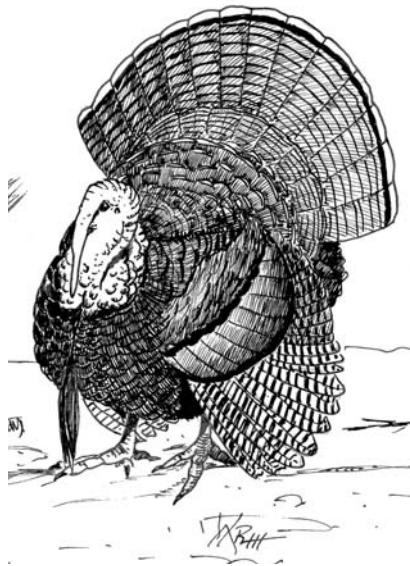


2005 FALL WILD TURKEY HARVEST REPORT



Sharon Goetz and Allison Boies
Farmland Wildlife Populations and Research Group
35365 800th Ave., Madelia, MN 56062
507-642-8478, ext. 24; sharon.goetz@dnr.state.mn.us

Introduction

In Minnesota, monitoring wild turkey harvest is an important component of population management, which includes setting permit levels for subsequent seasons. Wild turkey populations, permit levels available for the fall season, and harvest have all increased since Minnesota's first fall hunting season in 1990. Fall harvest is affected by wild turkey population size, by harvest pressure, and weather conditions during the fall hunting season.

Methods

The 2005 fall turkey season took place from 12 October through 23 October (2, 5-day periods). There were 4,410 permits available in the 24 permit areas open to fall hunting, with a total of 4,542 applicants (Table 1). Available permits increased by 30 permits from 2004 (4,380). Spring turkey hunters are required to register their bird at a designated registration station within 24 hours of harvest. During registration sex, age, and harvest date are recorded.

Results and Discussion

This year's harvest of 681 was down from 2004 (758), and from the 5-year average of 721 (Table 1). The highest harvest occurred in permit area 341 with a total of 88 turkeys registered (Table 2, Figure 1). Hunter success rate was 25% overall, which is below the long-term average of 32%. Half of the harvest occurred during Season A (October 12-16), and half during Season B (October 19-23). Hunter numbers were down 299 this year, but were still greater than the 5-year average of 2,789 fall turkey hunters. Hunter effort is one factor that impacts fall turkey harvest, and could have contributed to lower harvest levels in 2005.

Females comprised 65% of the overall reported harvest, with adult females accounting for 45% of the harvest alone (Table 3 and 4). Juveniles made up 35% of the harvest (Table 4), this is higher than 2004 (23%). Harvest age ratios are biased by hunter preference for taking adult turkeys. Also, because age data are hunter reported, some juvenile birds are likely misclassified as adults (i.e., it is assumed that hunters are more likely to report shooting an adult).

Table 1. Fall wild turkey applications, permits, harvest and adjusted hunter success rates in Minnesota, 1990-2005.

Year	# Applicants	# Permits Available	# Permits Issued	# Turkeys Registered	Hunter Success (%)¹
1990	4,522	1,000	951	326	38
1991	2,990	2,200	2,020	552	30
1992	2,782	2,200	2,028	588	32
1993	3,186	2,400	2,094	605	32
1994	3,124	2,500	2,106	601	32
1995	3,685	2,500	2,125	648	34
1996	4,453	2,500	2,289	685	33
1997	4,574	2,580	2,378	698	33
1998	4,526	2,710	2,483	828	37
1999	5,354	2,890	2,644	865	36
2000	5,263	3,090	2,484	735	33
2001	4,501	2,870	2,262	629	31
2002	5,180	3,790	2,945	594	22
2003	5,264	3,870	2,977	889	33
2004	5,878	4,380	3,277	758	26
2005	4,542	4,410	2,978	681	25

¹ Success rates adjusted using a 10% non-participation rate based on hunter survey data.

