

Spring Wild Turkey Harvest Report, 2009

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In Minnesota, the demand for spring turkey permits exceeds the supply of permits available. To regulate harvest and distribute hunting pressure, permits are allocated across 76 permit areas (PAs) and 8 time periods using a quota system (Figure 1). Hunters interested in pursuing wild turkeys are required to apply for a permit through a drawing based on a system of preference. Preference is determined by the number of years a valid but unsuccessful application has been submitted since last receiving a permit. Hunters may apply individually or in a group of up to 4 members, and may apply for a second choice permit area and time period. Successful applicants are notified through mail, and unsuccessful applicants are awarded a preference point. The goal of this system is to provide quality turkey hunting opportunities where populations can sustain harvest.

Three types of hunting licenses were available to spring turkey hunters: (1) general lottery permit in which an applicant or a group of up to 4 hunters applied for a specific PA and time period; (2) landowner permit in which up to 20% of permits for each PA and time period were reserved for landowners or tenants who lived on 40 acres or more of land within the PA; and (3) archery permits which could be purchased for the last 2 time periods of any PA with 50 or more permits per period.

During 2009 we received 57,692 applications for 42,328 permits (Table 1, Figure 2). Over 36,000 general lottery and landowner permits were issued to hunters, and almost 4,500 were issued to archers (Table 2, Appendix A and B). Hunters registered over 12,000 turkeys, an increase of 11% from 2008 which is the highest turkey harvest on record (Table 1, Figure 2). Hunter success averaged 34%, which is above the 5-year average of 32% (Table 1). Hunter success by PA ranged from 15% (PA 423) to 64% (PA 266; Table 2). Similar to the 5-year average, hunter success rates were highest during the first 2 time periods (Table 3), but chance of drawing a permit were generally highest during the last 3-4 time periods (Appendix C).

A mentored youth hunt sponsored by non-profit organizations was held on weekends from mid April through May. During 2009, 294 youth hunters registered 118 turkeys, an increase in turkey harvest of 18% from 2008. Success averaged 40%, which was above the 2008 success rate (37%; Table 3).

At the turkey management unit (TMU) level success rates continue to be the highest across the northern units (TMUs J, K, L, M, N, O; Table 4). Turkey populations in these areas have recently been established and survey data show evidence that these populations are expanding (Dunton and Snyders 2009; Table 4). In southeastern Minnesota (TMUs A, B, C), turkey populations are well established and success rates and populations appear to be fluctuating around a stable mean (Dunton and Snyders 2009; Table 4, Figure 3).

Overall weather conditions for the 2009 spring turkey hunting season were favorable across much of the turkey range in Minnesota. April and May were relatively dry across much

of Minnesota, except for the Red River Valley where major flooding occurred in late March and continued through April (Minnesota Climatology Working Group 2009). April temperatures were near average and May temperatures were below historic averages in west-central and northern Minnesota and near average in the remainder of the state (Minnesota Climatology Working Group 2009). Although favorable weather generally contributes to increased harvest, the continued increase in harvest can be partially attributed to the increase in the number of permits available (i.e., 11% increase in the number of permits available and an 11% increase in registered harvest) from 2008 and 3 new permit areas open to hunting. Increased permits and permit areas resulted in more opportunities for hunters to harvest turkeys.

Literature Cited

Dunton, E., and J. Snyders. 2009. Fall wild turkey population survey, 2008. Minnesota Department of Natural Resources, St. Paul, MN, Agency Report.

Minnesota Climatology Working Group. 2009. Climate journal. <http://climate.umn.edu/>
Accessed 30 June 2009.

Table 1. Spring applicants, permits available and issued, and registered harvest from 1978 – 2009 for all spring wild turkey hunting seasons, Minnesota.

Year	Applicants	Permits			Registered harvest	Success (%) ^a
		Available	Issued	Issued (%)		
1978	10,740	420	411	98	94	23
1979	11,116	840	827	99	116	14
1980	9,613	1,200	1,191	99	98	8
1981	8,398	1,500	1,437	96	113	8
1982	7,223	2,000	1,992	99	106	5
1983	8,153	2,100	2,079	99	116	6
1984	7,123	3,000	2,837	95	178	6
1985	5,662	2,750	2,449	89	323	13
1986	5,715	2,500	2,251	90	333	15
1987	6,361	2,700	2,520	93	520	21
1988	8,402	3,000	2,994	99	674	23
1989	13,007	4,000	3,821	96	930	24
1990	14,326	6,600	6,126	93	1,709	28
1991	15,918	9,170	8,607	94	1,724	20
1992	16,401	9,310	9,051	97	1,691	19
1993	17,800	9,625	9,265	96	2,082	23
1994	19,853	9,940	9,479	95	1,975	21
1995	21,345	9,975	9,550	96	2,339	25
1996	23,757	12,131	10,983	91	2,841	26
1997	25,958	12,530	11,610	93	3,302	28
1998	29,727	14,035	13,229	94	4,361	33
1999	39,957	18,360	16,387	89	5,132	31
2000	42,022	20,160	18,661	93	6,154	33
2001	41,048	22,936	21,404	93	6,383	30
2002	42,415	24,136	22,607	94	6,516	29
2003	44,415	25,016	22,770	91	7,666	34
2004	48,059	27,600	25,261	92	8,434	33
2005	49,181	31,748	27,638	87	7,800	28
2006	45,704	32,624	27,876	85	8,241	30
2007 ^b	52,566	33,976	28,320	83	9,412	33
2008 ^b	51,000	37,992	31,942	84	10,994	34
2009 ^b	57,692	42,328	36,193 ^c	85	12,210	34

^a Success rates not adjusted for non-participation

^b Youth hunt data included

^c 4,483 permits were issued to archery hunters and are not included in this figure.

Table 2. Permits available and issued, registered harvest, success, and historic success rates by permit area for the 2009 spring wild turkey season, Minnesota.

