State: <u>Georgia</u> Grant Number: <u>8-1</u> Study Number: <u>6</u>

LONG RANGE PERFORMANCE REPORT

Grant Title:	State	ate Funded Wildlife Survey							
Period Covered:	July	uly 1, 2005 - June 30, 2006							
Study Title:	Wild	Wild Turkey Production and Population Indices							
Study Objectives:	1.	To determine annually an index of statewide turkey populations and production success in Georgia.							
	2.	To organize data obtained in a form so that it can be used in sound management of turkeys in Georgia.							

Abstract

Recent analysis of long-term production data indicated that a new production index, 'Poults+Hens' instead of 'Poults/Observer' was the better predictor for Hours Hunted/Turkey Seen. Twenty-five percent fewer Poults+Hens were observed in 2005 (4,109) versus 2004 (5,596). Correspondingly, the harvest season population index (Hours Hunted/Turkey Seen) was 11% lower in 2005 (1.8) than 2004 (1.6). With the new analysis an inverse correlation coefficient of r = -0.91 was obtained between the new production index and population indices for the entire survey period which began in 1978. Hunter success increased slightly to 69.1% in 2006 from 65.4% in 2005. The average number of poults per hen was 1.5, which was down 25% from 2004.

- A. Activity:
 - Job A. <u>Turkey Production Index Survey</u> This survey was conducted during the months of May through August from 1978 to 1991. Beginning in 1991, the survey period was shortened to June through August when statistical analysis of data indicated the shorter time period was adequate. Data collection and summary for the 2005 survey period is not complete.

Cooperators involved in data collection for this survey were field personnel of the Game Management Section, Fisheries Management Section, and Law Enforcement Section of the Wildlife Resources Division. Observations were made during the course of regular field duties. No special efforts were made to locate turkeys for the survey.

Records were maintained of all turkey broods and hens, with and without broods. Data were compiled on a statewide and physiographic region basis. Historically, the

average number of poults seen per observer was the best index of production, however, recent analysis indicated this was not the case with data between 1987-2006. Currently, the best index of production data is estimated Total Poults+Hens.

Job B. <u>Turkey Hunting Population Index Survey</u> - The hunter cooperators participating in the survey were obtained from names of prospects submitted by WRD personnel and current cooperators. Cooperators were also solicited through newspaper and magazine requests and programs to interest groups. Randomly selected members of the Georgia Chapter of the National Wild Turkey Federation also were contacted to bring the total potential cooperating hunters to 2,000.

This survey is conducted during the regular spring gobbler-hunting season, which begins the first Saturday after March 19 and ends May 15. Specific information requested about each hunting trip was the date, hours hunted, county or physiographic region hunted, the number of turkeys seen, and the number of gobblers heard. Kill information was also requested, but was an optional item. Hunt record forms were supplied to all cooperators along with full instructions and a short newsletter on survey findings from previous years.

The number of turkeys observed per unit of hunting effort is used as an index of the hunting season population. The correlation between the population indices and the production indices are used in evaluating annual production and populations and in making comparisons for trends. Data were calculated on a statewide and physiographic region basis.

B. Target Date for Achievement and Accomplishments:

Job A. Planned dates and dates of accomplishment coincide, June 30, 2006.

Job B. Planned dates and dates of accomplishment coincide, June 30, 2006.

C. Significant Deviations:

Jobs A & B.

Historically, we used the primary production index of Poults/Observer to analyze against the following years harvest data of Hours Hunted/Turkey Seen as a population index. If the analysis is carried out from 1978-2006 we observe a significant trend where Significance F <0.001 and an inverse correlation factor of – 0.71, with R^2 =0.51 (that means that Poults/Observer in one year can explain 51% of the variation in the following years Hours hunted/Turkey Seen). However, if this data is observed graphically the trend appears to be chaos after about 1987-1988 (see below).