Table 2. Fall wild turkey harvest and hunter success rates by permit area, 2005.

Permit Area	# Permits Available	# Permits Issued	# Turkeys Registered	Hunter Success (%)¹
228	70	47	14	30
236	100	78	17	22
337	100	76	13	17
338	140	106	23	22
339	140	93	16	17
341	500	339	88	26
342	450	238	38	16
343	130	112	31	28
344	200	160	36	23
345	250	82	15	18
346	390	232	53	23
347	150	118	29	25
348	300	233	61	26
349	560	348	73	21
442	250	205	43	21
443	100	64	9	14
448	10	10	4	40
449	10	8	4	50
461	160	123	40	33
462	160	126	31	25
464	40	28	3	11
465	50	28	7	25
466	80	66	21	32
467	70	58	12	21
Total	4,410	2,978	681	23

¹ Success rates not adjusted for non-participants.

Table 3. Age and sex structure of fall wild turkey harvest by permit area, 2005.
Note: Age and sex are hunter reported and subject to error.

Permit Area	Male		Female		Unknown	Total
	Juvenile	Adult	Juvenile	Adult		
228	2	5	2	5	0	14
236	5	8	0	4	0	17
337	0	3	1	9	0	13
338	7	3	2	11	0	23
339	2	3	0	11	0	16
341	12	22	14	40	0	88
342	6	6	9	17	0	38
343	2	9	6	11	3	31
344	4	4	13	15	0	36
345	2	0	4	9	0	15
346	2	5	16	30	0	53
347	3	4	3	18	1	29
348	9	9	15	28	0	61
349	14	10	11	38	0	73
442	12	10	5	16	0	43
443	0	2	5	2	0	9
448	0	0	1	3	0	4
449	1	1	0	2	0	4
461	6	8	10	15	1	40
462	4	6	8	13	0	31
464	1	0	0	2	0	3
465	1	2	2	2	0	7
466	6	3	7	5	0	21
467	2	6	1	3	0	12
Total	103	129	135	309	5	681

Table 4. Age and sex structure of fall wild turkey harvest in Minnesota, 1990-2005.

Note: Age and sex are hunter reported and subject to error.

Year	Male			Female			Unknown Age/Sex	Total
	Juvenile	Adult	Unknown	Juvenile	Adult	Unknown		
1990	67 (21%)	83 (25%)		85 (26%)	91 (28%)			326
1991	121 (22%)	80 (15%)		211 (38%)	140 (25%)			552
1992	120 (20%)	86 (15%)		208 (35%)	174 (30%)			588
1993	110 (18%)	112 (19%)		184 (30%)	196 (32%)		3(<1%)	605
1994	105 (17%)	83 (14%)		210 (35%)	203 (34%)			601
1995	131 (20%)	136 (21%)		194 (30%)	187 (29%)			648
1996	96 (14%)	141 (20%)		224 (33%)	224 (33%)			685
1997	115 (16%)	130 (19%)		215 (31%)	238 (34%)			698
1998	152 (18%)	139 (17%)		261 (32%)	274 (33%)		2(<1%)	828
1999	141 (16%)	213 (25%)		253 (29%)	258 (30%)			865
2000	101 (14%)	175 (24%)		206 (28%)	253 (34%)			735
2001	81 (13%)	119 (19%)		178 (28%)	251 (40%)			629
2002	94 (16%)	109 (18%)	2 (<1%)	169 (28%)	205 (35%)	3 (<1%)	12 (2%)	594
2003	121 (14%)	237 (27%)		164 (18%)	347 (39%)	1 (<1%)	19 (2%)	889
2004	90 (12%)	276 (37%)		82 (11%)	296 (40%)		1 (<1%)	745
2005	103 (15%)	129 (19%)		135 (20%)	309 (45%)		5(<1%)	681

