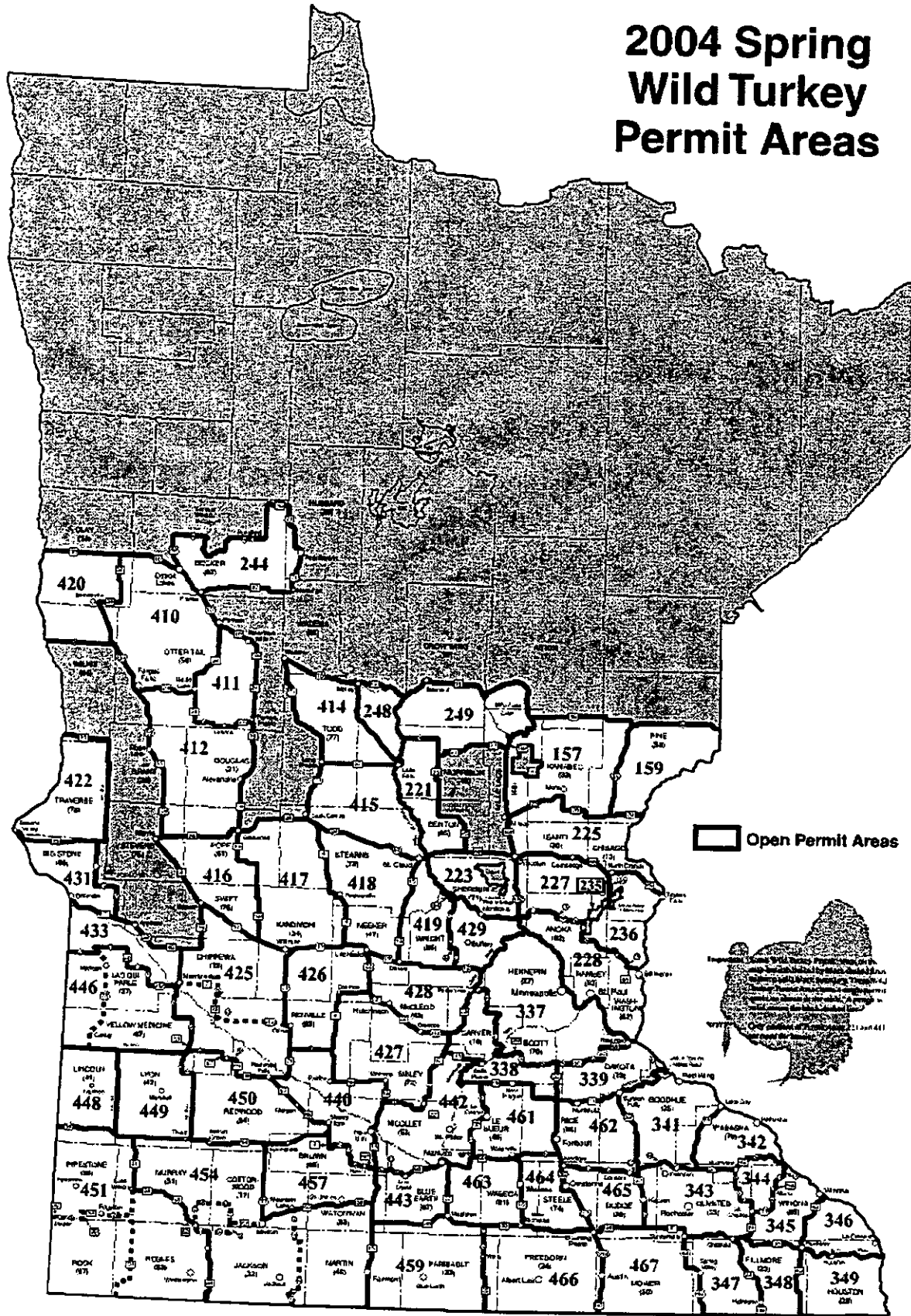


Figure 56. Spring wild turkey hunt permit areas, 2004.

Table 40. Fall turkey hunting summary, 1990-2003.

Year	Area of open hunt zone (mi <sup>2</sup> )	Number of permit applicants	Number of permits available	Number of permits issued	Number of persons hunting <sup>a</sup>	Registered turkey harvest	% Success <sup>b</sup>
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	7,241 <sup>c</sup>	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	9,286	5,354	2,890	2,644	2,380	865	36
2000	9,286	5,263	3,090	2,484	2,236	735	33
2001	7,566	4,501	2,870	2,262	2,036	629	31
2002	11,168	5,180	3,790	2,945	2,651	594	22
2003	2,871 <sup>d</sup>	5,264	3,870	2,977	2,679	861	32

<sup>a</sup> Number hunting estimated at 90% of permits issued based on survey results.

<sup>b</sup> Registered turkey harvest divided by number actually hunting, expressed as %.

<sup>c</sup> Total area of open hunt zone calculated from Deer Permit Zone information of area/miles<sup>2</sup>.

<sup>d</sup> Total area of open hunt zone calculation based on Total Huntatable Habitat (square miles). Huntatable habitat is forest cover buffered by 50 meters, with non-huntatable areas (e.g. lakes, cities) removed.



Table 41. Fall wild turkey harvest by permit area, 2003.

Permit Area	Male			Female			Unknown Age/Sex	Total
	Juvenile	Adult	Unknown	Juvenile	Adult	Unknown		
228	0	3		3	5			11
236	5	7		0	7			19
337	3	9		4	5			21
338	3	11		4	6			24
339	4	10		1	2			17
341	5	33		13	30		12	93
342	5	18		22	40		5	90
343	1	8		5	16		1	31
344	3	3		5	30		1	42
345	3	6		5	8			22
346	11	19		13	31			74
347	10	11		0	20			41
348	7	8		10	38			63
349	21	27		42	49			139
442	14	22		15	16			67
443	5	6		3	2			16
448	0	1		0	1			2
461	6	17		6	9			38
462	1	3		4	8			16
464	0	2		0	2			4
465	0	0		1	0			1
466	3	4		2	7	1		17
467	1	1		4	4			10
Unknown	0	2		1	0			3
Total	111	231	0	163	336	1	19	861

**2003 FALL WILD TURKEY  
PERMIT AREA QUOTAS**

WILD TURKEY PERMIT AREA NUMBER	TIME PERIOD AND DATE	
	A October 15-19	B October 22-26
228	25	25
236	35	35
337	40	40
338	60	60
339	50	50
341	200	200
342	200	200
343	60	60
344	100	100
345	125	125
346	185	185
347	75	75
348	150	150
349	280	280
442	100	100
443	35	35
448	5	5
461	50	50
462	50	50
464	20	20
465	20	20
466	30	30
467	30	30
<b>TOTAL</b>	<b>1,935</b>	<b>1,935</b>

Carlos Avery W.M.A. Closed to Fall Hunting

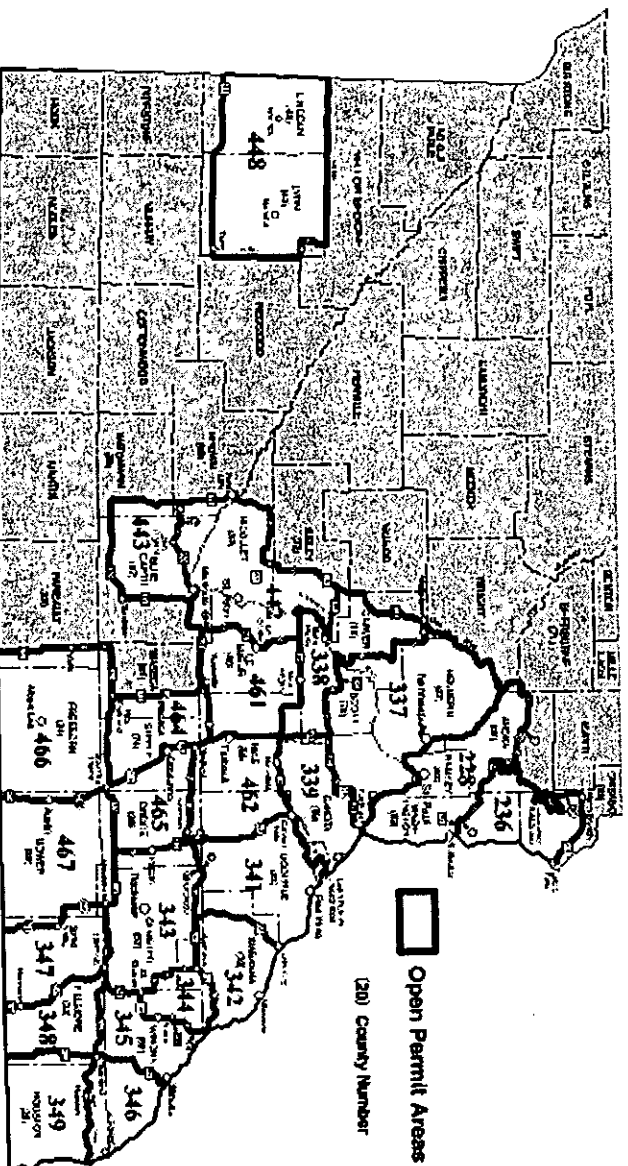


Figure 57. Fall wild turkey hunt zones, 2003.

Table 42. Applicants, permits available, permits issued and harvest by permit area for the Minnesota prairie chicken season, October 2003.

Permit Area	# Applicants (Landowner)	# Permits Available (Landowner)	#Permits Issued <sup>a</sup> (Landowner)	# Prairie Chickens Registered via ELS	# Prairie Chickens Reported Harvested via Survey	Average # birds per hunter	
						ELS	Survey
405A	120 (2)	12 (3)	13 (1)	23	25	1.8	1.9
407A	109 (3)	13 (3)	14 (2)	10	12	0.7	0.9
407B	97 (0)	15 (3)	13 (0)	8	8	0.6	0.6
407C	80 (2)	13 (3)	14 (2)	20	20	1.4	1.4
420A	116 (6)	14 (3)	10 (3)	14	15	1.4	1.5
420B	203 (2)	18 (4)	17 (2)	24	31	1.4	1.8
421A	128 (3)	15 (3)	12 (3)	16	18	1.3	1.5
<b>Total</b>	<b>853 (18)</b>	<b>100 (22)</b>	<b>93 (13)</b>	<b>115</b>	<b>129</b>	<b>1.2</b>	<b>1.4</b>

Table 43. Hunter success by permit area for the Minnesota prairie chicken season, October 2003.

Permit Area	Hunters that Harvested 0 Birds	Hunters that Harvested 1 Bird	Hunters that Harvested 2 Birds	Hunters that Harvested at least 1 bird (%)
405A	1	1	11	92.3
407A	8	2	4	42.9
407B	8	2	3	38.5
407C	3	2	9	78.6
420A	3	0	7	70.0
420B	4	2	11	76.5
421A	3	2	7	75.0
<b>Total</b>	<b>30</b>	<b>11</b>	<b>52</b>	<b>67.7</b>

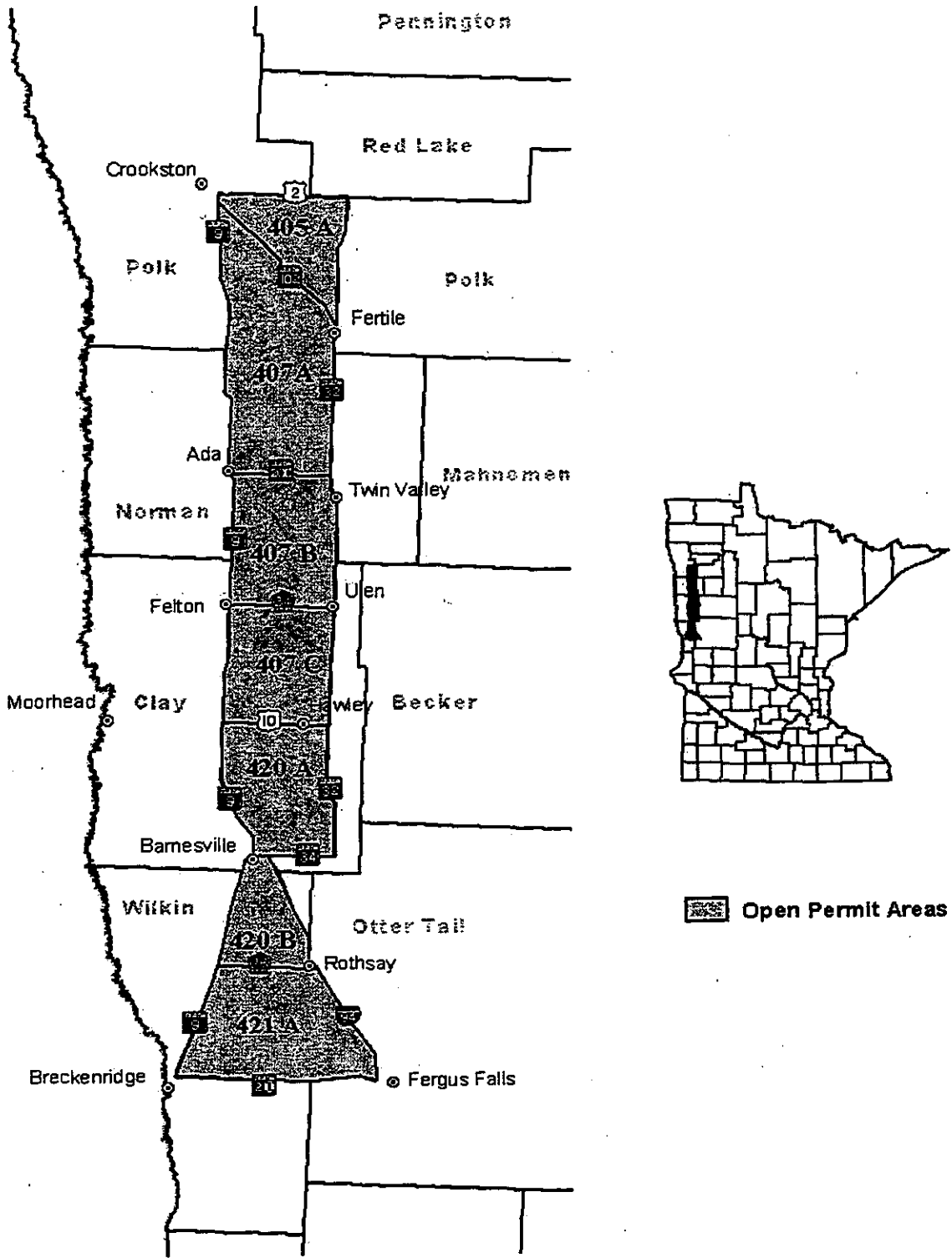


Figure 58. Location of hunting permit areas for the Minnesota prairie chicken season, October 2003.