Permit Area	Permits		2009		Historic mean ^c	
	Available	Issued ^a	Registered harvest	Success (%) ^b	Success (%)	<i>n</i>
152	40	41	11	27	31	2
156	80	76	29	38	47	2
157	400	358	178	50	46	6
159	120	111	37	33	36	6
183	40	42	16	38	29	2
213	640	576	260	45	46	3
214	720	638	232	36	38	6
215	920	792	355	45	43	11
218	800	734	351	48	50	3
219	480	435	160	37	31	11
221	480	411	192	47	51	5
222	400	353	132	37	44	5
223	760	668	273	41	36	11
225	1320	1181	324	27	27	11
227	1200	1020	282	28	34	11
229	360	317	82	26	25	10
235	160	149	50	34	34	11
236	1200	1058	401	38	39	11
239	960	855	375	44	43	8
240	800	704	286	41	40	5
241	200	176	72	41	42	2
242 ^d	40	26	10	38	38	1
243	120	99	39	39	40	2
244	360	300	115	38	34	8
246 ^d	80	63	37	59	59	1
248	400	430	165	38	43	6
249	400	356	115	32	32	7
262	80	60	25	42	44	2
266 ^d	40	22	14	64	64	1
338	720	623	243	39	33	9
339	680	607	232	38	35	9
341	1880	1663	612	37	34	9
342	1800	1452	387	27	27	9
343	1440	1290	542	42	41	9
344	1000	859	208	24	27	11
345	1400	1054	247	23	22	9

Table 2. Continued

Permit Area	Permits		2009		Historic mean ^c	
	Available	Issued ^a	Registered harvest	Success (%) ^b	Success (%)	<i>n</i>
346	2600	1831	385	21	25	11
347	1200	1021	326	32	27	9
348	1400	1210	296	24	25	9
349	3400	2615	509	19	24	11
412	360	327	132	40	42	3
416	120	114	47	41	39	10
417	400	375	169	45	43	3
420	120	77	23	30	37	6
421	56	31	15	48	35	2
422	160	123	61	50	46	11
423	40	27	4	15	21	2
424	80	74	14	19	32	5
425	520	485	160	33	39	6
426	40	34	11	32	24	9
427	96	80	31	39	34	9
428	280	257	109	42	43	9
431	120	107	43	40	41	11
433	96	89	43	48	51	6
440	600	540	168	31	32	11
442	1280	1141	412	36	35	11
443	680	598	191	32	32	11
446	80	71	21	30	39	5
447	80	73	20	27	27	5
448	80	72	40	56	52	6
449	80	76	35	46	47	6
450	120	101	30	30	29	11
451	120	106	47	44	47	7
454	40	36	10	28	34	5
456	40	32	6	19	11	5
457	120	104	33	32	35	11
458	80	50	17	34	30	5
459	200	175	38	22	25	11
461	1000	903	319	35	34	11
462	960	833	343	41	37	9
463	240	211	73	35	30	11
464	320	294	103	35	29	9
465	320	269	89	33	28	9

Table 2. Continued

Permit Area	Permits		2009		Historic mean ^c	
	Available	Issued ^a	Registered harvest	Success (%) ^b	Success (%)	<i>n</i>
466	640	553	170	31	32	8
467	440	418	160	38	35	8
601	1200	1057	414	39	39	10
Unknown ^e		4	4			
Total	42,328	36,193	12,210	34.0		

^a 4,483 permits were issued to archery hunters and are not included in these figures

^b Success rates not adjusted for non-participants

^c Mean success rate (%) over all spring turkey seasons (*n*) between 1999 – 2009 or since a permit area boundary change occurred.

^d New permits areas for the 2009 spring season

^e Unknown harvest location (permit area) due to registration station error

Table 3. Permits available and issued, registered harvest, and success (2009 and mean) by time period for the 2009 spring wild turkey season, Minnesota.

Time Period ^a	Permits		2009		1999 - 2009 mean success (%)
	Available	Issued	Registered harvest	Success (%) ^b	
A	5291	4799	2222	46	43
B	5291	4748	1900	40	39
C	5291	4807	1576	33	31
D	5291	4686	1432	31	29
E	5291	4809	1634	34	33
F	5291	3950	1081	27	29
G	5291	4303	1327	31	25
H	5291	3793	911	24	24
Unknown ^c		4	9		
Youth Hunt					
W	-	1	0	0	
X	-	1	0	0	
Y	-	280	113	40	
Z	-	12	5	42	
Total		36,193	12,210		

^a A = April 15-19, B = April 20-24, C = April 25-29, D = April 30-May 4, E = May 5-9, F = May 10-14, G = May 15-21, H = May 22-28, W = May 2-3, X = April 25-26, Y = April 18-19, and Z = April 11-12

^b Success rates not adjusted for non-participants

^c Unknown harvest location and unknown harvest time periods due to registration station error

Table 4. Permits available and issued, registered harvest, success (2009 and mean), and mean finite rate of population change (Dunton and Snyders 2009) by Turkey Management Unit for the 2009 spring wild turkey season, Minnesota.

TMU ^{a,b}	Permits		2009		Mean success ^e		Mean finite rate of change ^f	
	Available	Issued	Registered harvest	Success (%)	<i>n</i>	Mean	λ	99% CI ^g
A	8800	6710	1437	21	9	24	0.99*	(0.94, 1.04)
B	1000	859	208	24	11	27	0.98	(0.89, 1.07)
C	6320	5426	1867	34	9	32	0.99	(0.91, 1.09)
D	4480	3907	1390	36	9	31	1.06*	(1.04, 1.07)
E	2000	1809	595	33	2	33	1.15*	(1.09, 1.20)
F	4600	4088	1489	36	8	35	1.03	(0.96, 1.12)
G	1040	896	297	33	5	33	1.07*	(1.02, 1.11)
H	3296	2960	1017	34	6	34	1.03	(0.95, 1.13)
I	416	371	151	41	9	37	1.08	(0.99, 1.19)
J	2080	1814	722	40	1	40	1.11	(0.96, 1.30)
K	2960	2653	1117	42	3	43	1.09	(0.99, 1.20)
L	2080	1872	814	43	3	43	1.15	(0.91, 1.45)
M	456	332	117	35	2	36	1.18	(1.01, 1.37)
N	2680	2410	946	39	1	39	1.18	(0.93, 1.51)
O	120	82	39	48	1	48	1.17	(0.70, 1.97)
P ^c	-	-	-	-	-	-	1.12	
Unknown ^d		4	4					

^a TMU A = permit areas (345, 346, 348, 349), TMU B = permit area (344), TMU C = permit areas (341, 342, 343, 347), TMU D = permit areas (227, 235, 236, 338, 601), TMU E = permit areas (152, 156, 157, 159, 183, 225), TMU F = permit areas (339, 461, 462, 464, 465, 466, 467), TMU G = permit areas (446, 447, 448, 449, 450, 451, 454, 456, 457, 458, 459), TMU H = permit areas (431, 433, 435, 440, 442, 443), TMU I = permit areas (425, 426, 427, 428), TMU J = permit areas (154, 221, 222, 223, 224, 242, 247, 249), TMU K = permit areas (215, 218, 219, 229, 417), TMU L = permit areas (213, 239, 412, 416), TMU M = permit areas (420, 421, 422, 423, 424), TMU N = permit areas (214, 240, 241, 243, 244, 245, 246, 248), TMU O = permit areas (201, 208, 209, 210, 251, 256, 257, 260, 261, 262, 263, 264, 265, 266, 267, 268, 298), TMU P = permit areas (170, 172, 174, 181, 182, 184, 197, 199, 287).