After observing this area of chaos after 1987, we performed a separate analysis on comparing the same indices 1987-2006. This new analysis was not significant with a Significance F =0.248 and an inverse correlation of -0.29, with R² =0.08 (therefore, from 1987 until now Poults/Observer has only explained 8% of the following years variation in Hours Hunted/Turkey Seen).

After observing that our original primary index for reproduction was not a good predictor, we conducted further analyses to find a more reliable predictor variable. Currently, the best predictor we have been able to utilize is the estimated Total Number of Poults and Hens for a primary index. The analysis using Total Poults+Hens vs. Hours Hunted/Turkey Seen for 1978-2006 resulted in a Significance F < 0.001 and an inverse correlation of -0.74, with $R^2 = 0.55$ (whereby the estimated Total Poults+Hens explained 55% of the variation in the following years Hours Hunted/Turkey Seen). *See the graph below.* Data is in Table 6.



However, it too was not a good predictor since 1987-1988, but it still was significant with a Significance F = 0.033 and an inverse correlation of -0.49, with $R^2 = 0.24$.

We then decided to examine the scatter plots of the data to determine possible outlier years. The scatter plot below reveals three years of data that fall well outside the trendline and can be deleted as outlier years (1986-87, 1996-1997, 2001-02). Few individuals collecting data during the 1996 Olympics could be attributed to the outlier from that year. Also the extreme drought of 1986-87 may have accounted for the data outlier. It is uncertain what may have accounted for outliers in 2001-02.

Below entire data set scatter plot:





Below is the scatter plot without the outliers and the corresponding regression analysis:

Now, the Significance F <0.001 and an inverse correlation of -0.91, with $R^2 = 0.82$ (thus, this years production data should explain 82% of the following years population data gathered from the harvest card survey).

Examination of the data without outliers for the questionable period of 1987-2006 results in the below graph and corresponding data analysis:



The Significance F <0.001 and an inverse correlation of -0.86, with R² =0.74. Therefore, the current analysis indicated estimated Total Poults+Hens was the best predictor of the following year Hours Hunted/Turkey Seen.

D. Finds:

Job A. In 2005, 248 broods were observed (Table 1). This total is substantially less than in 2004, when 354 broods were observed and even worse when compared with two years ago (2003) of 448 and three years ago (2002) of 648. The average brood size of 10.0 poults is 6% less than last year's average of 10.6. Twenty-five percent fewer Poults+Hens were observed in 2005 (4,109) versus 2004 (5,596; Table 6).

Regional examination of poults/observer revealed that statewide it too was lower by 29% for 2005 (12.89) compared to 2004 (18.28;Table 3). Poults/observer was down in all physiographic regions from 2004. The index for Blue Ridge Mountains (BRM or II) and the Piedmont (III) were down greater than 34% from 2004.

The number of hens reported totaled 1,640 (Table 4). The percent of hens with poults, 37.3% was 25.3% less than the 2004 total (Table 5). The average number of poults per hen, 1.5, was down 25% from 2004 and therefore overall production was considered poor for 2005. Historically, with Georgia's expanding turkey population an average of 3 poults per hen was considered good, however, recent data with a more stable population indicates that productivity threshold of \geq 2.0 poults per hen may be an indicator of good reproductive levels.

Job B. Usable hunt data was supplied by 404 cooperators. Of these 363 came from the permanent cooperator list, 37 from the NWTF list, and 4 were new which resulted in a reporting rate (after deleting wrong addresses, deceased, quit hunting, incorrect data collection, etc.) of 36.8% and 4.2% from the permanent and NWTF list cooperators, respectively. These cooperators reported spending a total of 15,297.8 hours hunting (Table 7). The average season hunter effort was 11.3 trips totaling 37.9 hours. They reported observing 8,708 turkeys and hearing 6,775 gobblers. The statewide population index of 1.8 was 11% lower than last year (1.6 hrs hunter/turkey seen [the lower the number the greater the population]; Table 8). The effort per gobbler heard of 2.3 was 4% less than for the 2005 season (2.4; Table 8). The least hunting effort per turkey seen occurred in the Ridge and Valley and Lower Coastal Plain. The effort per gobbler heard was least in Upper and Lower Coastal Plain and highest in the Blue Ridge Mountains.