Table 44. Deer hunting license sales, 1957-2003<sup>a</sup>.

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 <sup>b</sup>	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
2001	450,649	11,137	461,786	69,732	1,288	71,020	532,806
2002 <sup>c</sup>	429,143	11,006	440,149	57,532	1,275	58,807	498,956
2003	443,265	11,334	454,599	59,339	1,428	60,767	515,366

<sup>a</sup> Duplicate licenses not included. Leech Lake licenses are included during years they were issued.

<sup>b</sup> Bonus licenses not included beginning 1988.

<sup>c</sup> Lifetime license sales included 2002.

Table 45. Registered deer harvest and hunter success rates, 1974-2003.

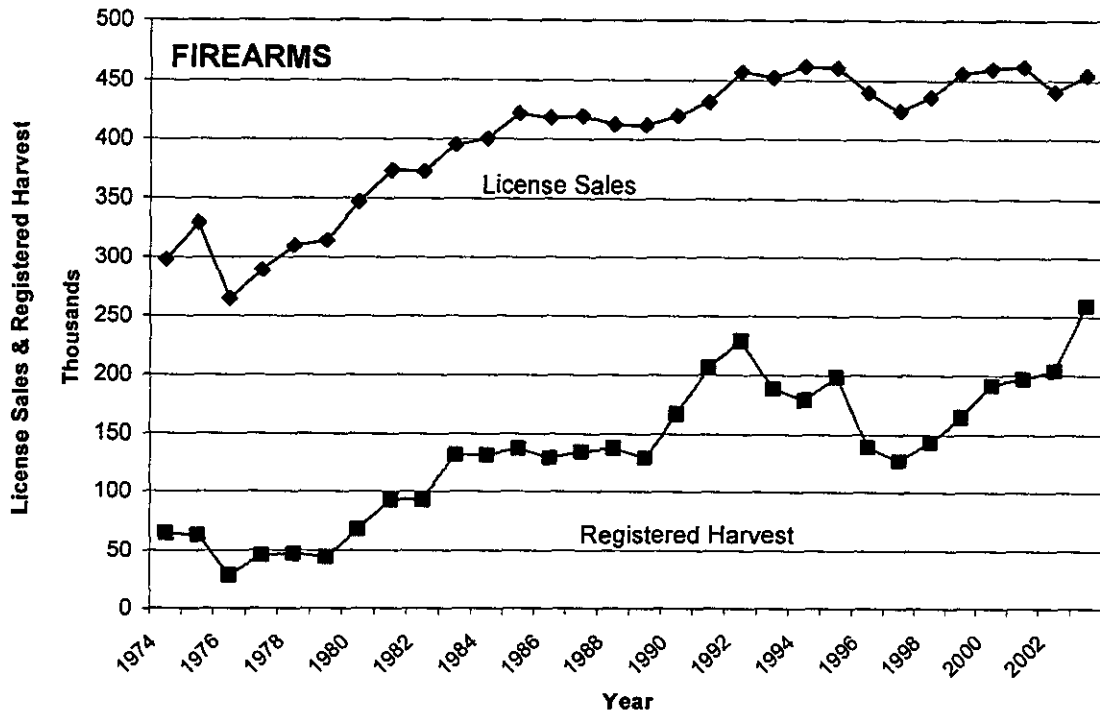
	Registered Harvest				Percent Success	
	Regular firearms	Archery	Special Muzzleloader season <sup>a</sup>	Total	Regular firearms and special muzzleloader seasons	Archery
1974	64,997	2,176	-	67,173	21.8	6.9
1975	63,604	2,265	-	65,869	19.3	6.9
1976	28,613	1,167	-	29,780	10.8	5.3
1977	45,918	2,609	32	48,559	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
2001	197,063	15,884	4,494	217,441	37.9	17.1
2002	203,793	14,752	3,505	222,050	37.4	19.2
2003	259,339 <sup>b</sup>	21,720	9,466 <sup>c</sup>	288,962	40.6	35.7

<sup>a</sup> No special muzzleloader seasons were held before 1977.

<sup>b</sup> includes landowner harvest (290,525).

<sup>c</sup> includes All Season harvest (4,371)

a)



b)

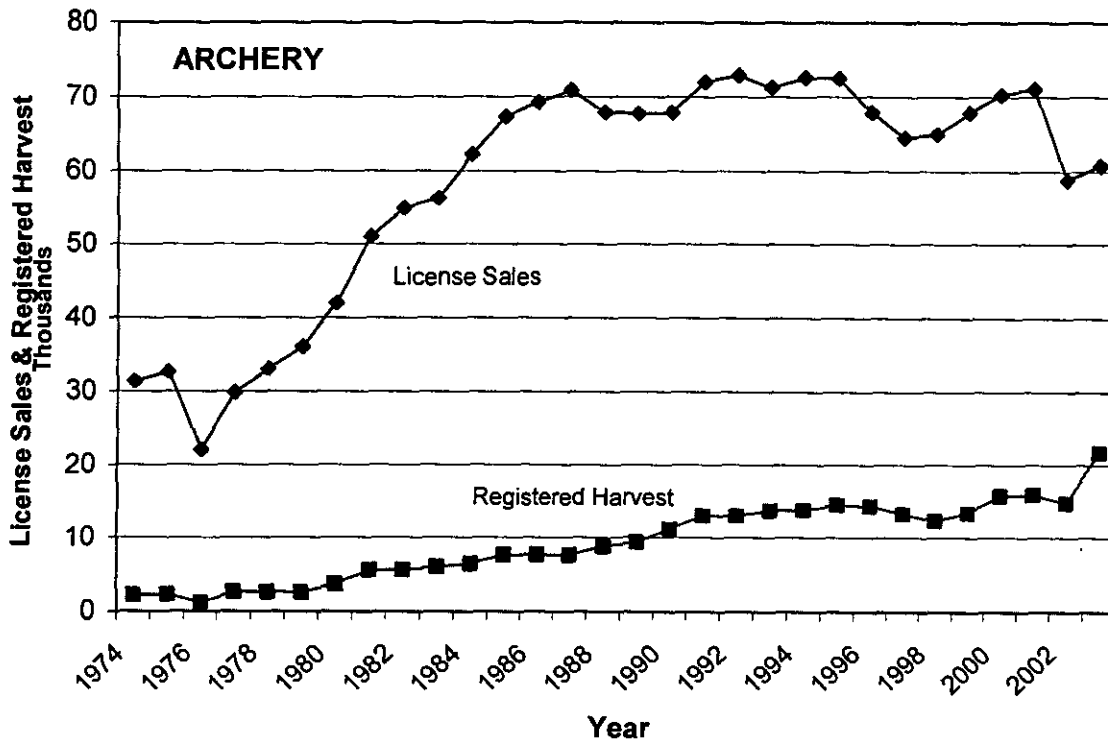


Figure 59. Numbers of Minnesota deer hunting licenses sold and registered harvest by a) firearm and b) archery hunters, 1974 – 2003.

Table 46. White-tailed deer harvest by Sub-DMU and permit area, 2003<sup>a</sup>.

Sub-DMU	Permit Area	Antlerless Registered	Bucks Registered	Total Registered Harvest
Red River West	401A(B)	77 (65)	133 (101)	210 (166)
	402A(B)	218 (147)	340 (165)	558 (312)
	Total A(B)	295 (212)	473 (266)	768 (478)
Red River East	403 A(B)	123 (190)	149 (179)	272 (369)
	404 A(B)	247 (313)	389 (360)	636 (673)
	405 A(B)	274 (256)	368 (265)	642 (521)
	406 A(B)	209 (219)	342 (234)	551 (453)
	407 A(B)	253 (242)	377 (240)	630 (482)
	408 A(B)	245 (183)	354 (195)	599 (378)
	Total A(B)	1,351 (1,403)	1,979 (1,473)	3,330 (2,876)
Aggasiz	201	79	123	202
	202	261	444	705
	203	93	164	257
	204	659	1,066	1,725
	205	1,307	1,997	3,304
	206	623	920	1,543
	207	418	639	1,057
	208	335	474	809
	209	436	778	1,214
	210	564	1,152	1,716
	Total	4,775	7,757	12,532
Rainy River West	211	1,025	1,707	2,732
	213	0	0	0
	214	27	55	82
	Total	1,052	1,762	2,814
Rainy River Central	104	1,229	1,986	3,215
	110	528	771	1,299
	Total	1,757	2,757	4,514
Rainy River East	107	1,770	3,134	4,904
Superior Wilderness	115	1,636	3,396	5,032
	116	19	231	250
	Total	1,655	3,627	5,282
Superior Central	122	138	503	641
Superior East	126	83	537	620
	127	13	117	130
	Total	96	654	750
Itasca North West	167	484	937	1,421
	168	944	1,969	2,913
	283	317	397	714
	Total	1,745	3,303	5,048
Itasca North East	175	1,690	3,092	4,782
	178	1,791	3,394	5,185
	Total	3,481	6,486	9,967



Table 46 (con't.)

Sub-DMU	Permit Area	Antlerless Registered	Bucks Registered	Total Registered Harvest
Itasca South East	180	878	2,048	2,926
	181	1,233	2,674	3,907
	183	1,563	2,356	3,919
	199	22	113	135
	Total	3,696	7,191	10,887
Itasca South West	170	2,754	5,032	7,786
	172	2,787	3,649	6,436
	174	1,423	2,130	3,553
	Total	6,964	10,811	17,775
Leech Lake I.R.	197	374	1,074	1,448
Bemidji	284	4,319	6,735	11,054
	285	461	797	1,258
	287	183	327	510
	Total	4,963	7,859	12,822
Mille Lacs West	244	2,359	4,085	6,444
	245	2,837	4,382	7,219
	251	140	281	421
	Total	5,336	8,748	14,084
Mille Lacs Central	242	830	1,261	2,091
	243	1,414	2,112	3,526
	246	2,655	4,091	6,746
	247	843	1,532	2,375
	248	481	736	1,217
	249	1,488	2,272	3,760
	Total	7,711	12,004	19,715
Mille Lacs East	152	65	126	191
	154	2,174	3,103	5,277
	156	1,850	2,727	4,577
	157	3,125	4,890	8,015
	159	1,925	2,611	4,536
	Total	9,139	13,457	22,596
White Earth I.R.	297	42	239	281
	298	593	1,230	1,823
	Total	635	1,469	2,104
Big Woods North	409 A(B)	836 (443)	1,451 (462)	2,287 (905)
	410 A(B)	1,233 (398)	1,998 (545)	3,231 (943)
	411 A(B)	1,223 (477)	1,929 (493)	3,152 (970)
	412 A(B)	864 (243)	1,381 (336)	2,245 (579)
	413 A(B)	889 (393)	1,392 (456)	2,281 (849)
	414 A(B)	1,110 (413)	1,679 (481)	2,789 (894)
	415 A(B)	677 (244)	1,004 (326)	1,681 (570)
	416 A(B)	374 (167)	585 (215)	959 (382)
	417 A(B)	825 (283)	1,075 (393)	1,900 (676)
	418 A(B)	514 (158)	896 (264)	1,410 (422)
	419 A(B)	223 (110)	464 (135)	687 (245)
	429 A(B)	107 (59)	162 (68)	269 (127)
	Total A(B)	8,875 (3,388)	14,016 (4,174)	22,891 (7,562)

Table 46 (con't.)