^b Not all permit areas are open to spring hunting

^c TMU P currently does not have any permit areas open for turkey hunting

^d Unknown harvest location (permit area) due to registration station error

^e Mean success rate based on consecutive number of years hunting in permit area since a boundary change occurred or area was opened to hunting. Mean success rate based on areas open to hunting, which may not represent all areas within a TMU.

^f Mean finite rate of change based on fall wild turkey population survey data (1999-2008 [$n = 4$ surveys]), TMU P based on 2 surveys.

^g 85% family of confidence intervals (type I error rate controlled at $\alpha = 0.15$).

*Desired level of precision achieved

2009 Spring Wild Turkey Permit Areas

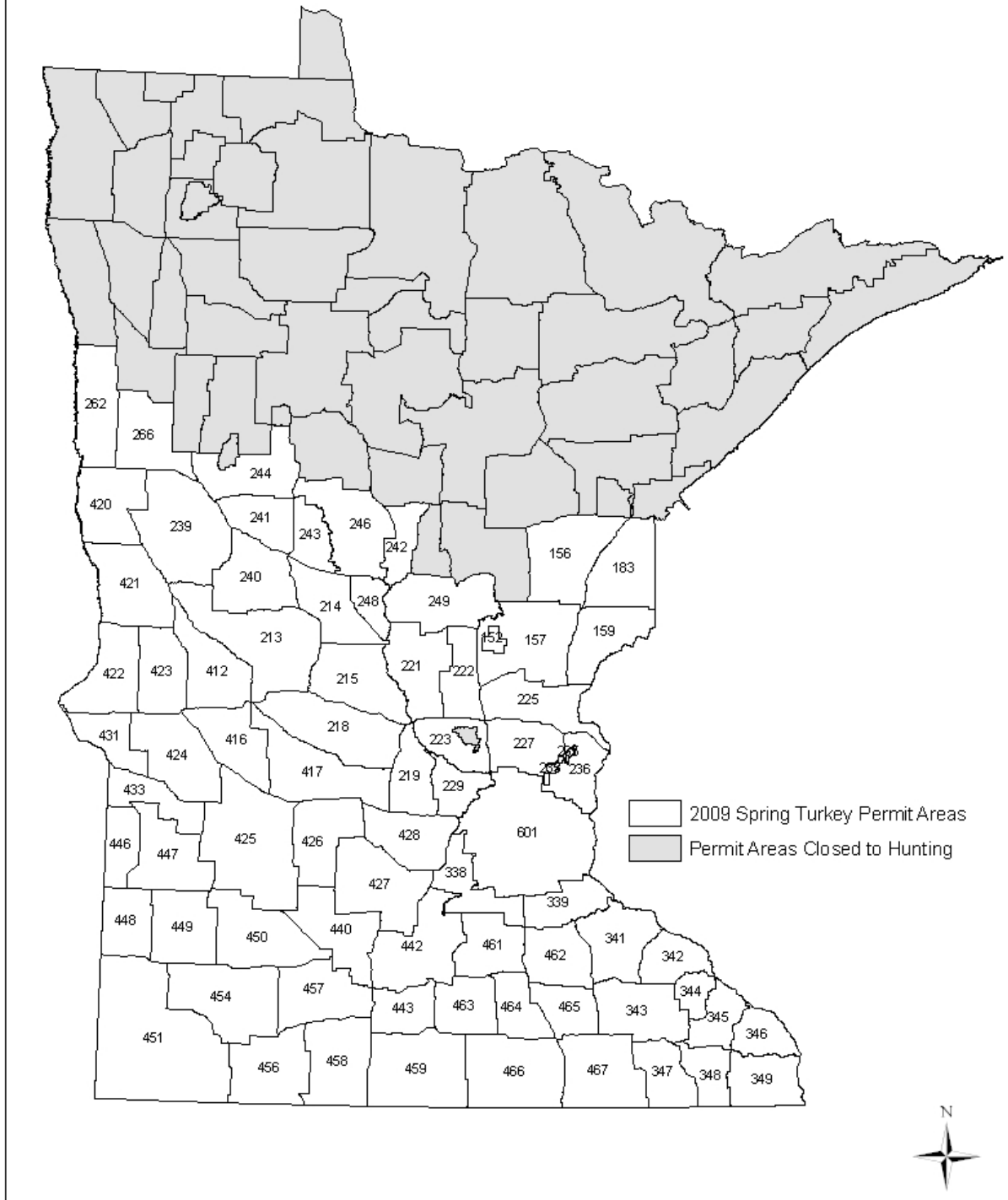


Fig. 1. Permit areas open for hunting during the 2009 spring turkey hunting season, Minnesota.

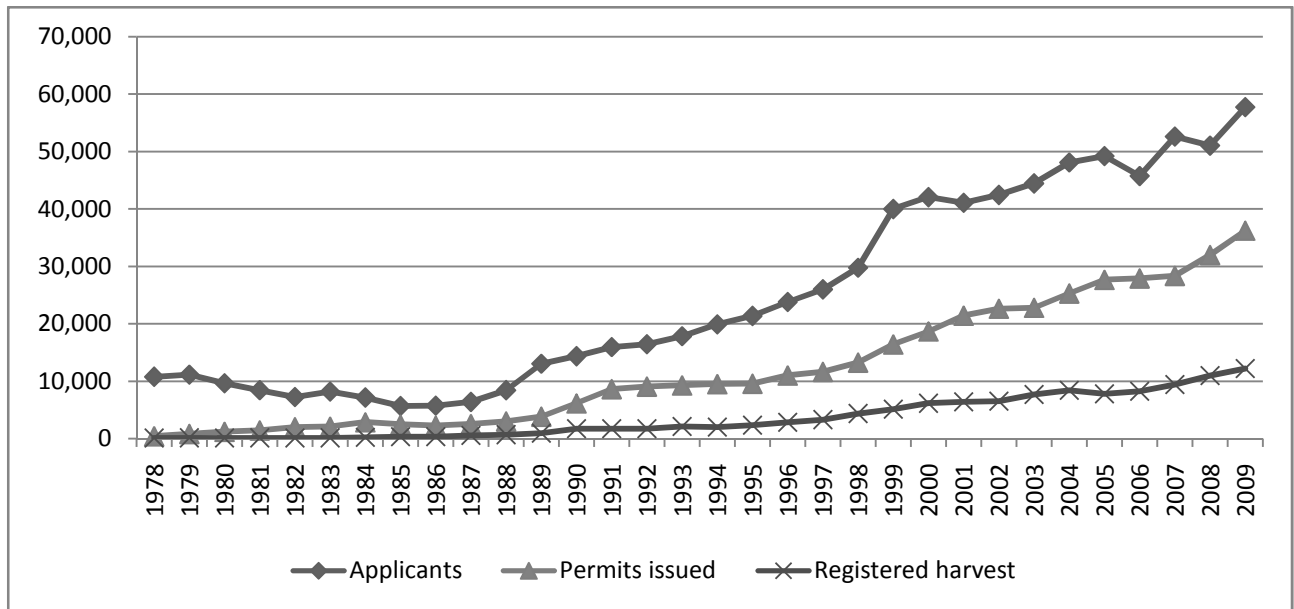


Fig. 2. Applicants, permits issued, and registered harvest for the spring wild turkey seasons 1978-2008, Minnesota.