Statewide peak gobbling activity, 2.2 gobblers heard per trip, occurred during the first weekend (March 25-26). The next highest period was the first week (March 27-31) of the season with 1.8 gobblers heard per trip. All other periods averaged between 0.8 and 1.7 gobblers per trip, with the last week (May 8-12) and last day (May 15) averaging the lowest at 0.8 per trip. The greatest amount of gobbling activity was between the opening weekend and third week (April 10-14; Table 9). Even though the greatest amount of gobbling activity was the first weekend for most of the state (Regions I – Ridge and Valley, III – Piedmont, and IV – Upper Coastal Plain) the

greatest amount for Region II – Blue Ridge Mountains was the third week (April 10-14; which corresponded with the greatest number of hunting trips for that region; see tables 9 and 13), and the greatest gobbling activity for Region V- Lower Coastal Plain was the first week (March 27-31).

The statewide gobbler harvest during the first seven days of the season amounted to 37% of the total season harvest, which was greater than 2005 (29%; Table 10). Peak harvest was generally seen within the first seven days of the season in all parts of the state (Tables 11 and 12), except for in the Blue Ridge Mountains when it occurred during the third week of the season (April 10-14).

Similar to previous seasons, the greatest number of trips were made during the first seven days of the season (Tables 13 and 14). Only minor variations in hunting effort measures have occurred over the years.

Hunter success increased slightly to 69.1 % with 279 of 404 hunters reported taking or assisting in taking at least one gobbler. Of the successful hunters, 114 (28.2 %) took or assisted in taking one bird, 77 (19.1 %) took or assisted in taking two birds, and 88 (21.8 %) took or assisted in taking three birds. Cooperators reported 108 gobblers killed by companions.

The predictive model analysis uses Poults+Hens of the reproductive season during the current year to predict the following years harvest season population index of Hours Hunted/Turkey Seen, where the predictor model (1978-2006) is:

Constant + (Slope *2005 Total Poults+Hens) = 2006 Hours Hunted/Turkey Seen

Therefore:

3.3764 + (-0.00036*4,109) = 1.9 Hours Hunted/Turkey Seen in 2006.

The predicted value of 1.9 was almost exact to the actual observed value of 1.8 (2006). A relatively high inverse correlation r = -0.91 was obtained from the comparison of the new nesting season population index versus the following years harvest season population index.

Year	-	Broods	Poults				
	Total	Poult Counts	Brood Average	Est. Total			
1978	123	82	8.6	1,058			
1979	183	160	8.6	1,565			
1980	176	169	8.4	1,479			
1981	264	241	7.6	2,006			
1982	260	218	7.7	2,002			
1983	298	261	8.8	2,622			
1984	293	247	6.8	1,992			
1985	324	274	7.2	2,333			
1986	430	377	9.4	4,042			
1987	347	328	9.7	3,366			
1988	347	321	7.9	2,741			
1989	322	306	9.0	2,898			
1990	459	278	7.6	3,488			
1991	289	213	7.1	2,039			
1992	298	274	6.8	2,027			
1993	328	303	8.2	2,676			
1994	341	316	9.4	3,209			
1995	408	386	10.4	4,209			
1996	271	239	7.5	2,033			
1997	408	304	6.5	2,613			
1998	595	534	7.0	4,185			
1999	447	364	7.1	3,170			
2000	393	358	7.2	2,809			
2001	493	431	7.0	3,017			
2002	648	618	6.0	3,894			
2003	448	448	5.9	2,619			
2004	354	354	10.6	3,733			
2005	248	248	10.0	2,469			

Table 1. Turkey broods and poults observed statewide in Georgia, 1978-2005.