Sub-DMU	Permit Area	Antlerless Registered	Bucks Registered	Total Registered Harvest
Big Woods Central	221	960	1,749	2,709
	222	853	1,553	2,406
	223	468	876	1,344
	224	142	262	404
	225	1,307	2,424	3,731
	Total	3,730	6,864	10,594
Big Woods Metro North	227	662	1,381	2,043
	228	147	315	462
	235	76	154	230
	236	617	1,129	1,746
	Total	1,502	2,979	4,481
Big Woods Metro South	337 A(B)	104 (75)	260 (104)	364 (179)
	338 A(B)	35 (173)	178 (209)	213 (382)
	339 A(B)	26 (130)	170 (174)	196 (304)
	Total A(B)	165 (378)	608 (487)	773 (865)
Big Woods Southeast	341 A(B)	63 (562)	568 (654)	631 (1,216)
	342 A(B)	62 (468)	417 (503)	479 (971)
	343 A(B)	41 (485)	573 (608)	614 (1,093)
	344 A(B)	59 (314)	370 (293)	429 (607)
	345 A(B)	30 (344)	352 (397)	382 (741)
	346 A(B)	49 (642)	675 (735)	724 (1,377)
	347 A(B)	38 (462)	467 (504)	505 (966)
	348 A(B)	69 (579)	555 (598)	624 (1,177)
	349 A(B)	64 (880)	880 (966)	944 (1,846)
	Total A(B)	475 (4,736)	4,857 (5,258)	5,332 (9,994)
Prairie North	420 A(B)	156 (99)	275 (151)	431 (250)
	421 A(B)	120 (56)	221 (97)	341 (153)
	422 A(B)	116 (47)	198 (84)	314 (131)
	423 A(B)	141 (73)	226 (94)	367 (167)
	424 A(B)	95 (49)	177 (78)	272 (127)
	425 A(B)	43 (22)	83 (47)	126 (69)
	426 A(B)	64 (136)	177 (122)	241 (258)
	427 A(B)	49 (35)	172 (53)	221 (88)
	428 A(B)	111 (75)	189 (83)	300 (158)
	Total A(B)	895 (592)	1,718 (809)	2,613 (1,401)
Prairie River	431 A(B)	47 (23)	140 (53)	187 (76)
	433 A(B)	149 (109)	378 (134)	527 (243)
	435 A(B)	152 (78)	292 (100)	444 (178)
	440 A(B)	195 (58)	289 (54)	484 (112)
	442 A(B)	149 (89)	365 (114)	514 (203)
	443 A(B)	77 (61)	174 (80)	251 (141)
	Total A(B)	769 (418)	1,638 (535)	2,407 (953)

Table 46 (con't.)

Sub-DMU	Permit Area	Antlerless Registered	Bucks Registered	Total Registered Harvest
Prairie Southwest	446 A(B)	92 (79)	166 (80)	258 (159)
	447 A(B)	86 (40)	196 (42)	282 (82)
	448 A(B)	128 (44)	239 (69)	367 (113)
	449 A(B)	166 (61)	284 (76)	450 (137)
	450 A(B)	63 (34)	133 (52)	196 (86)
	451 A(B)	78 (62)	212 (139)	290 (201)
	452 A(B)	86 (93)	142 (158)	228 (251)
	453 A(B)	77 (50)	211 (88)	288 (138)
	454 A(B)	169 (96)	282 (126)	451 (222)
	455 A(B)	13 (16)	31 (28)	44 (44)
	456 A(B)	107 (81)	199 (118)	306 (199)
	457 A(B)	109 (65)	183 (79)	292 (144)
	458 A(B)	95 (62)	195 (97)	290 (159)
	459 A(B)	141 (97)	278 (132)	419 (229)
	Total A(B)	1,410 (880)	2,751 (1,284)	4,161 (2,164)
Prairie Southeast	461 A(B)	135 (155)	262 (191)	397 (346)
	462 A(B)	130 (145)	303 (160)	433 (305)
	463 A(B)	85 (42)	146 (62)	231 (104)
	464 A(B)	58 (83)	122 (106)	180 (189)
	465 A(B)	22 (93)	71 (111)	93 (204)
	466 A(B)	82 (179)	184 (231)	266 (410)
	467 A(B)	140 (176)	292 (196)	432 (372)
	Total A(B)	652 (873)	1,380 (1,057)	2,032 (1,930)
Special Hunt Totals*	--	296	340	636
GRAND TOTALS		88,582	147,542	236,124

\* includes MEA youth firearms hunt and 3B firearms hunts.

Table 47. Archery deer harvest by Sub-DMU and permit areas, 1995-2003.

Sub-DMU	Permit Area	1995*	1996*	1997*	1998*	1999*	2000*	2001*	2002*	2003*
Red River West	401	159	131	103	63	30	54	98	59	74
	402	94	83	74	71	37	88	120	82	110
Red River East	403	121	49	46	43	17	64	59	54	63
	404	91	59	42	56	31	45	70	52	71
	405	20	18	28	32	5	33	51	34	44
	406	14	29	29	40	15	50	70	44	48
	407	98	53	82	27	8	44	86	86	69
	408	35	13	22	44	1	20	32	37	28
Agassiz	201	9	6	2	0	2	3	10	4	4
	202	21	17	6	2	12	14	35	34	34
	203	2	2	1	0	1	0	0	0	1
	204	66	49	29	16	31	65	69	45	52
	205	183	79	58	56	52	101	58	106	178
	206	84	73	42	14	25	50	59	90	111
	207	23	13	16	6	8	20	29	15	28
	208	32	15	6	2	5	10	18	14	19
	209	44	37	44	49	32	36	37	27	45
	210	29	17	31	15	18	33	39	39	38
Rainy River West	211	116	70	18	4	4	77	70	68	51
	213	1	1	1	0	0	0	13	7	0
	214	2	9	6	2	2	7	10	8	7
Rainy River Central	104	10	1	0	2	19	24	14	16	42
	110	17	4	1	2	10	12	15	20	21
Rainy River East	107	20	4	2	2	34	21	38	43	68
Superior Wilderness	115	0	0	0	1	15	12	28	30	63
	116	3	0	0	1	0	0	0	2	8
Superior Central	122	12	4	1	1	1	14	10	9	6
Superior East	126	20	7	3	2	3	14	15	12	16
	127	1	0	0	1	4	0	2	1	3
Itasca North West	167	13	5	2	3	20	23	21	24	13
	168	32	2	5	4	71	57	63	48	43
	283					7	9	11	12	21
Itasca North East	175	50	9	8	10	58	25	67	39	82
	178	12	5	2	5	70	34	62	79	121
Itasca South West	170	60	15	29	26	139	149	143	92	172
	172	47	14	14	28	69	90	64	100	139
	174	24	8	8	12	49	63	54	47	75
Itasca South East	180	86	3	36	45	39	93	103	63	150
	181	32	12	4	10	119	112	154	154	260
	183	42	13	17	25	86	94	93	81	126
	199	2	3	2	2	6	2	5	1	2
Leech Lake I.R.	197	13	9	2	11	12	39	24	16	25
Bemidji	284	113	99	46	72	300	377	296	367	836
	285	30	15	8	7	6	16	10	17	29
	287	10	1	0	0	3	0	3	0	1

Table 47 (cont.)

Sub-DMU	Permit Area	1995*	1996*	1997*	1998*	1999*	2000*	2001*	2002*	2003*
Mille Lacs West	244	54	15	56	85	54	151	89	134	455
	245	64	10	43	37	114	164	41	50	411
	251	7	1	2	4	1	3	1	1	4
Mille Lacs Central	242								456	484
	243					93	86	177	106	258
	246	129	80	142	160	85	160	177	113	324
	247	186	253	222	300	252	340	596	217	208
	248	49	56	41	49	69	155	50	91	73
	249	74	85	71	97	128	82	103	169	188
Mille Lacs East	152	3	6	5	5	10	6	5	4	8
	154	21	28	33	52	122	137	107	209	189
	156	50	67	53	78	82	120	96	89	140
	157	62	66	68	69	231	429	375	462	523
	159	122	147	131	162	157	323	310	234	273
White Earth I.R.	297	7	0	4	0	0	5	1	1	5
	298	2	1	0	1	3	11	7	2	21
Big Woods North	409	185	252	274	217	160	381	290	139	226
	410	242	175	169	84	39	228	251	271	256
	411	202	181	164	163	118	232	338	256	306
	412	269	288	189	111	226	241	242	208	207
	413	288	293	224	266	173	275	239	331	339
	414	234	123	204	210	241	303	289	195	277
	415	205	218	215	243	276	174	335	242	231
	416	84	161	116	157	188	164	141	42	89
	417	256	275	339	180	258	207	189	119	186
	418	252	248	286	188	207	169	163	220	240
	419	246	280	242	227	220	223	252	159	178
	429	76	118	142	121	122	106	125	140	153
	Big Woods Central	221	77	126	95	115	112	261	145	207
222		57	48	35	63	53	100	147	146	195
223		293	342	265	260	250	287	246	313	449
224		10	17	21	13	10	22	15	24	29
225		77	154	129	120	351	334	424	304	444
Big Woods Metro North	227	353	382	343	325	396	376	488	418	615
	228	711	828	734	756	768	772	790	551	821
	235	44	41	68	29	38	29	37	22	48
	236	623	611	572	550	583	524	618	705	902
Big Woods Metro South	337	953	901	821	681	817	820	747	567	764
	338	215	158	127	147	82	104	109	65	107
	339	245	244	239	220	226	165	226	209	175
Big Woods Southeast	341	223	279	286	317	363	353	352	353	349
	342	129	133	119	120	128	194	181	143	165
	343	391	467	615	476	573	524	590	551	522
	344	88	105	91	48	70	68	41	57	79
	345	197	154	174	159	145	214	142	193	137
	346	105	190	270	167	168	216	194	203	424
	347	195	197	201	151	184	198	196	198	179
	348	70	163	156	195	171	250	186	198	173
	349	84	150	173	181	182	274	258	269	400

Table 47 (cont.)

Sub-DMU	Permit Area	1995*	1996*	1997*	1998*	1999*	2000*	2001*	2002*	2003*
Prairie North	420	94	128	72	0	24	71	83	74	63
	421	81	83	75	29	30	61	82	50	50
	422	52	64	46	38	43	28	38	23	25
	423	46	35	21	38	23	23	33	23	23
	424	65	118	57	23	35	37	28	15	19
	425	102	90	26	19	46	25	20	18	18
	426	101	52	39	38	82	38	53	27	47
	427	51	45	44	43	37	35	48	30	22
	428	89	96	82	80	81	82	106	51	55
Prairie River	431	38	91	56	76	80	33	16	13	12
	433	122	137	151	78	121	114	94	56	61
	435	71	91	99	52	61	64	65	24	31
	440	112	122	130	97	96	121	91	75	50
	442	222	203	191	169	145	221	219	156	184
	443	76	97	72	81	58	87	84	59	55
Prairie Southwest	446	23	31	15	28	16	43	24	12	28
	447	38	45	24	42	24	48	21	10	19
	448	40	41	26	26	20	18	36	22	26
	449	100	113	79	78	36	49	83	44	64
	450	44	32	35	28	33	23	27	19	25
	451	57	79	48	39	35	39	40	31	37
	452	37	83	45	72	53	68	37	36	69
	453	43	57	38	29	39	37	19	27	36
	454	77	156	81	77	85	87	79	60	55
	455	18	11	10	17	16	19	18	10	11
	456	77	80	96	71	93	82	61	46	41
	457	33	78	44	40	58	66	44	36	39
	458	60	83	59	52	54	61	41	38	42
459	84	106	123	73	91	84	59	46	74	
Prairie Southeast	461	131	108	132	163	125	152	74	62	89
	462	234	275	206	218	265	206	240	238	184
	463	47	44	26	52	34	37	51	27	22
	464	64	125	77	92	50	48	48	50	50
	465	171	172	143	135	159	94	68	75	124
	466	113	164	133	163	223	221	98	95	112
	467	173	162	204	235	130	200	218	195	232
Unknown	UNK	0	0	0	0	0	0	0	0	0
Camp Ripley		247	160	142	175	203	375	350	337	440
TOTAL		4,013 (527)†	14,338 (765)†	13,258 (1,009)†	12,306 (448)†	13,376 (581)†	16,151 (1,167)†	16,245 (1,639)†	14,752 (2,638)†	19,335 (10,032)†

\* Includes Regular licenses, Management permits, Intensive harvest permits, and Special permit areas.

† Harvest in ( ) shows Intensive Harvest Permit harvest.

Table 48. Muzzleloader Season harvest by block, 2003 (Includes Special Permit Areas)

Permit Area	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
104	3	1	8	2	14
107	1	0	4	2	7
110	1	2	2	0	5
115	4	3	8	0	15
122	0	0	1	0	1
152	1	0	5	4	10
154	2	5	14	4	25
156	3	2	18	5	28
157	10	24	55	15	104
159	8	12	25	2	47
167	4	0	1	0	5
168	1	0	6	0	7
170	5	5	36	7	53
172	4	11	30	1	46
174	1	2	9	1	13
175	5	1	4	0	10
178	9	0	3	0	12
180	5	0	8	1	14
181	2	1	10	0	13
183	2	2	6	2	12
197	2	1	1	0	4
201	1	1	1	1	4
202	1	1	2	0	4
204	4	5	16	3	28
205	17	11	44	12	84
206	5	6	24	2	37
207	4	5	11	4	24
208	1	3	4	1	9
209	3	1	8	0	12
210	1	1	5	2	9
211	8	4	38	2	52
221	4	3	10	3	20
222	4	13	13	6	36
223	3	9	29	5	46
225	4	16	26	13	59
227	10	14	35	10	69
228	5	4	8	4	21
235	3	2	4	0	9
236	7	8	37	6	58

Permit Area	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
248	7	5	28	10	50
249	5	4	23	5	37
251	0	1	1	0	2
283	1	0	15	1	17
284	14	24	58	23	119
285	4	8	4	4	20
297	0	1	1	0	2
298	0	2	4	2	8
337	17	10	21	4	52
338	6	3	18	1	28
339	4	3	10	0	17
341	11	8	26	6	51
342	19	6	26	6	57
343	11	9	46	5	71
344	4	4	12	2	22
345	3	4	8	0	15
346	4	11	31	6	52
347	12	5	31	4	52
348	13	12	30	6	61
349	9	15	58	8	90
401	24	7	25	8	64
402	8	13	36	15	72
403	13	7	37	11	68
404	6	4	23	8	41
405	9	5	13	4	31
406	5	4	9	1	19
407	11	13	31	12	67
408	5	4	13	5	27
409	3	21	45	15	84
410	9	25	62	22	118
411	1	4	14	4	23
412	5	9	22	6	42
413	7	21	56	8	92
414	4	21	51	16	92
415	8	7	18	13	46
416	4	8	19	4	35
417	9	7	53	8	77
418	6	7	22	8	43
419	7	16	49	6	78

Table 48. (cont.)