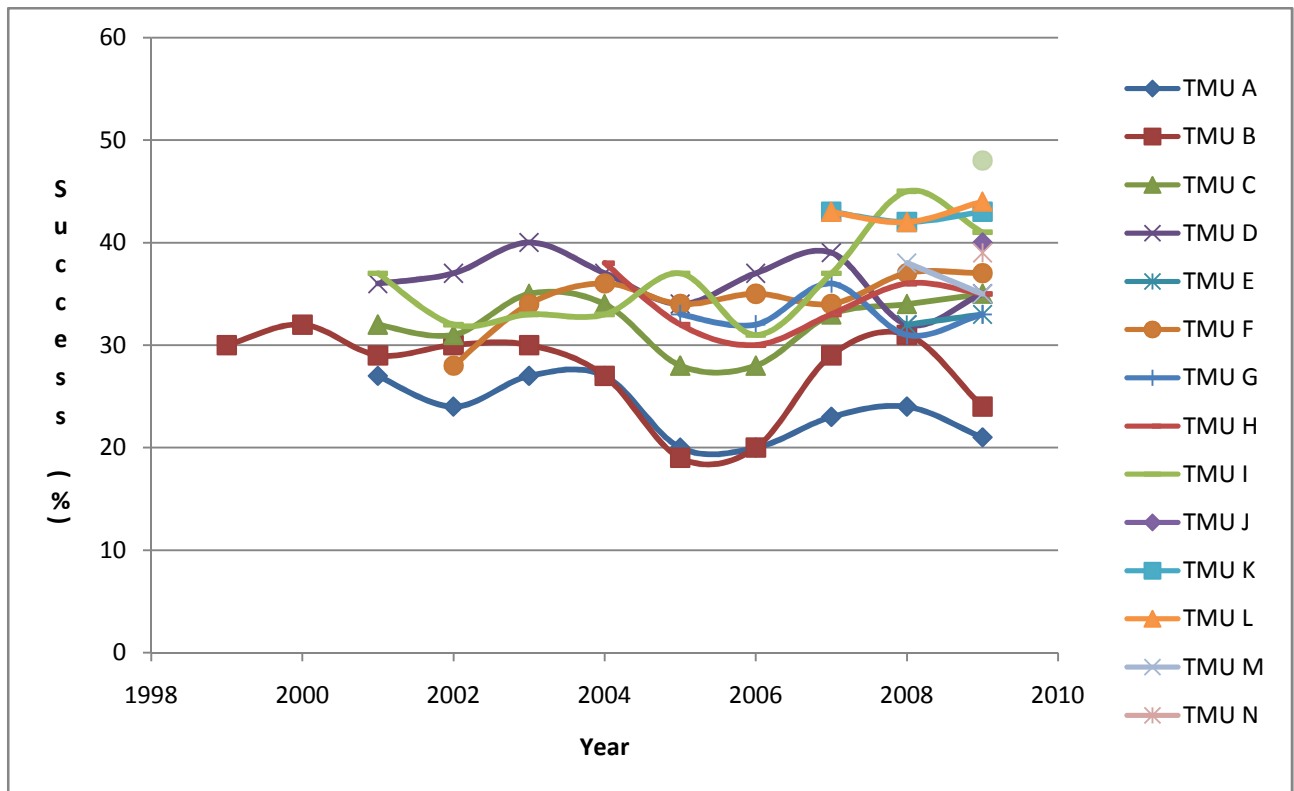


Fig. 3. Mean success rate (%) for turkey management units (TMUs) based on cumulative permit area success rates since a boundary change occurred or permit areas opened for hunting, Minnesota.

Appendix A. Permits available and issued by type and permit area for the 2009 spring wild turkey season, Minnesota.

Permit Area	Permits available	Permits issued					Youth	Total
		General	Landowner	Second choice	Surplus			
152	40	28	0	2	11	-	41	
156	80	55	11	10	0	-	76	
157	400	266	33	56	0	3	358	
159	120	91	14	6	0	-	111	
183	40	39	3	0	0	-	42	
213	640	436	71	61	0	8	576	
214	720	366	39	134	99	-	638	
215	920	584	65	137	0	6	792	
218	800	575	73	70	2	14	734	
219	480	314	20	83	11	7	435	
221	480	292	24	89	3	3	411	
222	400	246	33	53	17	4	353	
223	760	487	33	118	15	15	668	
225	1320	694	80	215	178	14	1181	
227	1200	665	36	192	112	15	1020	
229	360	186	9	66	56	-	317	
235	160	130	0	9	10	-	149	
236	1200	721	32	188	105	12	1058	
239	960	595	73	157	15	15	855	
240	800	493	55	107	34	15	704	
241	200	118	12	35	11	-	176	
242	40	6	0	2	18	-	26	
243	120	72	11	14	2	-	99	
244	360	235	21	44	0	-	300	
246	80	37	12	14	0	-	63	
248	400	204	36	61	129	-	430	
249	400	242	21	55	31	7	356	
262	80	34	0	3	23	-	60	
266	40	14	1	0	7	-	22	
338	720	437	50	98	38	-	623	
339	680	442	32	86	44	3	607	
341	1880	1,257	102	199	93	12	1663	
342	1800	967	66	213	206	-	1452	
343	1440	1,007	106	91	60	26	1290	
344	1000	677	36	63	76	7	859	
345	1400	697	52	99	202	4	1054	