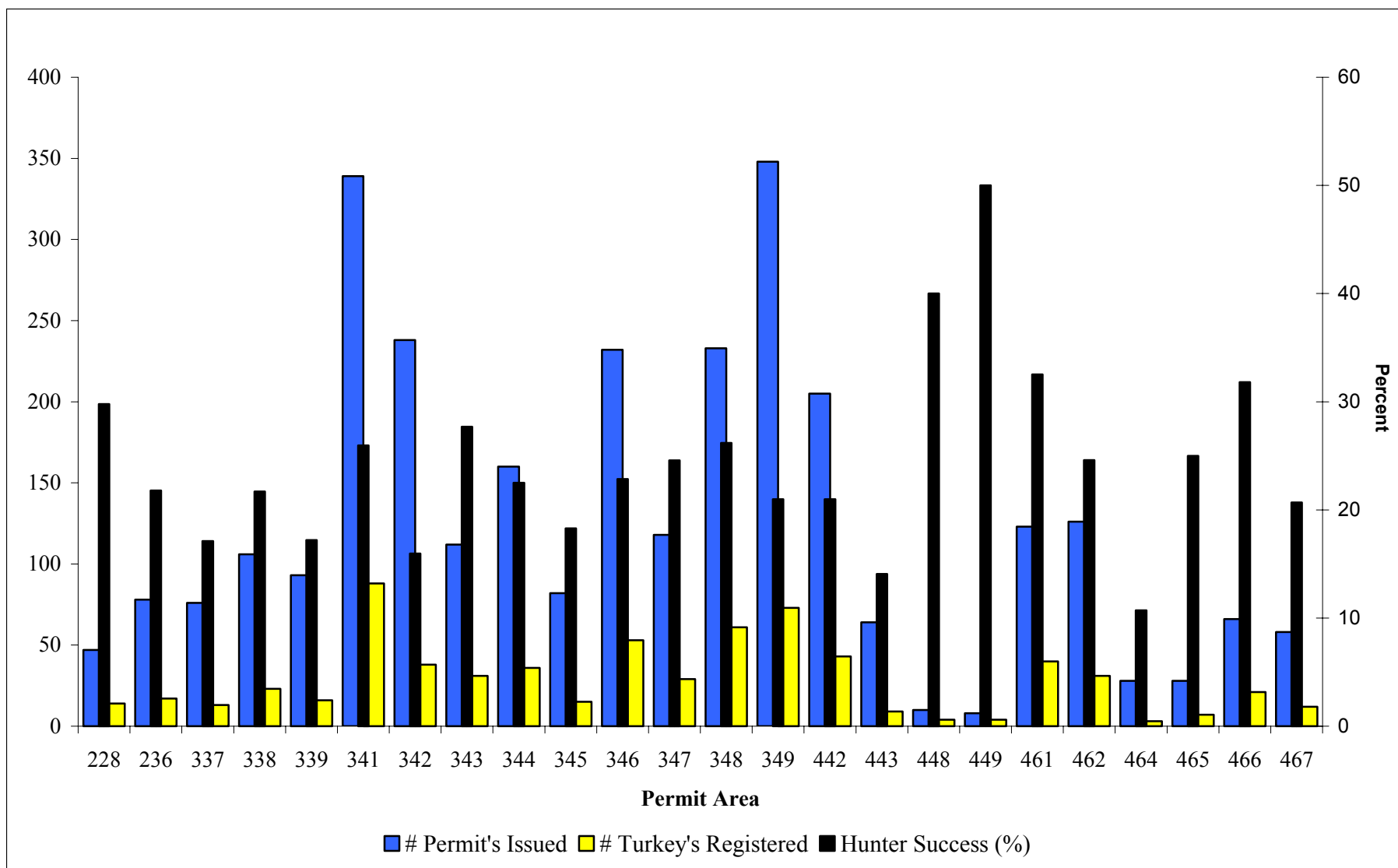


Figure 1. Total harvest, permits issued, and hunter success rate for the 2005 fall wild turkey hunting season in Minnesota.