Permit Area	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
242	11	13	46	10	80
243	5	9	40	9	63
244	7	23	50	13	93
245	22	29	100	23	174
246	7	17	51	11	86
247	5	3	13	5	26
426	5	2	18	0	25
427	5	2	5	1	13
428	7	3	6	1	17
429	3	13	34	4	54
431	6	3	14	3	26
433	23	11	55	11	100
435	6	0	9	0	15
440	5	1	15	1	22
442	15	5	31	5	56
443	7	4	24	2	37
446	10	6	11	1	28
447	7	4	14	3	28
448	11	3	18	2	34
449	14	6	26	5	51
450	4	0	9	0	13
451	16	6	11	4	37
452	15	3	32	5	55
453	20	2	15	3	40
454	16	1	32	7	56
455	3	0	4	0	7

Permit Area	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
420	8	5	14	1	28
421	8	1	4	1	14
422	1	4	4	0	9
423	5	3	4	1	13
424	12	4	20	7	43
425	6	1	4	0	11
456	17	5	18	1	41
457	5	3	18	2	28
458	9	8	17	1	35
459	20	4	27	9	60
461	10	9	34	5	58
462	13	11	38	8	70
463	5	1	2	0	8
464	3	2	2	0	7
465	9	6	16	3	34
466	28	11	52	19	110
467	20	13	75	11	119
931	1	7	31	14	53
932	7	6	20	11	44
933	4	3	5	2	14
935	13	13	20	6	52
936	0	5	14	1	20
937	0	7	11	2	20
<b>TOTAL</b>	<b>905</b>	<b>818</b>	<b>2,751</b>	<b>621</b>	<b>5,095</b>



Table 49. Muzzleloader Special Permit Area Data, 2003.

Area	Dates	Permits Issued	Harvest				Total
			Adult Male	Fawn Male	Adult Female	Fawn Female	
931 - Jay Cooke SP <sup>1</sup>	11/29 - 12/3	90*	3	11	38	16	68
932 - Crow Wing SP <sup>1</sup>	12/5 - 12/7	40**	8	6	23	11	48
933 - Afton SP <sup>1</sup>	12/3 - 12/4	40**	4	3	7	2	16
934 - Lake Shetek SP	12/6 - 12/9	15***	0	0	0	0	0
935 - Nerstrand Woods SP/Prairie Creek SNA <sup>1</sup>	11/29-12/1	50**	14	13	21	7	55
	12/5 - 12/7						
936 - Rice Lake SP <sup>1</sup>	11/29-12/1	15***	0	5	14	1	20
	12/5 - 12/7						
937 - Myre-Big Island SP	11/29-12/1	40***	0	7	11	2	20
	12/13 - 12/14						
<b>TOTAL</b>			29	45	114	39	227

<sup>1</sup> Intensive harvest permits available

\*Either Sex opening day only

\*\*Either Sex

\*\*\*Antlerless Only

Table 50. All -season Deer Harvest by Permit Area, 2003

Zone 1					
Permit Area	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
104	51	5	28	5	89
107	94	16	52	6	168
110	13	4	16	5	38
115	111	8	41	5	165
116	5	0	0	0	5
122	18	3	5	0	26
126	29	0	3	0	32
127	10	0	1	0	11
152	5	2	4	1	12
154	75	13	37	13	138
156	63	6	45	7	121
157	97	12	65	18	192
159	56	14	42	5	117
167	46	8	36	3	93
168	79	13	63	18	173
170	168	24	98	13	303
172	138	22	86	16	262
174	47	5	37	8	97
175	69	5	29	3	106
178	76	7	21	5	109
180	71	11	25	3	110
181	76	11	25	4	116
183	65	7	36	8	116
197	65	4	34	3	106
199	1	1	1	0	3
<b>Zone 1 Total</b>	<b>1,528</b>	<b>201</b>	<b>830</b>	<b>149</b>	<b>2,708</b>

Zone 2					
Permit Area	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
201	9	0	5	0	14
202	14	0	5	3	22
203	12	0	8	0	20
204	32	5	35	8	80
205	50	15	29	4	98
206	35	6	28	3	72
207	31	2	10	4	47
208	15	0	14	1	30
209	18	2	6	3	29
210	39	5	25	6	75
211	70	6	38	4	118
214	2	0	0	0	2
221	39	9	26	2	76
222	37	7	29	2	75
223	30	4	12	4	50
224	11	2	3	2	18
225	48	15	33	9	105
227	45	5	33	6	89
228	15	0	5	1	21
235	2	0	1	0	3
236	43	1	12	2	58
242	29	3	16	8	56
243	69	12	48	13	142
244	99	24	85	24	232
245	118	31	74	18	241
246	111	21	76	20	228
247	42	4	27	7	80
248	31	10	24	5	70
249	51	10	42	9	112
251	13	3	9	6	31
283	15	5	13	0	33
284	175	36	131	32	374
285	20	2	9	2	33
287	7	1	4	1	13
297	16	0	2	0	18
298	51	7	18	8	84
<b>Zone 2 Total</b>	<b>1,444</b>	<b>253</b>	<b>935</b>	<b>217</b>	<b>2,849</b>

Zone 3					
Permit Area	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
337	20	1	5	0	26
338	18	0	5	0	23
339	7	0	3	0	10
341	22	1	5	1	29
342	21	3	6	0	30
343	17	2	11	1	31
344	12	1	2	1	16
345	15	3	2	0	20
346	22	3	9	1	35
347	29	4	6	2	41
348	19	5	7	1	32
349	41	6	11	0	58
<b>Zone 3 Total</b>	<b>243</b>	<b>29</b>	<b>72</b>	<b>7</b>	<b>351</b>

Table 50. (cont.)

Zone 4											
Permit Area	Adult Male	Fawn Male	Adult Female	Fawn Female	Total	Permit Area	Adult Male	Fawn Male	Adult Female	Fawn Female	Total
401	11	1	7	2	21	446	28	3	10	1	42
402	25	1	24	1	51	447	20	4	12	1	37
403	32	2	14	3	51	448	23	3	13	0	39
404	42	5	28	2	77	449	68	5	17	0	90
405	22	3	18	2	45	450	9	2	5	0	16
406	34	3	31	1	69	451	42	1	9	3	55
407	49	7	42	9	107	452	30	2	10	5	47
408	39	6	26	7	78	453	48	0	12	1	61
409	129	31	123	36	319	454	59	6	28	1	94
410	154	28	89	26	297	455	16	0	9	0	25
411	128	31	125	21	305	456	57	6	22	2	87
412	165	26	105	26	322	457	29	6	19	0	54
413	74	27	59	19	179	458	35	1	12	5	53
414	134	40	92	33	299	459	87	7	29	3	126
415	134	36	95	20	285	461	69	10	43	13	135
416	88	15	58	3	164	462	60	9	24	10	103
417	195	34	135	30	394	463	35	5	13	4	57
418	132	27	59	27	245	464	35	6	18	3	62
419	90	11	33	21	155	465	37	4	16	1	58
420	37	6	19	6	68	466	92	9	45	5	151
421	25	2	15	3	45	467	47	2	31	4	84
422	39	9	15	5	68	<b>Zone 4 Total</b>	<b>3,223</b>	<b>500</b>	<b>1,831</b>	<b>396</b>	<b>5,950</b>
423	33	4	12	2	51	<b>Special Hunts</b>					
424	42	6	22	5	75	<b>Permit Area</b>	<b>Adult Male</b>	<b>Fawn Male</b>	<b>Adult Female</b>	<b>Fawn Female</b>	<b>Total</b>
425	12	2	4	0	18	901	0	1	0	0	1
426	64	9	31	1	105	902	7	1	0	0	8
427	26	4	8	0	38	904	1	0	0	0	1
428	59	6	30	5	100	905	1	0	0	0	1
429	37	2	12	6	57	906	0	0	1	0	1
431	30	2	9	0	41	909	0	1	0	0	1
433	53	9	35	3	100	910	3	0	2	1	6
435	35	5	9	4	53	911	0	1	1	0	2
440	12	1	6	2	21	919	4	1	3	0	8
442	70	7	28	0	105	<b>Special Hunts Total</b>	<b>16</b>	<b>5</b>	<b>7</b>	<b>1</b>	<b>29</b>
443	46	1	16	3	66	<b>GRAND TOTAL</b>					
						<b>6,454</b>	<b>988</b>	<b>3,675</b>	<b>770</b>	<b>11,887</b>	

Table 51. Black bear registered harvest and hunter success, 1994 - 2003.

Quota Area	Harvest (success rate)									
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
12	130(34%)	229(49%)	114(23%)	163(34%)	170(30%)	142(24%)	186(32%)	263(44%)	104 (22%)	174 (35%)
13	108(34%)	258(59%)	96(22%)	125(35%)	216(31%)	134(17%)	211(26%)	241(31%)	116 (19%)	185 (31%)
22	33(16%)	29(14%)	5(2%)	21(16%)	8(6%)	10(8%)	4(3%)	6 ( 7%)	7 (8%)	3 (4%)
24	176(26%)	288(32%)	93(10%)	251(29%)	274(26%)	257(24%)	168(15%)	273(28%)	101 (15%)	163 (25%)
25	199(27%)	489(40%)	149(12%)	357(35%)	419(27%)	443(24%)	387(19%)	584(34%)	328 (23%)	510 (34%)
26	260(30%)	513(59%)	131(15%)	311(38%)	373(38%)	371(32%)	284(23%)	397(32%)	171 (17%)	303 (29%)
31	260(27%)	636(47%)	188(13%)	402(38%)	544(28%)	483(23%)	413(19%)	697(34%)	301 (17%)	436 (25%)
41	92(31%)	148(50%)	38(13%)	88(32%)	120(25%)	92(14%)	171(34%)	201(40%)	51 (14%)	100 (29%)
44	294(24%)	643(43%)	231(16%)	357(24%)	563(25%)	435(18%)	556(22%)	553(23%)	183 ( 9%)	444 (26%)
45	91(14%)	173(24%)	106(13%)	143(18%)	170(15%)	153(10%)	150(9%)	178(13%)	36 ( 4%)	143 (13%)
51	432(23%)	872(37%)	431(18%)	605(25%)	812(19%)	739(18%)	795(19%)	895(24%)	300 ( 9%)	667 (21%)
No Quota	254(17%)	678(35%)	292(16%)	389(22%)	441(25%)	361(20%)	573(25%)	648(23%)	217 (10%)	470 (21%)
Total	2,329 (26%)	4,956 (43%)	1,874 (16%)	3,212 (31%)	4,110 (28%)	3,620 (23%)	3,898 (23%)	4,936 (27%)	1,915 (13%)	3,598 (25%)

Table 52. Minnesota bear permits, licenses, hunters, harvests, and success rates during 1992-2003.

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Permit applications	26,428	27,365	30,127	29,922	30,405	27,353	30,245	29,384	29,275	26,824	21,886	16,431
Permits available	7,920	8,630	9,400	11,950	12,030	11,370	18,210	20,840	20,710	20,710	20,610	20,110
Licenses purchased:												
Quota area	6,845	7,528	8,125	10,304	10,592	9,655	14,941	16,563	17,021	13,867	12,559	12,387
No-quota area	1,640	1,696	1,701	2,144	1,822	1,785	1,796	1,792	2,283	2,643	2,080	2,022
% Permit-holders buying license <sup>a</sup>	86.4	87.2	86.4	86.2	88.0	84.9	82.0 <sup>a</sup>	79.5 <sup>a</sup>	82.2 <sup>a</sup>	67.0 <sup>a</sup>	60.9 <sup>a</sup>	61.6 <sup>a</sup>
Estimated number of hunters <sup>b</sup>	7,900	8,600	9,100	11,600	11,500	10,300	14,500	15,900	16,800	15,500	13,700	13,500
Harvest	3,175	3,003	2,329	4,956	1,874	3,212	4,110	3,620	3,898	4,936	1,915	3,598
% Success rate <sup>c</sup>	40	35	26	43 <sup>c</sup>	16 <sup>d</sup>	31	28	23	23	29 <sup>c</sup>	14 <sup>c</sup>	26 <sup>c</sup>

<sup>a</sup> Licenses bought / permits available. The low rate in later years was due to undersubscription of permits in some areas. Based on just the number of permit-holders (rather than the number of permits available), 84.8% (1998), 82.7% (1999), 83.9% (2000), 69.8% (2001), 66.3 % (2002), and 65.7 % (2003) of hunters that were drawn bought licenses in these years.

<sup>b</sup> Number of licensed hunters x percent of license-holders hunting. Percent hunting based on data from bear hunter surveys in 1981-91 and 1998 (86.8%) and 2001 (93.9%). Decline in percent hunting follows decline in percent of permit-holders buying a license.