Appendix A. Continued

Permit Area	Permits available	Permits issued					Total
		General	Landowner	Second choice	Surplus	Youth	
346	2600	1283	90	126	326	6	1831
347	1200	677	51	155	127	11	1021
348	1400	865	58	165	117	5	1210
349	3400	1877	128	231	377	2	2615
412	360	252	24	51	0	-	327
416	120	105	9	0	0	-	114
417	400	291	39	38	0	7	375
420	120	31	3	7	36	-	77
421	56	21	0	1	9	-	31
422	160	86	3	17	17	-	123
423	40	9	0	0	18	-	27
424	80	40	0	19	15	-	74
425	520	363	45	70	0	7	485
426	40	20	2	5	7	-	34
427	96	58	8	10	4	-	80
428	280	190	19	42	6	-	257
431	120	67	4	21	15	-	107
433	96	70	9	7	3	-	89
440	600	328	31	104	67	10	540
442	1280	809	107	183	33	9	1141
443	680	386	20	107	83	2	598
446	80	52	7	4	8	-	71
447	80	48	5	9	11	-	73
448	80	45	15	9	3	-	72
449	80	64	9	3	0	-	76
450	120	64	4	16	17	-	101
451	120	56	5	25	20	-	106
454	40	31	5	0	0	-	36
456	40	24	0	4	4	-	32
457	120	55	6	22	21	-	104
458	80	20	0	3	27	-	50
459	200	128	12	35	0	-	175
461	1000	588	57	177	69	12	903
462	960	568	39	130	95	1	833
463	240	137	14	54	6	-	211
464	320	169	5	65	55	-	294
465	320	164	1	40	64	-	269

Appendix A. Continued.

Permit Area	Permits available	Permits issued					Total
		General	Landowner	Second choice	Surplus	Youth	
466	640	320	30	111	92	-	553
467	440	270	31	69	48	-	418
601	1200	747	24	153	101	32	1057
Unknown							4
Total	42,328	25,087	2,181	5,118	3,509	294	36,193

Appendix B. Permits available and issued by type and time period for the 2009 spring wild turkey season, Minnesota.

Time Period	Permits available	Permits issued by type ^a				Total
		General	Landowner	Second choice	Surplus	
A	5291	3985	784	-	30	4799
B	5291	4208	413	-	127	4748
C	5291	4255	495	-	57	4807
D	5291	4385	265	-	36	4686
E	5291	3439	88	-	1282	4809
F	5291	1536	31	2157	226	3950
G	5291	2494	67	1473	269	4303
H	5291	785	38	1488	1482	3793
Unknown						4
Total	42,328	25,087	2,181	5,118	3,509	35,899 ^a

^a Does not include youth information (see Table 3 for youth data)

Appendix C. Registered harvest, general lottery applicants, permits available (total, landowner, general lottery), and the chance of being drawn in the general lottery by permit area and time period for the 2009 spring wild turkey season, Minnesota.