Month			0 /	Total		
	Ι	Π	III	IV	V	
June	9	4	12	25	10	60
July	4	9	26	20	33	92
August	22	3	25	25	21	96
Totals	35	16	63	70	64	248

Table 2. Turkey brood observations by physiographic region and month in Georgia, 2005.

¹Roman numerals correspond to physiographic regions as follows:

I - Valley and Ridge Lookout Mountain Plateau

II - Blue Ridge Mountains III - Piedmont

- IV Upper Coastal Plain V Lower Coastal Plain

Region 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 I 4.84 0 4.80 3.45 3.52 10.30 9.09 7.20 23.19 27.87 22.10 30.70 18.92 21.19 15.93 26.75 II 11.18 5.70 3.85 5.32 10.36 21.21 16.54 7.90 36.62 19.79 34.61 21.82 19.89 7.07 12.89 17.31 III 7.04 8.88 11.13 12.12 14.79 20.24 11.01 15.93 22.99 23.11 18.80 21.72 23.06 20.69 15.90 22.03 IV 3.86 5.16 5.23 7.15 11.44 9.42 8.78 15.03 23.03 11.54 12.01 12.72 10.83 7.71 7.84 14.91 V 6.28 </th <th>i nysiograph</th> <th></th>	i nysiograph																
I 4.84 0 4.80 3.45 3.52 10.30 9.09 7.20 23.19 27.87 22.10 30.70 18.92 21.19 15.93 26.75 II 11.18 5.70 3.85 5.32 10.36 21.21 16.54 7.90 36.62 19.79 34.61 21.82 19.89 7.07 12.89 17.31 III 7.04 8.88 11.13 12.12 14.79 20.24 11.01 15.93 22.99 23.11 18.80 21.72 23.06 20.69 15.90 22.03 IV 3.86 5.16 5.23 7.15 11.44 9.42 8.78 15.03 23.03 11.54 12.01 12.72 10.83 7.71 7.84 14.91 V 6.28 7.36 3.63 8.89 5.37 5.19 6.37 10.93 13.74 6.60 9.32 8.12 20.10 5.27 10.32 11.15 Statewide 7.50 6.33 7.31 8.72 10.77 13.29 10.02 13.07 <t< td=""><td>Region</td><td>1978</td><td>1979</td><td>1980</td><td>1981</td><td>1982</td><td>1983</td><td>1984</td><td>1985</td><td>1986</td><td>1987</td><td>1988</td><td>1989</td><td>1990</td><td>1991</td><td>1992</td><td>1993</td></t<>	Region	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
II 11.18 5.70 3.85 5.32 10.36 21.21 16.54 7.90 36.62 19.79 34.61 21.82 19.89 7.07 12.89 17.31 III 7.04 8.88 11.13 12.12 14.79 20.24 11.01 15.93 22.99 23.11 18.80 21.72 23.06 20.69 15.90 22.03 IV 3.86 5.16 5.23 7.15 11.44 9.42 8.78 15.03 23.03 11.54 12.01 12.72 10.83 7.71 7.84 14.91 V 6.28 7.36 3.63 8.89 5.37 5.19 6.37 10.93 13.74 6.60 9.32 8.12 20.10 5.27 10.32 11.15 Statewide 7.50 6.33 7.31 8.72 10.77 13.29 10.02 13.07 22.42 17.31 16.05 17.53 18.88 12.01 12.39 16.39	Ι	4.84	0	4.80	3.45	3.52	10.30	9.09	7.20	23.19	27.87	22.10	30.70	18.92	21.19	15.93	26.75
III 7.04 8.88 11.13 12.12 14.79 20.24 11.01 15.93 22.99 23.11 18.80 21.72 23.06 20.69 15.90 22.03 IV 3.86 5.16 5.23 7.15 11.44 9.42 8.78 15.03 23.03 11.54 12.01 12.72 10.83 7.71 7.84 14.91 V 6.28 7.36 3.63 8.89 5.37 5.19 6.37 10.93 13.74 6.60 9.32 8.12 20.10 5.27 10.32 11.15 Statewide 7.50 6.33 7.31 8.72 10.77 13.29 10.02 13.07 22.42 17.31 16.05 17.53 18.88 12.01 12.39 16.39	Π	11.18	5.70	3.85	5.32	10.36	21.21	16.54	7.90	36.62	19.79	34.61	21.82	19.89	7.07	12.89	17.31
IV 3.86 5.16 5.23 7.15 11.44 9.42 8.78 15.03 23.03 11.54 12.01 12.72 10.83 7.71 7.84 14.91 V 6.28 7.36 3.63 8.89 5.37 5.19 6.37 10.93 13.74 6.60 9.32 8.12 20.10 5.27 10.32 11.15 Statewide 7.50 6.33 7.31 8.72 10.77 13.29 10.02 13.07 22.42 17.31 16.05 17.53 18.88 12.01 12.39 16.39	III	7.04	8.88	11.13	12.12	14.79	20.24	11.01	15.93	22.99	23.11	18.80	21.72	23.06	20.69	15.90	22.03
V 6.28 7.36 3.63 8.89 5.37 5.19 6.37 10.93 13.74 6.60 9.32 8.12 20.10 5.27 10.32 11.15 Statewide 7.50 6.33 7.31 8.72 10.77 13.29 10.02 13.07 22.42 17.31 16.05 17.53 18.88 12.01 12.39 16.39	IV	3.86	5.16	5.23	7.15	11.44	9.42	8.78	15.03	23.03	11.54	12.01	12.72	10.83	7.71	7.84	14.91
Statewide 7.50 6.33 7.31 8.72 10.77 13.29 10.02 13.07 22.42 17.31 16.05 17.53 18.88 12.01 12.39 16.39	V	6.28	7.36	3.63	8.89	5.37	5.19	6.37	10.93	13.74	6.60	9.32	8.12	20.10	5.27	10.32	11.15
	Statewide	7.50	6.33	7.31	8.72	10.77	13.29	10.02	13.07	22.42	17.31	16.05	17.53	18.88	12.01	12.39	16.39