<sup>c</sup> Highest hunting success ever, due to poor natural food.

<sup>d</sup> Lowest hunting success since initiation of the permit system, due to exceptionally abundant food.

<sup>e</sup> Success rates in 2001 - 2003 were calculated using the number of successful hunters/total hunters, rather than the total number of bears killed/total hunters, because hunters could take 2 bears (2001 statewide, 4936 bears taken by 4456 successful hunters; in the quota area, 3859 hunters were successful; 2002: statewide 1915 bears were taken by 1900 successful hunters; all 15 second bears taken in the no-quota area; 2003: statewide, 3598 bears taken by 3556 successful hunters; all 42 second bears taken in the no-quota area).

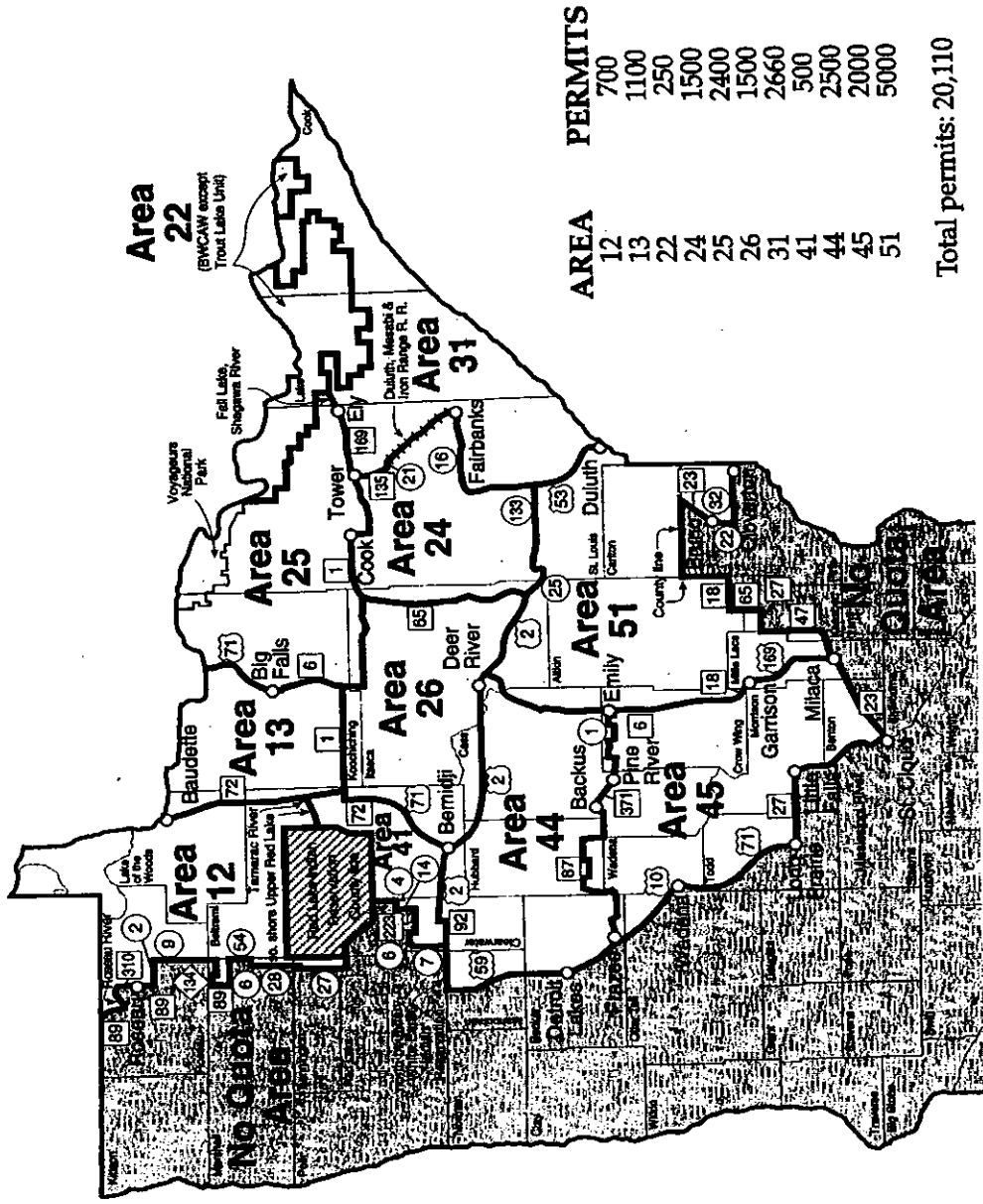


Figure 60. Black bear permit areas, 2003.

Table 53. Moose hunt quota and harvest statistics, 1987-2003.

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
1987	NW	772	14,234	1:11	727	94	505 (69%)	222 (31%)
	NE	528					292 (67%)	144 (33%)
1989	NW	449	15,381	1:15	438	98	291 (66%)	147 (34%)
	NE	545					285 (64%)	159 (36%)
1991	NW	365	5,665	1:16	359	98	258 (72%)	101 (28%)
	NE	0					-	-
1993	NW	446	9,925	1:13	419	94	317 (76%)	102 (24%)
	NE	315					200 (76%)	64 (24%)
1994	NW	262	11,351	1:25	245	93	166 (65%)	77 (32%)
	NE	189					115 (74%)	40 (26%)
1995	NW	191	10,753	1:28	172	90	112 (65%)	60 (35%)
	NE	188					129 (83%)	27 (17%)
1996	NW	39	6,550	1:27	38	97	31 (82%)	7 (18%)
	NE	207					123 (79%)	33 (21%)
1997	NW	0	3,958	1:20	152	77	-	-
	NE	198					124 (82%)	28 (28%)
1998	NW	0	4,157	1:23	125	69	-	-
	NE	182					90 (72%)	36 (28%)
1999	NW	0	3,919	1:21	136	72	-	-
	NE	189					101 (74%)	35 (26%)
2000	NW	Cancelled	Cancelled	Cancelled	Cancelled	Cancelled	Cancelled	Cancelled
	NE	Cancelled					Cancelled	
2001	NW	0	3,164	1:18	125	69	-	-
	NE	176					108 (86%)	17 (14%)
2002	NW	0	4,327	1:21	141	68	-	-
	NE	208					118 (84%)	23 (16%)
2003	NW	0	5,204	1:23	144	64	-	-
	NE	224					127 (88%)	17 (12%)

TRAPPING HARVEST STATISTICS  
Division of Wildlife  
500 Lafayette Road, Box 7  
Saint Paul, MN 55155-4007  
(651) 296-3344



Table 54. Trapper response to mail surveys, 1979-80 through 2003-04.

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
2001-02	5,482	127	4,132	78.6
2002-03	5,655	210	4,148	76.0
2003-04	5,812	197	4,234	75.4

Table 55. Use of trapper licenses, 1991-92 through 2003-04.

		Return from mail survey	Projections from license sales
1991-92	Trapped	1,639 ( 79.5%)	4,150
	Did not trap	<u>423 ( 20.5%)</u>	<u>1,070</u>
		2,062 (100.0%)	5,220 <sup>a</sup>
1992-93	Trapped	1,438 ( 85.5%)	4,927
	Did not trap	<u>243 ( 14.5%)</u>	<u>836</u>
		1,681 (100.0%)	5,763 <sup>a</sup>
1993-94	Trapped	1,904 ( 85.5%)	4,862
	Did not trap	<u>290 ( 13.2%)</u>	<u>739</u>
		2,194 (100.0%)	5,601 <sup>a</sup>
1994-95	Trapped	1,647 ( 87.8%)	6,054
	Did not trap	<u>228 ( 12.2%)</u>	<u>841</u>
		1,875 (100.0%)	6,895 <sup>a</sup>
1995-96	Trapped	2,053 ( 83.2%)	4,684
	Did not trap	<u>414 ( 16.8%)</u>	<u>946</u>
		2,467 (100.0%)	5,630 <sup>a</sup>
1996-97	Trapped	2,505 ( 84.8%)	5,660
	Did not trap	<u>450 ( 15.2%)</u>	<u>1,015</u>
		2,955 (100.0%)	6,675 <sup>a</sup>
1997-98	Trapped	2,310 ( 88.6%)	6,198
	Did not trap	<u>296 ( 11.4%)</u>	<u>798</u>
		2606 (100.0%)	6,996 <sup>a</sup>
1998-99	Trapped	2,398 (88.6%)	5,541
	Did not trap	<u>480 (16.7%)</u>	<u>1,111</u>
		2,878 (100.0%)	6,652 <sup>a</sup>
1999-00	Trapped	1,927 (83.5%)	4,122
	Did not trap	<u>381 (16.5%)</u>	<u>814</u>
		2,308 (100.0%)	4,936 <sup>a</sup>
2000-01	Trapped	2,897 (75.9%)	4,051
	Did not trap	<u>920 (24.1%)</u>	<u>1,286</u>
		3,817 (100.0%)	5,337 <sup>a</sup>
2001-02	Trapped	3,332 (81.5%)	4,510
	Did not trap	<u>754 (18.5%)</u>	<u>1,024</u>
		4,086 (100.0%)	5,534 <sup>a</sup>
2002-03	Trapped	3,344 (80.6%)	4,615
	Did not trap	<u>804 (19.4%)</u>	<u>1,111</u>
		4,148 (100.0%)	5,726 <sup>a</sup>
2003-04	Trapped	3,412 ( 81.1%)	4,737
	Did not trap	<u>793 ( 18.9%)</u>	<u>1,104</u>
		4,205 (100.0%)	5,841 <sup>a</sup>

<sup>a</sup> excludes duplicates.

Table 56. Estimated number of trappers of various furbearers, 1989-90 through 2003-04.

Estimated number of trappers (thousands)															
	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Muskrat	4	2	2	3	3	4	3	4	4	3	2	2	2	2	2
Mink	5	3	2	3	3	3	2	3	3	3	2	2	2	2	2
Short-tailed weasel	<1	<1	<1	<1	<1	1	<1	<1	1	<1	<1	<1	<1	<1	<1
Long-tailed weasel	1	<1	<1	<1	<1	<1	<1	<1	1	<1	<1	<1	<1	<1	<1
Raccoon (Sept 03-Feb 04)	4	2	2	2	3	3	2	3	3	3	2	2	2	2	2
Raccoon (Mar 03-Aug 03) <sup>a</sup>						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Striped skunk	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Eastern spotted skunk	<1	<1	<1	<1	<1	<1	<1	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Badger	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Opossum	1	1	1	1	1	1	1	1	1	1	<1	<1	1	1	1
Red fox (Sept 03Feb 04)	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1
Red fox (Mar 03-Aug 03) <sup>a</sup>						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Gray fox	1	<1	<1	<1	<1	<1	<1	n.a.	<1	<1	<1	<1	<1	<1	<1
Coyote	1	1	1	1	1	1	1	1	1	1	1	<1	1	1	1
Beaver (Oct 03- Feb 04)	3	2	2	2	2	3	2	2	3	3	2	2	2	2	2
Beaver (Mar 03- Apr 03)	2	1	1	1	1	2	1	2	2	2	1	1	1	1	1

<sup>a</sup> Raccoon and red fox season changed to year round beginning May, 1994.

Table 57. Estimated take per trapper of various furbearers, 1989-90 through 2003-2004.

	Estimated take per successful trapper reporting that species														
	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Muskrat	27	24	20	36	64	90	70	55	58	42	46	42	42	35	33
Mink	9	10	8	12	12	12	11	11	11	13	14	12	14	10	9
Short-tailed weasel	5	3	4	5	6	12	10	9	10	7	5	8	10	7	7
Long-tailed weasel	5	3	5	4	4	6	5	5	5	5	5	5	7	4	5
Raccoon (Sept 03-Feb 04)	12	16	14	16	5	20	23	23	24	23	20	20	27	25	22
Raccoon (Mar 03-Aug 03) <sup>a</sup>						15	15	13	14	15	14	11	19	12	15
Striped skunk	10	12	9	8	9	8	8	10	10	9	8	8	8	8	8
Eastern spotted skunk	5	7	3	2	6	4	5	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Badger	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Opossum	9	11	9	10	8	9	9	9	9	11	13	11	8	11	12
Red fox (Sept 03-Feb 04)	10	18	14	11	11	11	9	7	7	5	6	6	6	6	5
Red fox (Mar 03-Aug 03) <sup>a</sup>						9	5	4	4	3	4	4	5	5	6
Gray fox	3	3	2	4	3	2	2	n.a.	3	3	2	2	2	2	2
Coyote	4	3	4	5	5	4	5	4	3	3	4	4	4	4	5
Beaver (Oct 03-Feb 04)	15	13	15	13	16	18	14	16	16	16	16	15	18	13	12
Beaver (Mar 03 - Apr 03)	20	19	27	29	29	37	29	31	32	29	27	26	31	26	21

<sup>a</sup> Raccoon and red fox season changed to year round beginning May, 1994.