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%) ^b
				Total	Landowner ^a	General lottery	
152	A	2	5	5	0	5	100
	B	1	3	5	0	5	100
	C	2	14	5	0	5	36
	D	0	8	5	0	5	63
	E	3	6	5	0	5	72
	F	2	1	5	0	5	100
	G	1	1	5	0	5	100
	H	0	0	5	0	5	100
156	A	6	34	10	2	8	24
	B	3	18	10	2	8	44
	C	4	27	10	1	9	33
	D	3	32	10	2	8	25
	E	2	19	10	0	10	53
	F	4	3	10	1	9	100
	G	6	12	10	2	8	67
	H	1	5	10	1	9	100
157	A	36	253	50	12	38	15
	B	24	118	50	6	44	37
	C	24	183	50	8	42	23
	D	24	158	50	5	45	28
	E	17	52	50	0	50	96
	F	17	37	50	0	50	100
	G	20	38	50	1	49	100
	H	16	15	50	1	49	100
159	A	3	97	15	4	11	11
	B	7	42	15	2	13	31
	C	8	71	15	3	12	17
	D	3	42	15	3	12	29
	E	6	20	15	1	14	70
	F	3	14	15	1	14	100
	G	5	20	15	0	15	75
	H	2	9	15	0	15	100
183	A	3	18	5	1	4	22
	B	1	10	5	1	4	40
	C	2	17	5	1	4	24
	D	6	30	5	0	5	17
	E	1	21	5	0	5	24
	F	1	7	5	0	5	71
	G	1	7	5	0	5	71
	H	1	5	5	0	5	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%) ^b
				Total	Landowner ^a	General lottery	
213	A	44	295	80	18	62	21
	B	38	195	80	15	65	33
	C	39	333	80	16	64	19
	D	32	283	80	10	70	25
	E	25	90	80	6	74	82
	F	28	49	80	1	79	100
	G	28	69	80	5	75	100
	H	22	35	80	0	80	100
214	A	38	191	90	12	78	41
	B	38	104	90	6	84	81
	C	28	169	90	12	78	46
	D	27	117	90	4	86	74
	E	31	41	90	0	90	100
	F	28	8	90	0	90	100
	G	26	21	90	0	90	100
	H	16	12	90	5	85	100
215	A	69	368	115	19	96	26
	B	60	184	115	10	105	57
	C	45	460	115	20	95	21
	D	33	293	115	8	107	37
	E	45	124	115	1	114	92
	F	33	42	115	1	114	100
	G	38	74	115	4	111	100
	H	27	33	115	2	113	100
218	A	62	399	100	20	80	20
	B	43	199	100	10	90	45
	C	50	425	100	22	78	18
	D	33	256	100	12	88	34
	E	37	120	100	2	98	82
	F	33	70	100	4	96	100
	G	47	104	100	2	98	94
	H	38	32	100	1	99	100
219	A	29	221	60	6	54	24
	B	22	140	60	6	54	39
	C	23	198	60	2	58	29
	D	21	152	60	1	59	39
	E	13	63	60	3	57	90
	F	11	9	60	0	60	100
	G	22	46	60	2	58	100
	H	14	10	60	0	60	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%) ^b
				Total	Landowner ^a	General lottery	
221	A	31	164	60	6	54	33
	B	28	99	60	7	53	54
	C	26	197	60	3	57	29
	D	23	92	60	4	56	61
	E	25	60	60	3	57	95
	F	13	15	60	0	60	100
	G	26	31	60	1	59	100
	H	18	10	60	0	60	100
222	A	24	156	50	10	40	26
	B	21	102	50	4	46	45
	C	20	156	50	5	45	29
	D	16	105	50	5	45	43
	E	16	35	50	4	46	100
	F	12	16	50	1	49	100
	G	10	40	50	3	47	100
	H	13	9	50	1	49	100
223	A	53	407	95	12	83	20
	B	40	208	95	6	89	43
	C	44	365	95	8	87	24
	D	28	224	95	4	91	41
	E	32	92	95	1	94	100
	F	27	30	95	0	95	100
	G	19	69	95	2	93	100
	H	20	19	95	0	95	100
225	A	57	420	165	31	134	32
	B	41	251	165	17	148	59
	C	46	370	165	18	147	40
	D	39	223	165	11	154	69
	E	45	102	165	3	162	100
	F	32	52	165	0	165	100
	G	34	45	165	0	165	100
	H	26	12	165	0	165	100
227	A	54	400	150	15	135	34
	B	34	246	150	10	140	57
	C	33	318	150	5	145	46
	D	38	195	150	4	146	75
	E	36	101	150	0	150	100
	F	23	25	150	0	150	100
	G	39	56	150	2	148	100
	H	19	22	150	0	150	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%) ^b
				Total	Landowner ^a	General lottery	
229	A	11	114	45	3	42	37
	B	13	77	45	3	42	55
	C	11	96	45	1	44	46
	D	10	49	45	1	44	90
	E	7	18	45	0	45	100
	F	7	8	45	0	45	100
	G	15	10	45	0	45	100
	H	8	3	45	1	44	100
235	A	10	81	20	0	20	25
	B	12	55	20	0	20	36
	C	6	50	20	0	20	40
	D	7	46	20	0	20	43
	E	5	21	20	0	20	95
	F	5	13	20	0	20	100
	G	3	20	20	0	20	100
	H	2	7	20	0	20	100
236	A	58	436	150	15	135	31
	B	56	232	150	5	145	63
	C	57	381	150	8	142	37
	D	53	273	150	3	147	54
	E	44	126	150	1	149	100
	F	34	49	150	0	150	30
	G	57	61	150	0	150	100
	H	37	14	150	0	150	100
239	A	69	367	120	22	98	27
	B	55	213	120	20	100	47
	C	46	359	120	13	107	30
	D	43	304	120	11	109	36
	E	45	103	120	4	116	100
	F	34	46	120	1	119	100
	G	44	76	120	2	118	100
	H	33	37	120	0	120	100
240	A	76	256	100	16	84	33
	B	46	153	100	14	86	56
	C	32	307	100	9	91	30
	D	26	203	100	12	88	43
	E	36	82	100	1	99	100
	F	24	40	100	1	99	100
	G	20	71	100	2	98	100
	H	22	18	100	0	100	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%) ^b
				Total	Landowner ^a	General lottery	
241	A	11	59	25	0	25	42
	B	10	33	25	2	23	70
	C	16	59	25	5	20	34
	D	7	53	25	5	20	38
	E	10	13	25	0	25	100
	F	6	12	25	0	25	100
	G	4	15	25	0	25	100
	H	8	7	25	0	25	100
242	A	1	2	5	0	5	100
	B	3	0	5	0	5	100
	C	1	3	5	0	5	100
	D	1	4	5	0	5	100
	E	2	3	5	0	5	100
	F	0	0	5	0	5	100
	G	1	3	5	0	5	100
	H	1	0	5	0	5	100
243	A	7	39	15	3	12	31
	B	9	17	15	1	14	82
	C	2	41	15	3	12	29
	D	4	33	15	0	15	45
	E	6	14	15	1	14	100
	F	5	4	15	2	13	100
	G	5	9	15	1	14	100
	H	1	4	15	0	15	100
244	A	19	154	45	7	38	25
	B	20	102	45	1	44	43
	C	18	164	45	5	40	24
	D	17	110	45	5	40	36
	E	12	70	45	1	44	63
	F	14	23	45	0	45	100
	G	8	36	45	2	43	100
	H	7	14	45	0	45	100
246	A	7	25	10	1	9	36
	B	4	18	10	2	8	44
	C	4	35	10	4	6	17
	D	5	48	10	2	8	17
	E	3	15	10	3	7	47
	F	6	1	10	0	10	100
	G	3	12	10	0	10	83
	H	5	3	10	0	10	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%) ^b
				Total	Landowner ^a	General lottery	
248	A	35	83	50	12	38	46
	B	34	55	50	4	46	84
	C	33	101	50	8	42	42
	D	17	62	50	8	42	68