Table 3. Average number of turkey poults seen per observer (production index) in Georgia, 1978-2005. Physiographic

Table 3. Continued.

Physiographi	С												
Region	19941	9951996	51997	1998	1999	2000	2001	2002	2003	2004	2005		
Ι	38.68	66.3	32.3	20.8	42.9	30.3	33.6	48.8	47.3	40.27	34.65	28.96	
Π	20.11	22.06	16.2	13.7	21.5	19.9	37.0	32.2	23.2	13.63	23.10	14.28	
III	25.22	48.99	26.9	26.6	29.5	18.2	22.5	24.4	28.8	14.94	19.11	12.66	
IV	19.17	21.0	16.5	14.1	22.6	21.2	17.4	18.9	21.7	8.55	16.18	12.10	
V	8.00	14.83	4.5	9.1	6.2	11.0	8.1	9.6	13.9	10.86	13.42	10.36	
Statewide	20.63	31.78	18.9	16.2	22.1	17.7	18.2	21.3	24.1	13.11	18.28	12.89	

Year		Hens Reported										
	With Poults	Without Poults	Uncertain of Poults	Total								
1978	145	70	26	241								
1979	176	131	39	346								
1980	166	133	15	314								
1981	276	116	66	458								
1982	327	136	24	487								
1983	361	211	72	644								
1984	261	232	59	552								
1985	475	251	81	807								
1986	648	283	84	1,015								
1987	519	230	52	801								
1988	529	305	59	893								
1989	459	261	48	768								
1990	642	371	49	1,062								
1991	321	399	59	779								
1992	407	490	59	956								
1993	374	292	41	707								
1994	463	361	66	890								
1995	606	301	83	990								
1996	298	384	74	756								
1997	560	618	271	1,449								
1998	820	661	236	1,717								
1999	560	753	344	1,657								
2000	734	577	251	1,562								
2001	634	589	337	1,560								
2002	695	644	220	1,559								
2003	795	1,113	296	2,204								
2004	930	586	347	1,863								
2005	611	772	257	1,640								

 Table 4. Turkey hens observed with poults, without poults, and uncertain of accompanying poults statewide in Georgia, 1978-2005.