Table 58. Minnesota trapper license sales and estimated annual harvest, 1990-91 through 2003-2004<sup>a</sup>

	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Trapper license sales <sup>b</sup>	6,163	5,220	5,763	5,601	6,895	5,630	6,675	6,996	6,652	4,936	5,337	5,534	5,725	5,841
Estimated harvest <sup>c</sup> (thousands)														
Muskrat	55	45	92	202	355	195	202	194	131	97	86	101	75	69
Mink	25	21	32	33	40	26	35	34	36	27	23	29	20	17
Short-tailed weasel	1	1	1	2	6	4	4	4	2	2	3	4	3	4
Long-tailed weasel	1	1	1	1	3	2	2	2	2	2	1	2	1	2
Raccoon (Sept 03- Feb 04)	34	31	34	56	58	53	69	66	64	37	32	60	61	54
Raccoon (Mar 03-Aug 03) <sup>f</sup>					1	5	5	5	7	4	4	6	4	5
Striped skunk	15	10	7	9	9	8	11	11	9	5	5	7	8	8
Eastern spotted skunk <sup>g</sup>	<1	<1	<1	<1	<1	<1	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Badger	1	1	1	1	1	<1	1	1	<1	<1	<1	<1	<1	1
Opossum	6	5	6	5	5	6	6	6	7	6	5	5	8	11
Red fox (Sept 03- Feb 04)	33	25	23	22	24	14	13	12	6	7	6	7	8	7
Red fox (Mar 03-Aug 03) <sup>f</sup>					1	1	1	1	<1	<1	<1	<1	1	1
Gray fox	1	1	1	1	1	1	n.a.	1	1	1	<1	1	1	1
Coyote	3	3	4	4	5	3	3	3	2	2	2	2	4	4
Beaver (Oct 03- Feb 04)	24	25	22	29	49	25	38	36	39	31	25	36	24	23
Beaver (Mar 03-Apr 03)	20	26	34	32	64	41	48	47	55	36	37	42	34	26
Registered harvest														
Otter	88	855	1,368	1,459	2,445	1,435	2,219	2,145	1,946	1,635	1,578	2,301	2,145	2,766
Lynx <sup>h</sup>	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Bobcat <sup>e</sup>	84	106	168	201	238	134	223	359	103	206	231	250	544	483
Fisher	746	528	778	1,159	1,771	942	1,773	2,761	2,695	1,725	1,674	2,119	2,660	2,517
Marten	1,349	656	1,602	1,438	1,527	1,500	1,625	2,261	2,299	2,423	1,629	1,928	2,839	3,214

<sup>a</sup> Includes data for all seasons from October through April of years indicated.

<sup>b</sup> Separate licenses were issued for juveniles (13-17 years old) and adults (18 and older), beginning in 1982. As of March 3, 2004 5,841 trapping licenses were sold in 2003 650 (11.1%) were juvenile licenses and 5,191 (88.9%) were adult licenses. Duplicate licenses excluded.

<sup>c</sup> Based upon trappers' responses to mail surveys.

<sup>d</sup> 1 is any number which rounds to 1. <1 is any number which is <0.5.

<sup>e</sup> Registered harvest for bobcat includes animals taken by hunting.

<sup>f</sup> Raccoon and red fox seasons changed to year round beginning May 1994.

<sup>g</sup> Lynx (1984) and Eastern spotted skunk (1996) listed as Special Concern and threatened species (respectively) and are fully protected.

Table 59. Average price per pelt paid to hunters and trappers in Minnesota, 1990-91 through 2003-04.

Species	Average pelt prices paid hunters and trappers in Minnesota (dollars)													
	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Muskrat	0.75	1.55	1.35	1.35	1.61	1.53	3.49	2.24	1.11	1.57	1.83	2.32	2.11	2.05
Mink (male)	23.06	27.30	24.74	21.89	14.90	11.75	20.82	13.52	9.83	11.61	11.15	9.34	9.55	11.41
Mink (female)	14.73	17.36	15.02	12.18	11.43	8.56	13.71	9.65	6.11	8.22	7.70	6.76	6.52	7.23
S.T. Weasel	1.55	0.77	1.31	1.72	1.73	1.84	2.32	2.33	1.72	2.16	2.30	2.41	2.63	2.53
L.T. Weasel	0.58	1.21	1.06	1.05	2.05	1.24	3.33	2.67	2.05	2.34	1.80	2.98	1.94	3.34
Raccoon	4.19	8.57	7.29	8.26	9.02	9.40	15.16	13.92	7.25	5.09	8.86	9.53	10.33	11.45
Striped Skunk	1.84	1.47	2.69	3.70	3.52	3.21	2.11	3.18	4.72	4.40	4.79	3.91	5.81	4.66
Badger	4.33	3.51	4.20	4.62	6.12	6.33	8.49	6.53	6.30	7.30	10.15	9.39	13.18	14.23
Opossum	3.51	0.96	0.78	0.89	0.98	0.97	1.04	1.10	0.58	0.96	0.97	1.19	1.22	1.23
Red Fox	7.17	10.81	8.88	10.59	13.42	14.21	14.81	11.23	8.04	11.82	14.45	17.07	22.08	20.02
Gray Fox	5.16	5.22	6.73	6.55	9.69	7.49	9.00	7.69	5.63	7.06	7.52	8.36	9.05	13.64
Coyote	8.95	14.85	15.55	14.68	13.55	10.89	12.25	10.12	5.57	9.42	12.40	13.37	16.12	18.37
Lynx	-----No Open Season-----													
Bobcat	42.50	37.44	28.18	43.42	36.36	31.81	32.82	30.39	27.66	24.23	33.09	46.00	71.54	95.90
Beaver (fall-winter)	9.44	9.00	7.10	11.24	13.80	12.56	19.24	16.48	11.40	11.51	14.66	12.74	10.05	12.57
Beaver (spring)	9.66	9.25	7.89	9.41	14.48	10.96	19.14	17.39	14.06	11.02	12.80	12.47	9.99	11.09
Otter	24.21	24.74	29.90	43.14	47.50	38.76	38.75	39.81	34.03	41.41	50.52	46.19	61.16	85.33
Fisher (male)	34.85	21.46	15.73	14.17	19.06	16.17	25.48	31.09	18.92	19.45	20.14	23.18	26.70	27.15
Fisher (female)	46.25	47.93	28.79	28.40	29.93	24.90	34.47	33.65	21.76	19.91	19.01	22.86	25.44	25.71
Marten (male)	43.89	39.59	27.87	35.86	34.07	28.30	34.47	27.82	19.70	24.89	27.56	24.10	28.00	30.09
Marten (female)	40.84	27.24	24.96	29.58	28.34	21.42	29.26	21.79	16.12	21.27	21.25	22.52	27.30	26.70

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

Table 60. Registered furbearer harvests and total permits issued, 1985-2003<sup>a</sup>.

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 <sup>b</sup>	--	106	2,360	528	2,020	686	2,282	855
1992 <sup>b</sup>	--	168	2,420	778	2,050	1,602	3,440	1,368
1993 <sup>b</sup>	--	201	2,299	1,159	1,925	1,438	2,254	1,459
1994 <sup>b</sup>	--	238	2,186	1,771	2,477	1,527	2,964	2,445
1995 <sup>b</sup>	--	134	2,520	942	2,268	1,500	2,579	1,435
1996 <sup>b</sup>	--	223	1,557	1,773	1,392	1,625	1,623	2,219
1997 <sup>b</sup>	--	359	2,517	2,761	2,517	2,261	2,543	2,145
1998 <sup>b</sup>	--	103	2,808	2,695	2,808	2,299	2,749	1,946
1999 <sup>b</sup>	--	206	1,984	1,725	1,984	2,423	1,918	1,635
2000 <sup>b</sup>	--	231	3,226	1,674	3,226	1,629	3,116	1,578
2001 <sup>c</sup>	--	250	--	2,119	--	1,928	--	2,301
2002 <sup>c</sup>	--	544	--	2,660	--	2,839	--	2,145
2003	--	483	--	2,517	--	3,214	--	2,766

<sup>a</sup> 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.

<sup>b</sup> Confiscation and 1854 Authority removed.

<sup>c</sup> Prior request tags and permits were not required for fisher, marten, or otter starting in 2001-02.



# BOBCAT 2003-2004

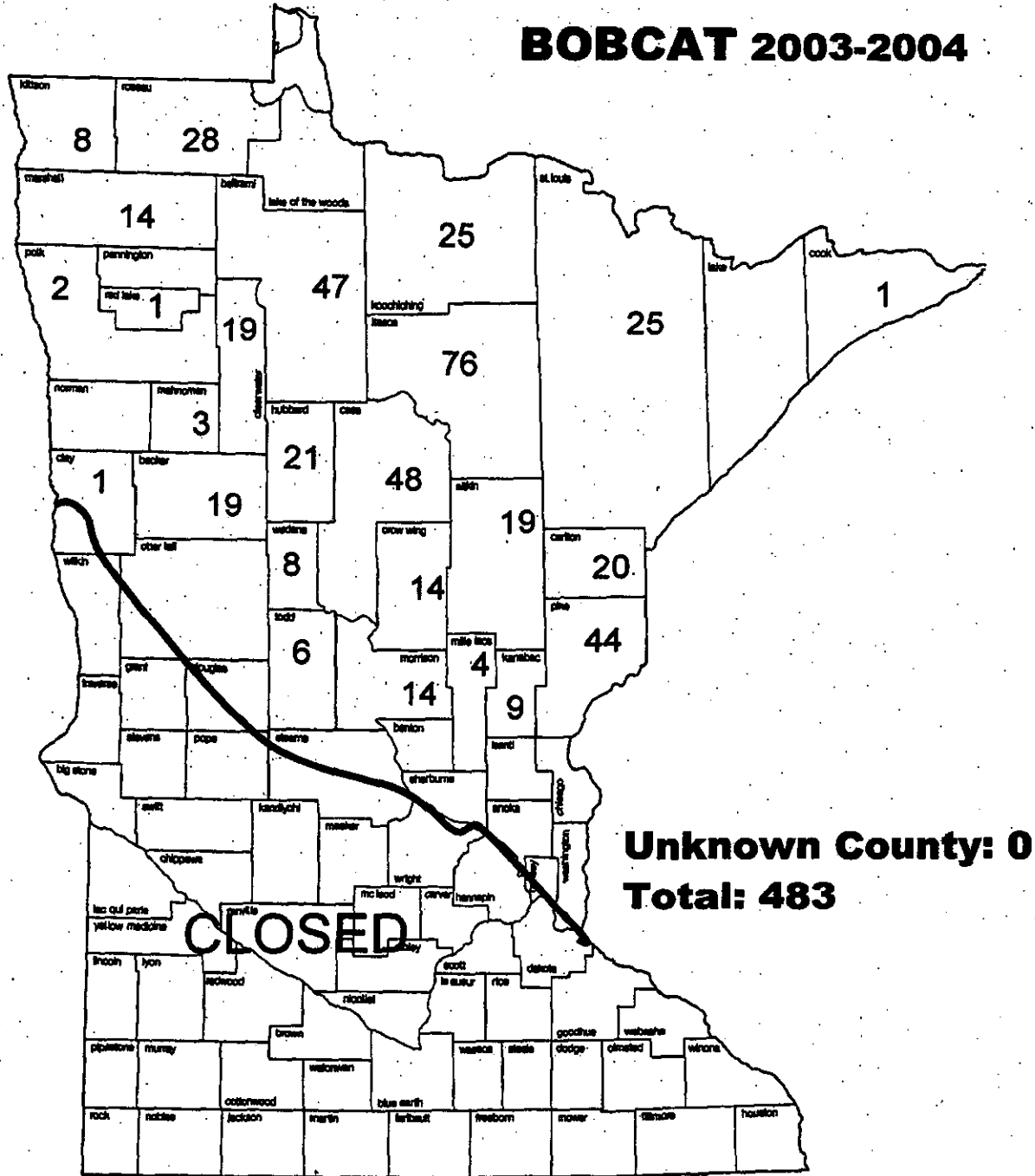


Figure 56. Bobcat harvest by county, 2003-2004.

Table 61. Time distribution of bobcat harvest by 5-day increments, 2003-2004 season.

	Sex*			Total	% of Total	Cumulative %
	Male	Female	Unknown			
Nov. 29 – Dec 3	44	47	0	91	18.8	18.8
Dec. 4 – 8	31	48	1	80	16.6	35.4
Dec. 9 - 13	41	32	1	74	15.3	50.7
Dec. 14 - 18	20	25	1	46	9.5	60.2
Dec. 19 - 23	33	42	0	75	15.5	75.8
Dec. 24 - 28	21	22	0	43	8.9	84.7
Dec. 29 – Jan. 4**	35	27	0	62	12.8	97.5
Unknown	6	6	0	12	2.5	100.0
Total	231	249	3	483	100	

\* Trapper/hunter reported sex ratios are NOT adjusted according to results from DNR carcass analyses

Table 62. Distribution of bobcat harvest\* among takers, 1984-85 thru 2003-04.