	E	12	36	50	3	47	100
	F	9	9	50	1	49	100
	G	17	7	50	0	50	100
	H	8	6	50	0	50	100
249	A	15	154	50	7	43	28
	B	21	85	50	8	42	49
	C	12	154	50	2	48	31
	D	11	119	50	2	48	40
	E	19	38	50	1	49	100
	F	10	9	50	1	49	100
	G	18	42	50	0	50	100
	H	7	3	50	0	50	100
262	A	3	14	10	0	10	71
	B	3	10	10	0	10	100
	C	5	14	10	0	10	71
	D	5	8	10	0	10	100
	E	4	3	10	0	10	100
	F	3	3	10	0	10	100
	G	1	3	10	0	10	100
	H	1	0	10	0	10	100
266	A	3	4	5	0	5	100
	B	1	5	5	0	5	100
	C	1	5	5	0	5	100
	D	5	1	5	1	4	100
	E	2	2	5	0	5	100
	F	0	0	5	0	5	100
	G	2	2	5	0	5	100
	H	0	0	5	0	5	100
338	A	45	319	90	18	72	23
	B	34	219	90	12	78	36
	C	26	307	90	10	80	26
	D	35	191	90	5	85	45
	E	33	66	90	1	89	100
	F	17	38	90	0	90	100
	G	35	70	90	0	90	100
	H	17	11	90	4	86	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%) ^b
				Total	Landowner ^a	General lottery	
339	A	32	249	85	11	74	30
	B	33	139	85	5	80	58
	C	35	240	85	8	77	32
	D	31	142	85	6	79	56
	E	30	92	85	1	84	91
	F	21	29	85	0	85	100
	G	32	73	85	0	85	100
	H	18	8	85	1	84	100
341	A	87	695	235	32	203	29
	B	89	410	235	20	215	52
	C	84	659	235	24	211	32
	D	72	465	235	13	222	48
	E	102	236	235	5	230	97
	F	57	91	235	2	233	100
	G	71	205	235	3	232	100
	H	43	46	235	3	232	100
342	A	72	408	225	33	192	47
	B	82	305	225	9	216	71
	C	55	469	225	14	211	45
	D	39	357	225	6	219	61
	E	64	124	225	1	224	100
	F	39	74	225	2	223	100
	G	25	66	225	1	224	100
	H	11	21	225	0	225	100
343	A	73	510	180	30	150	29
	B	93	352	180	14	166	47
	C	61	623	180	27	153	25
	D	61	356	180	19	161	45
	E	73	200	180	5	175	88
	F	55	112	180	0	180	100
	G	64	172	180	7	173	100
	H	48	50	180	4	176	100
344	A	38	449	125	21	104	23
	B	42	220	125	9	116	53
	C	26	349	125	3	122	35
	D	18	219	125	0	125	57
	E	28	118	125	0	125	100
	F	20	62	125	0	125	100
	G	22	128	125	3	122	95
	H	11	21	125	0	125	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%) ^b
				Total	Landowner ^a	General lottery	
345	A	57	258	175	33	142	55
	B	43	195	175	9	166	85
	C	32	286	175	5	170	59
	D	35	208	175	3	172	83
	E	44	68	175	0	175	100
	F	15	13	175	0	175	100
	G	17	43	175	2	173	100
	H	3	16	175	0	175	100
346	A	88	472	325	45	280	59
	B	95	268	325	14	311	100
	C	40	458	325	22	303	66
	D	52	364	325	6	319	88
	E	55	156	325	2	323	100
	F	24	65	325	0	325	100
	G	26	69	325	1	324	100
	H	4	11	325	0	325	100
347	A	52	303	150	12	138	46
	B	61	224	150	8	142	63
	C	35	370	150	23	127	34
	D	41	260	150	6	144	55
	E	61	95	150	1	149	100
	F	24	44	150	0	150	100
	G	30	70	150	1	149	100
	H	17	21	150	0	150	100
348	A	66	417	175	26	149	36
	B	57	253	175	8	167	66
	C	27	435	175	16	159	37
	D	35	343	175	6	169	49
	E	41	146	175	0	175	100
	F	32	65	175	0	175	100
	G	21	94	175	0	175	100
	H	15	40	175	2	173	100
349	A	128	831	425	65	360	43
	B	93	489	425	17	408	83
	C	59	729	425	32	393	54
	D	57	512	425	10	415	81
	E	70	261	425	3	422	100
	F	37	134	425	0	425	100
	G	47	189	425	1	424	100
	H	18	57	425	0	425	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%) ^b
				Total	Landowner ^a	General lottery	
412	A	22	127	45	7	38	30
	B	19	65	45	3	42	65
	C	15	123	45	3	42	34
	D	20	79	45	3	42	53
	E	16	52	45	7	38	73
	F	14	21	45	0	45	100
	G	16	36	45	1	44	100
	H	10	14	45	0	45	100
416	A	10	64	15	2	13	20
	B	4	44	15	2	13	30
	C	7	53	15	4	11	21
	D	3	50	15	0	15	30
	E	9	25	15	1	14	56
	F	4	30	15	0	15	20
	G	4	24	15	0	15	63
	H	6	18	15	0	15	83
417	A	31	220	50	10	40	18
	B	19	135	50	9	41	30
	C	16	251	50	9	41	16
	D	21	101	50	7	43	43
	E	19	73	50	1	49	67
	F	10	32	50	2	48	100
	G	26	61	50	0	50	82
	H	22	22	50	1	49	100
420	A	7	5	15	0	15	100
	B	2	7	15	0	15	100
	C	4	28	15	3	12	43
	D	5	7	15	0	15	100
	E	2	1	15	0	15	100
	F	0	1	15	0	15	100
	G	2	2	15	0	15	100
	H	1	3	15	0	15	100
421	A	5	9	7	0	7	78
	B	5	5	7	0	7	100
	C	2	6	7	0	7	100
	D	0	0	7	0	7	100
	E	3	2	7	0	7	100
	F	0	0	7	0	7	100
	G	0	5	7	0	7	100
	H	0	0	7	0	7	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%) ^b
				Total	Landowner ^a	General lottery	
422	A	9	36	20	2	18	50
	B	9	9	20	1	19	100
	C	8	34	20	0	20	59
	D	11	26	20	0	20	77
	E	7	9	20	0	20	100
	F	0	1	20	0	20	100
	G	9	6	20	0	20	100
	H	8	3	20	0	20	100
423	A	0	7	5	0	5	71
	B	1	1	5	0	5	100
	C	0	4	5	0	5	100
	D	0	0	5	0	5	100
	E	3	1	5	0	5	100
	F	0	0	5	0	5	100
	G	0	0	5	0	5	100
	H	0	1	5	0	5	100
424	A	4	23	10	0	10	43
	B	2	6	10	0	10	100
	C	2	12	10	0	10	83
	D	1	14	10	0	10	71
	E	1	6	10	0	10	100
	F	1	1	10	0	10	100
	G	1	1	10	0	10	100
	H	2	0	10	0	10	100
425	A	28	211	65	14	51	24
	B	22	111	65	11	54	49
	C	14	251	65	11	54	22
	D	13	196	65	5	60	31
	E	22	72	65	2	63	88
	F	19	21	65	1	64	100
	G	21	49	65	1	64	100
	H	21	41	65	0	65	100
426	A	1	10	5	1	4	40
	B	4	4	5	1	4	100
	C	1	15	5	0	5	33
	D	1	3	5	0	5	100
	E	3	0	5	0	5	100
	F	0	4	5	0	5	100
	G	1	7	5	0	5	71
	H	0	1	5	0	5	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%) ^b
				Total	Landowner ^a	General lottery	
427	A	2	25	12	5	7	28
	B	4	20	12	1	11	55
	C	6	27	12	0	12	44
	D	6	25	12	1	11	44
	E	5	9	12	1	11	100
	F	3	3	12	0	12	100
	G	3	10	12	0	12	100
	H	2	3	12	0	12	100
428	A	19	88	35	7	28	32
	B	13	65	35	2	33	51