Table 5. Percent of turkey hens accompanied by poults (2nd potential population index) and the average number

Year	Percent Hens With Poults	Poults Per Hen
1978	60	4.4
1979	51	4.5
1980	53	4.7
1981	60	4.4
1982	67	4.1
1983	56	4.1
1984	47	3.6
1985	59	3.6
1986	64	4.4
1987	65	4.2
1988	59	3.1
1989	60	3.8
1990	60	3.3
1991	41	2.6
1992	43	2.1
1993	56	3.8
1994	56	3.6
1995	61	4.3
1996	39	2.7
1997	39	1.8
1998	48	2.4
1999	34	1.9
2000	47	1.8
2001	41	2.2
2002	45	2.5
2003	36	1.2
2004	50	2.0
2005	37	1.5

of poults per hen statewide in Georgia, 1978-2005.

Population	Nesting	Statewide	
Index	Season	Poults+Hens	
	1978	1,299	
	1979	1,911	
	1980	1,793	
	1981	2,464	
	1982	2,489	
	1983	3,266	
	1984	2,544	
	1985	3,140	
	1986	5,057	
	1987	4,167	
	1988	3,634	
	1989	3,666	
	1990	4,550	
	1991	2,758	
	1992	2,983	
	1993	3,383	
	1994	4,099	
	1995	5,199	
	1996	2,789	
	1997	4,062	
	1998	5,902	
	1999	4,827	
	2000	4,371	
	2001	4,577	
	2002	5,453	
	2003	4,823	
	2004	5,596	
	2005	4,109	

Table 6. Estimated Total Poults + hens population indices in Georgia, 1978-2006.

Item		Pł	ysiographic H	Region ¹		
	Ι	II	III	IV	V	Statewide
Total Hunters	50	24	236	168	48	404**
Total Hours	1,225.5	522	7,684.75	4,516.55	1,349	15,297.8
Total Trips	394	152	2,117	1,427	458	4,548
Avg. Hours	24.5	21.2	32.6	26.9	28.1	37.9
Avg. Trips	7.9	6.3	9.0	8.5	9.5	11.3
Avg. Hrs./Trip	3.1	3.4	3.6	3.2	2.9	3.4
Total Turkeys Seen	1,040	262	3,410	2,854	1,142	8,708
Hrs./Turkeys Seen	1.2	2.0	2.3	1.6	1.2	1.8
Total Gobblers Heard	560	163	2,872	2,386	794	6,775
Hrs./Gobbler Heard	2.2	3.2	2.7	1.9	1.7	2.3
Total Kill*	59	13	248	209	80	609
Companion Killed	9	1	41	42	15	108
Hours/Kill	20.8	40.2	31.0	21.6	16.9	25.1

Table 7. Summary of turkey hunter cooperator data in Georgia, 2006.

¹Roman numerals correspond to physiographic regions as follows:

I - Ridge and Valley

- II Blue Ridge Mountains
- III Piedmont
- IV Upper Coastal Plain
- V Lower Coastal Plain