Number of Takers	Number Taken (%)					Total
	1	2	3	4	5	
1984-85	116 (65.2)	39 (21.9)	13 (7.3)	9 (5.1)	1 (0.5)	178
1985-86	70 (78.7)	11 (12.4)	6 (6.7)	1 (1.1)	1 (1.1)	89
1986-87	92 (76.7)	18 (15.0)	9 (7.5)	0 (0.0)	1 (0.8)	120
1987-88	104 (71.7)	23 (15.9)	10 (6.9)	6 (4.1)	2 (1.4)	145
1988-89	88 (81.5)	11 (10.2)	7 (6.5)	1 (0.9)	1 (0.9)	108
1989-90	56 (69.1)	13 (16.0)	5 (6.2)	3 (3.7)	4 (4.9)	81
1990-91	47 (77.0)	9 (14.7)	1 (1.6)	4 (6.5)	0 (0.0)	61
1991-92	42 (63.6)	15 (22.7)	4 (6.1)	3 (4.5)	2 (3.0)	66
1992-93	69 (64)	21 (20)	9 (9)	5 (5)	2 (2)	106
1993-94	90 (70)	17 (13)	13 (10)	7 (5)	2 (2)	201
1994-95	103 (68)	25 (17)	12 (8)	6 (4)	5 (3)	151
1995-96	67 (74)	13 (14)	5 (6)	4 (4)	2 (2)	91
1996-97	115 (73)	28 (18)	85 (5)	2 (1)	4 (3)	157
1997-98	129 (61)	43 (20)	17 (8)	12 (6)	9 (5)	210
1998-99	59 (77)	11 (14)	2 (3)	3 (4)	1 (2)	76
1999-00	113 (76)	21 (14)	10 (6)	4 (3)	1(1)	149
2000-01	99(69)	23 (16)	7 (5)	5 (4)	9 (6)	143
2001-02	101 (71)	23 (16)	12 (8)	1 (1)	5 (4)	142
2002-03	185 (60)	64 (21)	33 (10)	15 (5)	12 (4)	309
2003-04	171 (64)	40 (15)	25 (10)	20 (7)	11 (4)	267

\* Product of categories above may not equal total harvest due to some unknown name / license numbers

Table 63. Bobcat harvest by method of take, 1982-83 to 2003-2004.

Year	Total Harvest <sup>a</sup>	Trapping				Hunting			
		Harvest	% of Total	# Takers <sup>b</sup>	Ave. Take <sup>b</sup>	Harvest	% of Total	# Takers <sup>b</sup>	Ave. Take <sup>b</sup>
1982-83	274	239	87	147	1.6	35	13	23	1.5
1983-84	208	168	81	118	1.4	40	19	32	1.3
1984-85	280	252	90	156	1.6	28	10	22	1.3
1985-86	119	83	70	62	1.3	36	30	27	1.3
1986-87	160	119	74	89	1.3	41	26	31	1.3
1987-88	214	177	83	118	1.5	37	17	26	1.4
1988-89	140	94	67	76	1.2	46	33	32	1.4
1989-90	129	90	70	49	1.8	39	31	28	1.4
1990-91	84	61	73	43	1.4	22	26	17	1.3
1991-92	106	59	56	31	1.9	43	41	33	1.3
1992-93	168	133	80	85	1.6	35	20	23	1.5
1993-94	201	147	73	88	1.7	54	27	41	1.3
1994-95	238	189	80	120	1.6	49	21	31	1.6
1995-96	134	73	55	53	1.4	61	46	38	1.6
1996-97	223	133	60	91	1.5	70	31	53	1.3
1997-98	359	313	87	176	1.8	44	13	34	1.3
1998-99	103	95	92	67	1.4	8	8	8	1
1999-00	206	155	75	114	1.4	51	25	36	1.4
2000-01	231	140	61	85	1.6	91	39	58	1.6
2001-02	250	208	83	116	1.8	42	17	27	1.3
2002-03	544	500	92	279	1.8	44	8	32	1.4
2003-04	483	415	86	230	1.8	68	14	40	1.7

<sup>a</sup> Sum of trapping and hunting harvest may not be equal to total harvest due to incomplete method-of-take data.

<sup>b</sup> Multiplying # takers and average take may not match total harvest due to some incomplete name/license #'s

Table 64. Comparison of bobcat harvest by county, 1993-94 through 2003-04.

County	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Aitkin	28	14	12	20	19	6	25	32	20	35	19
Becker	1	7	5	4	10	1	8	6	28	26	19
Beltrami	15	23	6	20	37	7	13	16	26	63	47
Benton	0	0	1	0	0	0	0	0	0	0	0
Carlton	5	8	5	14	18	4	10	12	14	11	20
Cass	16	31	10	22	64	16	24	11	17	59	48
Chisago	0	0	0	0	0	0	0	0	0	1	0
Clearwater	2	7	6	3	14	1	4	0	6	24	19
Clay	0	0	0	0	0	0	0	0	0	0	1
Cook	1	0	2	0	0	0	0	0	0	1	1
Crow Wing	3	8	5	5	8	15	21	13	4	20	15
Hubbard	2	4	2	4	19	1	7	4	10	31	21
Isanti	0	0	0	0	0	0	2	0	0	0	2
Itasca	39	51	20	51	45	10	23	40	33	74	76
Kanabec	7	3	1	6	13	3	4	11	8	10	9
Kittson	1	3	3	1	0	0	7	6	7	5	8
Kooch	3	6	1	23	14	2	8	11	12	23	25
Lake	1	0	2	0	0	1	0	1	0	0	0
LOW	0	2	0	2	0	2	2	3	0	6	4
Mahnomen	-	-	1	0	2	0	1	1	1	0	3
Marshall	6	4	2	5	28	4	10	2	4	24	14
Mille Lacs	1	5	3	0	0	0	1	2	0	10	4
Morrison	14	5	6	5	1	2	6	8	4	6	14
Ottertail	2	0	0	0	2	0	0	0	1	0	0
Pennington	0	0	0	2	1	0	0	1	1	1	0
Pine	29	26	23	20	23	12	15	21	23	49	44
Polk	0	0	0	1	1	0	0	1	0	2	2
Red Lake	-	-	-	-	-	-	-	2	0	1	1
Roseau	5	9	1	5	15	3	7	12	18	22	28
St. Louis	10	15	7	7	14	10	5	9	7	30	25
Todd	-	-	-	-	-	2	1	0	1	3	6
Wadena	2	0	2	1	5	1	2	0	5	7	8
Unknown	8	7	8	2	4	0	0	4	0	0	0
Total	201	238	134	223	357	103	206	231	250	544	483

# FISHER 2003-2004

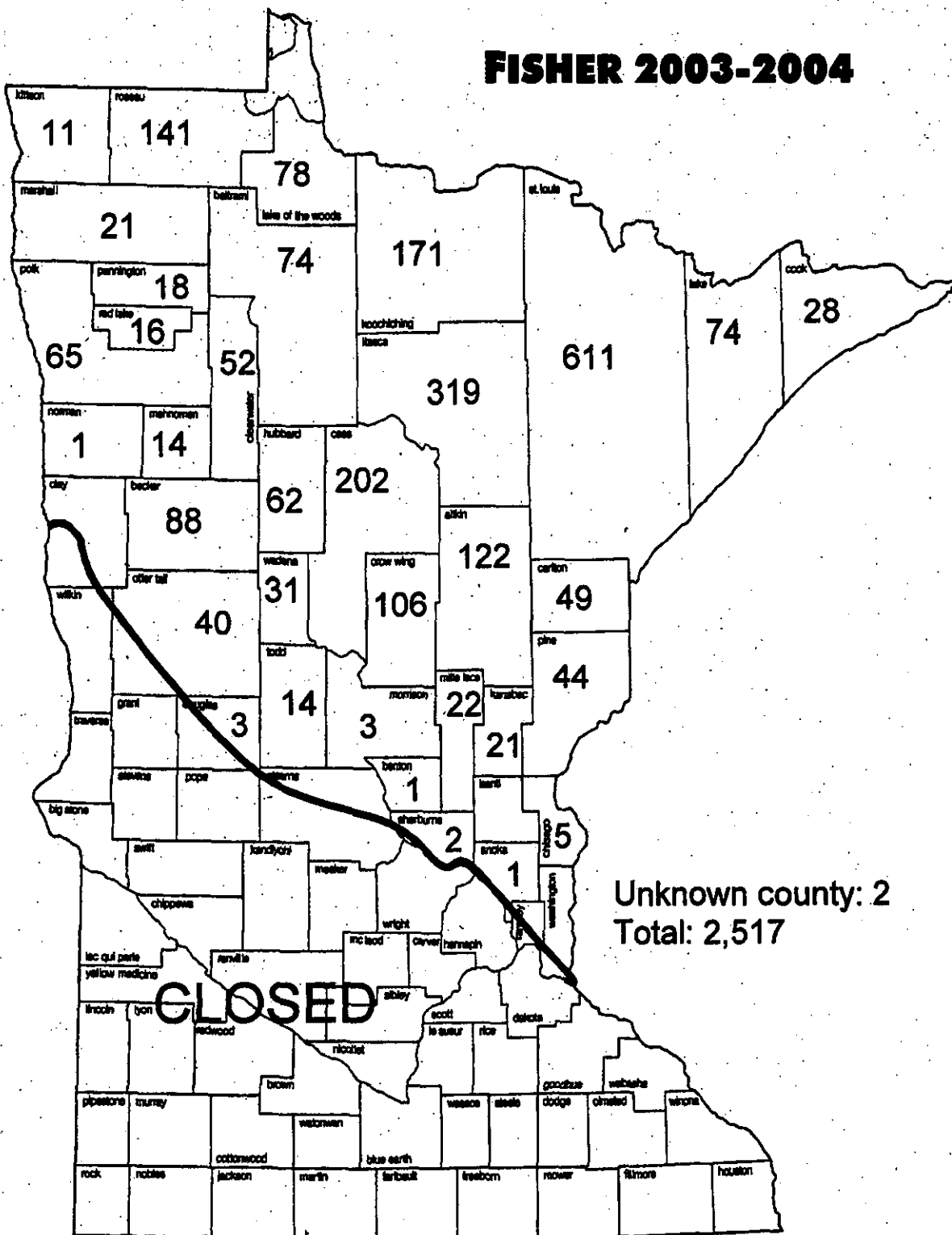


Figure 57. Fisher harvest by county, 2003-2004.

Table 65. Fisher harvest by date and sex, 2003-04 season, in Minnesota.

Date	Sex			Total	% of Known Total	Cumulative %
	Male	Female	Unknown			
Nov. 29	1	3	0	4	0.2	0.2
Nov. 30	61	30	0	91	3.6	3.8
Dec. 1	138	109	0	247	9.8	13.6
Dec. 2	101	82	0	183	7.3	20.9
Dec. 3	123	91	0	214	8.5	29.4
Dec. 4	88	87	0	175	7.0	36.4
Dec. 5	83	84	0	167	6.6	43.0
Dec. 6	110	97	0	207	8.2	51.2
Dec. 7	89	76	0	165	6.6	57.8
Dec. 8	72	57	1	130	5.2	62.9
Dec. 9	63	51	0	114	4.5	67.5
Dec. 10	77	66	4	147	5.8	73.3
Dec. 11	55	43	0	98	3.9	77.2
Dec. 12	58	51	0	109	4.3	81.5
Dec. 13	68	70	0	138	5.5	87.0
Dec. 14	74	61	0	135	5.4	92.4
Unknown	92	97	4	193	7.7	100.0
Total	1353	1155	9	2517	100	

Table 66. Fisher harvest by county and sex, 2003-04 season, in Minnesota.

County	Sex			Total
	Male	Female	Unknown	
Aitkin	78	46	0	124
Anoka	1	0	0	1
Becker	43	44	1	88
Beltrami	41	33	0	74
Benton	0	1	0	1
Carlton	23	19	0	42
Cass	121	81	0	202
Chisago	2	3	0	5
Clearwater	28	24	0	52
Cook	15	13	0	28
Crow Wing	51	55	0	106
Douglas	1	2	0	3
Hubbard	41	20	1	62
Itasca	172	147	0	319
Kanabec	14	7	0	21
Kittson	9	2	0	11
Koochiching	81	90	0	171
Lake	34	40	0	74
LOW	38	40	0	78
Mahnomen	8	6	0	14
Marshall	14	7	0	21
Mille Lacs	15	7	0	22
Morrison	1	2	0	3
Norman	0	1	0	1
Ottertail	29	11	0	40
Pennington	10	8	0	18
Pine	33	21	0	54
Polk	33	32	0	65
Red Lake	9	7	0	16
Roseau	81	60	0	141
St. Louis	298	306	7	611
Sherburne	0	2	0	2
Todd	9	5	0	14
Wadena	19	12	0	31
Unknown	1	1	0	2
Total	1353	1155	9	2517



Table 67. Comparison of fisher harvest by county, 1992-93 through 2003-04.

County	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Aitkin	15	17	23	26	58	86	105	84	68	103	122	124
Anoka												1
Becker	6	4	22	17	15	25	15	32	42	46	96	88
Beltrami	34	44	103	27	84	140	105	70	60	73	117	74
Benton												1
Carlton	8	12	14	14	10	45	25	23	27	37	48	42
Cass	33	57	100	58	142	212	133	123	122	134	225	202
Chisago							1	0	3	2	6	5
Clearwater	3	3	13	0	6	31	18	13	15	45	45	52
Cook	17	17	16	12	12	24	26	19	19	33	27	28
Crow Wing	18	23	30	24	32	65	75	53	71	82	106	106
Douglas									1	0	0	3
Hubbard	7	6	8	15	30	66	38	34	34	64	59	62
Itasca	76	177	299	116	291	477	441	248	288	298	354	319
Kanabec	2	0	1	0	6	7	3	11	4	4	19	21
Kittson	0	1	1	0	0	7	3	3	3	7	3	11
Koochiching	97	148	250	92	232	386	369	150	159	156	178	171
Lake	57	82	99	43	60	123	84	46	62	54	72	74
LOW	26	8	43	4	30	59	99	83	71	48	115	78
Mahnomen	0	1	1	0	0	0	0	3	0	12	16	14
Marshall	3	7	9	2	4	21	7	10	27	19	18	21
Mille Lacs					6	0	3	0	4	3	16	22
Morrison								2	0	1	6	3
Norman							0	6	0	0	1	1
Ottertail							1	0	0	1	12	40
Pennington	0	0	1	0	1	1	0	2	4	4	10	18
Pine	3	17	23	20	24	34	55	36	37	29	44	54
Polk	0	1	2	3	3	6	5	6	8	24	46	65
Red Lake	0	1	0	0	2	5	0	2	18	16	15	16
Roseau	32	68	93	26	89	134	171	111	157	180	106	141
St. Louis	229	463	616	153	604	783	880	546	369	608	734	611
Sherburne												2
Todd						2	0	0	0	2	5	14
Wadena				1	2	10	5	8	0	31	39	31
Unknown	112	2	5	289	30	12	28	2	1	1	0	2
Total	778	1,159	1,771	942	1,773	2,761	2,695	1,725	1,674	2,119	2,660	2,517



Table 68. Marten harvest by date and sex, 2003-04 season, in Minnesota.