	C	17	83	35	4	31	37
	D	15	66	35	3	32	48
	E	17	34	35	2	33	97
	F	11	24	35	1	34	100
	G	10	19	35	0	35	100
	H	7	5	35	0	35	100
431	A	9	30	15	1	14	47
	B	6	18	15	3	12	67
	C	6	14	15	0	15	100
	D	2	22	15	0	15	68
	E	3	7	15	0	15	100
	F	6	5	15	0	15	100
	G	5	5	15	0	15	100
	H	6	4	15	0	15	100
433	A	11	57	12	3	9	16
	B	5	43	12	2	10	23
	C	5	45	12	2	10	22
	D	7	20	12	0	12	60
	E	6	8	12	1	11	100
	F	3	8	12	0	12	100
	G	3	12	12	1	11	92
	H	3	7	12	0	12	100
440	A	42	209	75	14	61	29
	B	23	104	75	8	67	64
	C	23	166	75	6	69	42
	D	23	108	75	3	72	67
	E	16	42	75	0	75	100
	F	13	19	75	0	75	100
	G	14	25	75	0	75	100
	H	11	13	75	0	75	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%) ^b
				Total	Landowner ^a	General lottery	
442	A	67	498	160	26	134	27
	B	56	303	160	20	140	46
	C	50	547	160	32	128	23
	D	55	304	160	12	148	49
	E	45	154	160	8	152	99
	F	43	65	160	3	157	100
	G	50	118	160	2	158	100
	H	43	31	160	4	156	100
443	A	33	156	85	11	74	47
	B	27	103	85	0	85	83
	C	29	156	85	4	81	52
	D	21	123	85	1	84	68
	E	30	50	85	1	84	100
	F	20	16	85	2	83	100
	G	21	27	85	0	85	100
	H	9	7	85	1	84	100
446	A	6	19	10	1	9	47
	B	0	16	10	1	9	56
	C	0	9	10	1	9	100
	D	3	7	10	2	8	100
	E	5	7	10	1	9	100
	F	4	8	10	1	9	100
	G	0	11	10	0	10	91
	H	3	2	10	0	10	100
447	A	3	15	10	1	9	60
	B	5	12	10	1	9	75
	C	1	22	10	1	9	41
	D	3	11	10	1	9	82
	E	4	5	10	0	10	100
	F	0	2	10	0	10	100
	G	2	6	10	1	9	100
	H	2	3	10	0	10	100
448	A	8	31	10	4	6	19
	B	6	17	10	5	5	29
	C	6	23	10	4	6	26
	D	5	23	10	1	9	39
	E	6	7	10	0	10	100
	F	4	5	10	0	10	100
	G	4	14	10	1	9	64
	H	1	3	10	0	10	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%) ^b
				Total	Landowner ^a	General lottery	
449	A	5	51	10	2	8	16
	B	3	34	10	2	8	24
	C	3	49	10	2	8	16
	D	5	37	10	0	10	27
	E	3	18	10	0	10	56
	F	4	12	10	0	10	83
	G	6	12	10	3	7	58
	H	6	8	10	0	10	100
450	A	6	36	15	2	13	36
	B	5	11	15	1	14	100
	C	3	18	15	1	14	78
	D	5	11	15	0	15	100
	E	2	5	15	0	15	100
	F	5	9	15	0	15	100
	G	2	11	15	0	15	100
	H	2	1	15	0	15	100
451	A	11	31	15	1	14	45
	B	1	17	15	3	12	71
	C	9	39	15	0	15	38
	D	5	17	15	1	14	82
	E	8	3	15	0	15	100
	F	3	5	15	0	15	100
	G	5	3	15	0	15	100
	H	5	1	15	0	15	100
454	A	3	31	5	2	3	10
	B	1	16	5	0	5	31
	C	0	26	5	0	5	19
	D	0	24	5	1	4	17
	E	2	9	5	1	4	44
	F	2	8	5	0	5	63
	G	1	7	5	1	4	57
	H	1	6	5	0	5	83
456	A	1	6	5	0	5	83
	B	0	6	5	0	5	83
	C	2	6	5	0	5	83
	D	1	11	5	0	5	45
	E	2	3	5	0	5	100
	F	0	2	5	0	5	100
	G	0	2	5	0	5	100
	H	0	0	5	0	5	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%) ^b
				Total	Landowner ^a	General lottery	
457	A	4	32	15	2	13	41
	B	5	8	15	2	13	100
	C	5	29	15	1	14	48
	D	4	17	15	0	15	88
	E	4	8	15	1	14	100
	F	6	0	15	0	15	100
	G	2	7	15	0	15	100
	H	3	0	15	0	15	100
458	A	3	18	10	0	10	56
	B	4	5	10	0	10	100
	C	4	5	10	0	10	100
	D	3	1	10	0	10	100
	E	0	1	10	0	10	100
	F	2	1	10	0	10	100
	G	1	1	10	0	10	100
	H	0	0	10	0	10	100
459	A	5	92	25	4	21	23
	B	7	37	25	3	22	59
	C	11	57	25	2	23	40
	D	5	54	25	0	25	46
	E	4	26	25	1	24	92
	F	3	4	25	0	25	100
	G	1	21	25	0	25	100
	H	2	6	25	2	23	100
461	A	61	309	125	23	102	33
	B	50	222	125	10	115	52
	C	37	382	125	15	110	29
	D	31	234	125	8	117	50
	E	44	111	125	0	125	100
	F	26	33	125	0	125	100
	G	37	54	125	1	124	100
	H	30	11	125	0	125	100
462	A	51	287	120	14	106	37
	B	54	145	120	9	111	77
	C	42	283	120	13	107	38
	D	43	192	120	1	119	62
	E	62	88	120	0	120	100
	F	26	29	120	0	120	100
	G	38	64	120	2	118	100
	H	26	22	120	0	120	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%) ^b
				Total	Landowner ^a	General lottery	
463	A	11	89	30	6	24	27
	B	8	46	30	3	27	59
	C	8	74	30	4	26	35
	D	13	56	30	0	30	54
	E	10	25	30	1	29	100
	F	6	8	30	0	30	100
	G	9	10	30	0	30	100
	H	8	8	30	0	30	100
464	A	19	96	40	4	36	38
	B	17	56	40	0	40	71
	C	15	113	40	0	40	35
	D	11	62	40	1	39	63
	E	17	12	40	0	40	100
	F	13	5	40	0	40	100
	G	6	12	40	0	40	100
	H	5	5	40	0	40	100
465	A	11	86	40	1	39	45
	B	19	43	40	0	40	93
	C	16	79	40	0	40	51
	D	9	40	40	0	40	100
	E	14	17	40	0	40	100
	F	10	4	40	0	40	100
	G	6	8	40	0	40	100
	H	4	0	40	0	40	100
466	A	33	188	80	15	65	35
	B	25	113	80	6	74	65
	C	21	182	80	2	78	43
	D	12	94	80	3	77	82
	E	24	25	80	1	79	100
	F	12	17	80	2	78	100
	G	28	25	80	1	79	100
	H	15	5	80	0	80	100
467	A	27	142	55	12	43	30
	B	19	80	55	5	50	63
	C	24	154	55	3	52	34
	D	13	93	55	7	48	52
	E	18	41	55	0	55	100
	F	13	18	55	0	55	100
	G	24	36	55	2	53	100
	H	21	11	55	2	53	100

Appendix C. Continued

Permit area	Time period	Registered harvest	Applicants	Permits Available			Chance of general lottery applicant being drawn (%) ^b
				Total	Landowner ^a	General lottery	
601	A	80	522	150	7	143	27
	B	40	239	150	12	138	58
	C	46	370	150	2	148	40
	D	44	311	150	1	149	48
	E	56	115	150	0	150	100
	F	30	53	150	0	150	100
	G	59	94	150	0	150	100
	H	48	29	150	2	148	100

^a Landowners were allotted up to 20% of the total permits available for each permit area and time period. Unused landowner permits were made available in the general lottery.

^b Chance of general lottery applicant being drawn assumes no hunter preference.