Date	Sex			Total	% of Known Total	Cumulative %
	Male	Female	Unknown			
Nov. 29	5	2	0	7	0.2	0.2
Nov. 30	151	81	0	232	7.2	7.4
Dec. 1	206	95	0	301	9.4	16.8
Dec. 2	174	99	0	273	8.5	25.3
Dec. 3	151	82	0	233	7.2	32.5
Dec. 4	138	79	1	218	6.8	39.3
Dec. 5	138	62	0	200	6.2	45.5
Dec. 6	171	88	0	259	8.1	53.6
Dec. 7	115	49	0	164	5.1	58.7
Dec. 8	81	47	2	130	4.0	62.7
Dec. 9	65	34	0	99	3.1	65.8
Dec. 10	95	43	1	139	4.3	70.1
Dec. 11	38	44	0	82	2.6	72.7
Dec. 12	66	45	1	112	3.5	76.2
Dec. 13	85	57	1	143	4.4	80.6
Dec. 14	65	52	1	118	3.7	84.3
Unknown	303	200	1	504	15.7	100.0
Total	2047	1159	8	3214	100	

Table 69. Marten harvest by county and sex, 2003-04 season, in Minnesota.

County	Sex			Total
	Male	Female	Unknown	
Aitkin	3	3	0	6
Beltrami	22	16	0	38
Carlton	8	3	0	11
Cass	2	0	0	2
Clearwater	1	0	0	1
Cook	266	144	1	411
Crow Wing	0	0	0	0
Itasca	89	52	0	141
Koochiching	363	170	1	534
Lake	342	199	0	541
Lake of the Woods	48	23	0	71
Marshall	1	0	0	1
Pennington	0	0	0	0
Pine	0	1	0	1
Red Lake	0	0	0	0
Roseau	58	46	0	104
St. Louis	844	502	6	1352
Unknown	0	0	0	0
Total	2047	1159	8	3214

Table 70. Comparison of marten harvest by county in Minnesota, 1992-93 through 2003-04.

County	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Aitkin							1	2	2	3	5	6
Beltrami	1	0	1	0	2	12	12	37	2	24	30	38
Carlton							3	6	5	11	4	11
Cass							1	2	3	1	3	2
Clearwater												1
Cook	180	133	164	156	116	195	208	240	190	164	228	411
Crow Wing								3	0	0	0	0
Itasca	28	43	41	26	83	164	155	114	82	102	147	141
Koochiching	206	232	313	251	382	597	517	492	306	327	525	534
Lake	357	252	299	252	234	287	284	284	323	243	492	541
Lake of the Woods	0	1	2	0	0	12	26	58	15	13	104	71
Marshall								1	1	1	1	1
Pennington									2	0	0	0
Pine												1
Red Lake									3	0	0	0
Roseau							41	51	98	48	116	104
St. Louis	666	771	707	396	797	980	1,020	1,131	596	991	1,184	1,352
Unknown	164	6	0	419	11	14	31	2	1	0	0	0
Total	1,602	1,438	1,527	1,500	1,625	2,261	2,299	2,423	1,629	1,928	2,839	3,214

# OTTER 2003-2004

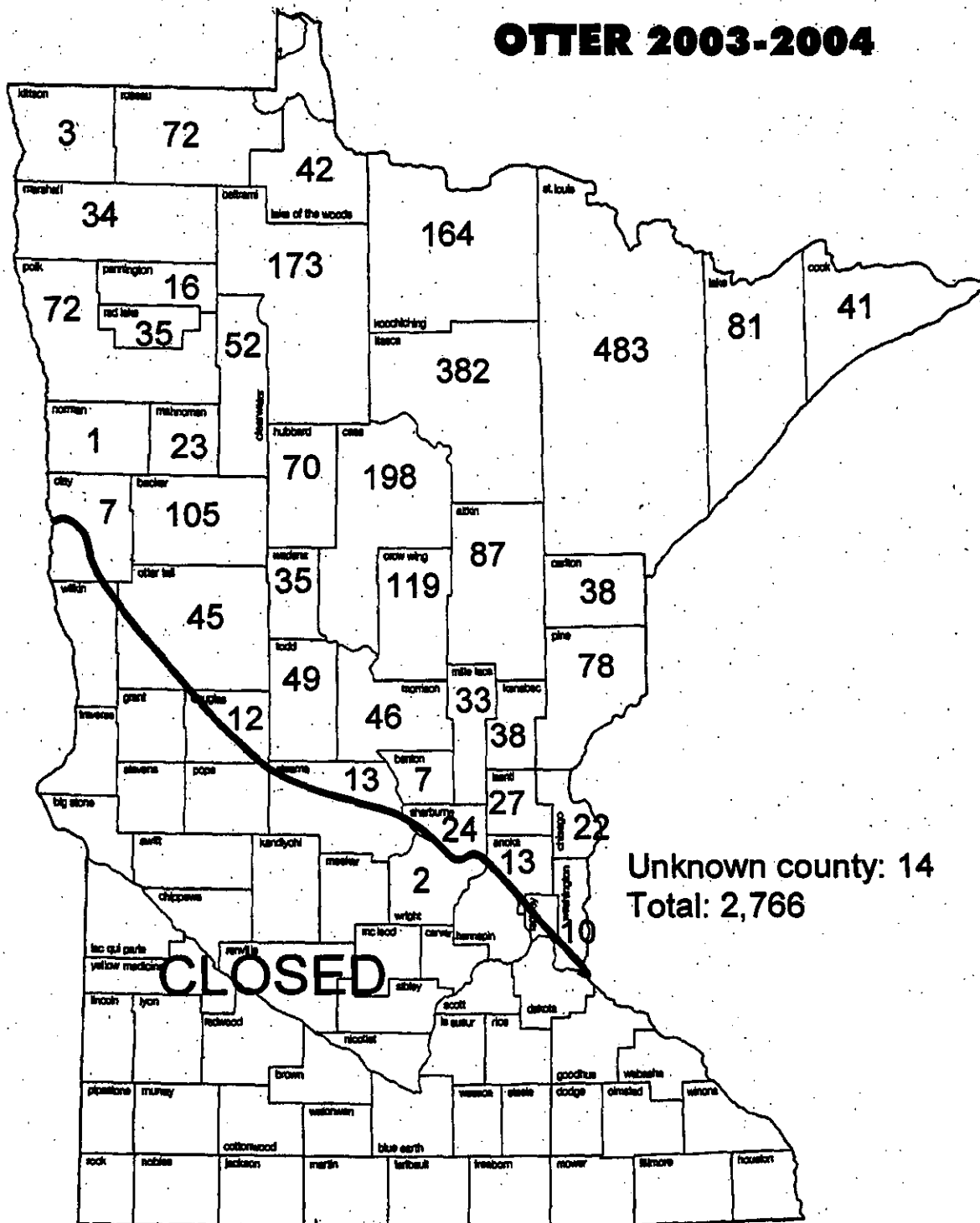


Figure 59. Otter harvest by county, 2003-2004.

Table 71. Otter harvest by 5-day interval and sex, 2003-04 season.

Interval	Sex			Total Harvest	% of Known Total	Cumulative %
	Male	Female	Unknown			
Oct. 25-29	71	41	0	112	4.0	4.0
Oct. 30 - Nov. 3	181	158	0	339	12.3	16.3
Nov. 4-8	184	140	1	325	11.7	28.0
Nov. 9-13	126	84	0	210	7.6	35.6
Nov. 14-18	99	94	0	193	7.0	42.6
Nov. 19-23	107	81	0	188	6.8	49.4
Nov. 24-28	105	96	0	201	7.3	56.6
Nov. 29 - Dec. 3	163	110	0	273	9.9	66.5
Dec. 4-8	139	84	0	223	8.1	74.6
Dec. 9-13	96	66	0	162	5.9	80.4
Dec. 14-18	52	39	0	91	3.3	83.7
Dec. 19-23	56	40	0	96	3.5	87.2
Dec. 24-28	54	34	0	88	3.2	90.4
Dec. 29-Jan. 4*	47	52	0	99	3.6	93.9
Unknown	91	75	0	166	6.0	100.0
Total	1571	1194	1	2766	100	

\* 7-day interval.

Table 72. Otter harvest by county and sex, 2003-04 season.

County	Sex			Total
	Male	Female	Unknown	
Aitkin	47	40	0	87
Anoka	7	6	0	13
Becker	63	42	0	105
Beltrami	88	85	0	173
Benton	4	3	0	7
Carlton	21	17	0	38
Cass	118	80	0	198
Chisago	11	11	0	22
Clay	5	2	0	7
Clearwater	26	26	0	52
Cook	25	16	0	41
Crow Wing	62	57	0	119
Douglas	6	6	0	12
Hubbard	42	28	0	70
Isanti	16	11	0	27
Itasca	218	163	1	382
Kanabec	19	19	0	38
Kittson	3	0	0	3
Koochiching	91	73	0	164
Lake	39	42	0	81
Lake of the Woods	24	18	0	42
Mahnomen	11	12	0	23
Marshall	25	9	0	34
Mille Lacs	21	12	0	33
Morrison	26	20	0	46
Norman	0	1	0	1
Ottertail	24	21	0	45
Pennington	10	6	0	16
Pine	43	35	0	78
Polk	48	24	0	72
Red Lake	12	23	0	35
Roseau	41	31	0	72
St. Louis	291	192	0	483
Sherburne	12	12	0	24
Stearns	9	4	0	13
Todd	28	21	0	49
Wadena	19	16	0	35
Washington	5	5	0	10
Wright	2	0	0	2
Unknown	9	5	0	14
Total	1571	1194	1	2766



Table 73. Comparison of otter harvest by county, 1992-93 to 2003-04.

County	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Aitkin	78	70	83	57	78	95	87	103	82	100	78	87
Anoka	14	18	20	13	13	21	23	25	14	17	17	13
Becker	36	38	62	64	54	85	30	64	45	125	104	105
Beltrami	97	91	166	59	133	133	81	103	74	108	127	173
Benton	0	4	5	0	1	4	6	2	7	10	6	7
Carlton	39	38	40	17	33	43	39	45	29	33	40	38
Cass	107	114	184	124	184	189	149	109	107	197	189	198
Chisago	9	17	26	9	13	20	20	13	12	26	18	22
Clay					2	7	0	7	3	1	7	7
Clearwater	14	27	52	13	57	25	18	29	25	47	61	52
Cook	28	44	53	37	28	29	48	30	26	26	31	41
Crow Wing	83	75	111	59	73	84	81	77	76	96	108	119
Douglas				2	5	7	7	1	1	1	0	12
Hubbard	44	30	43	48	89	95	28	23	19	61	64	70
Isanti	10	19	20	10	17	29	26	20	28	33	33	27
Itasca	193	259	432	245	383	371	339	220	296	337	310	382
Kanabec	24	32	57	13	20	43	24	29	32	56	40	38
Kittson	1	0	1	1	0	2	1	0	0	1	2	3
Koochiching	52	65	147	68	139	109	126	63	107	118	96	164
Lake	91	44	76	33	62	57	77	44	70	57	57	81
LOW	15	1	20	9	16	24	32	36	18	17	21	42
Mahnomen	0	2	21	18	11	6	9	10	10	17	7	23
Marshall	6	7	13	3	14	14	5	8	16	13	35	34
Mille Lacs	5	16	40	7	27	18	17	15	12	20	22	33
Morrison	16	13	34	12	20	25	18	30	17	45	36	46
Norman	0	0	0	4	3	1	0	2	4	3	4	1

Table 73. (Cont.)

County	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Ottertail	5	10	10	19	14	41	29	20	14	51	32	45
Pennington	0	0	0	0	5	6	2	10	2	6	12	16
Pine	76	52	92	59	72	73	62	21	35	42	61	78
Polk	14	28	33	36	45	35	23	21	34	60	63	72
Red Lake	2	5	8	1	9	9	7	8	22	18	27	35
Roseau	14	11	29	3	24	41	40	37	40	36	27	72
St. Louis	187	286	507	148	473	332	421	353	255	453	316	483
Sherburne	8	7	11	10	12	15	13	14	10	11	11	24
Stearns				3	15	15	11	7	5	5	17	13
Todd	0	1	1	19	22	22	23	16	22	24	30	49
Wadena	2	4	3	9	14	8	6	13	3	23	23	35
Washington	3	0	1	0	7	4	6	4	4	4	12	10
Wright											1	2
Unknown	91	31	44	203	32	8	12	3	2	3	0	14
Totals	1368	1459	2445	1435	2219	2145	1946	1635	1578	2301	2145	2766