*includes both gobblers taken and assisted in taking

** less than Regions summed because some hunters hunted in more than one Region

Population	Hunt		Phys	iographic Re	egion		
Index	Season	Ι	Π	III	IV	V	Statewide
Hours/Turkey	1979	20.5	3.5	2.9	3.1	2.8	3.0
Seen	1980	1.6	6.0	2.9	2.6	2.4	3.1
	1981	1.5	4.7	2.2	3.2	2.8	2.5
	1982	2.2	5.0	2.8	3.3	1.8	2.9
	1983	2.5	3.1	2.2	2.0	1.9	2.3
	1984	2.2	4.1	2.4	1.6	1.5	2.3
	1985	2.3	3.4	2.6	2.5	3.5	2.6
	1986	3.2	4.6	2.3	2.0	3.4	2.5
	1987	4.1	2.9	2.6	1.7	2.1	2.4
	1988	1.0	2.9	1.9	1.6	2.1	1.8
	1989	1.7	2.3	2.3	1.6	1.2	1.9
	1990	1.8	2.8	2.0	1.9	1.7	2.0
	1991	1.6	2.3	2.0	1.7	1.8	1.9
	1992	1.4	2.7	2.4	1.7	2.3	2.1
	1993	2.0	4.0	2.5	1.6	1.6	2.1
	1994	2.4	2.2	2.1	1.6	1.4	1.9
	1995	1.7	2.2	2.4	1.8	2.0	2.1
	1996	1.2	1.8	1.6	1.6	1.5	1.5
	1997	1.0	2.1	1.8	1.5	1.3	1.6
	1998	1.0	1.9	1.9	1.7	1.4	1.7
	1999	0.9	2.7	1.5	1.4	1.5	1.4
	2000	1.4	2.3	2.0	1.5	1.5	1.7
	2001	4.2	3.4	1.3	1.7	1.4	1.7
	2002	3.9	3.7	1.2	2.2	1.9	2.6
	2003	1.5	1.8	1.6	1.4	1.5	1.5
	2004	1.1	2.2	1.7	1.2	1.3	1.4
	2005	1.1	2.7	2.2	1.4	1.2	1.6
	2006	1.2	2.0	2.3	1.6	1.2	1.8

Table 8. Turkey hunting population indices in Georgia, 1979-2006.

Table 8. Contin	ued.						
Population	Hunt		Phys	iographic R	egion		
Index	Season	Ι	II	Ĩ	IV	V	Statewide
Hours/Gobbler	1979	50.7	7.3	3.3	2.1	1.8	3.2
Heard	1980	2.9	4.7	3.4	2.9	9.1	3.4
	1981	2.9	4.4	3.0	2.3	2.0	2.9
	1982	3.1	3.6	3.0	2.3	2.3	2.9
	1983	4.4	2.8	3.3	2.0	2.4	2.8
	1984	3.1	5.2	3.3	1.8	1.4	3.0
	1985	2.4	4.2	2.9	1.8	3.0	2.6
	1986	2.6	3.4	2.1	1.3	1.6	2.0
	1987	2.2	5.2	2.4	1.7	2.0	2.4
	1988	1.5	2.6	2.7	1.4	1.6	2.2
	1989	2.1	2.1	2.1	1.5	2.1	1.9
	1990	2.3	4.2	2.5	1.7	1.7	2.2
	1991	2.7	5.5	2.7	2.0	2.9	2.7
	1992	2.4	4.2	2.9	1.8	1.6	2.6
	1993	3.2	6.3	3.6	2.1	2.7	3.1
	1994	3.4	6.1	3.5	1.9	2.2	2.9
	1995	2.0	3.3	2.5	1.9	2.1	2.3
	1996	3.3	3.5	2.7	2.0	2.1	2.5
	1997	2.3	5.6	2.2	1.6	2.2	2.2
	1998	2.5	4.1	2.7	1.9	2.1	2.4
	1999	2.7	3.7	2.8	1.7	2.0	2.4
	2000	2.1	3.8	2.2	1.8	1.8	2.1
	2001	4.8	5.4	1.8	2.4	2.7	2.4
	2002	4.2	4.9	1.6	2.8	2.6	3.2
	2003	1.9	2.0	1.8	2.1	1.8	1.9
	2004	2.0	4.2	2.4	1.6	1.7	2.0
	2005	2.5	4.3	2.9	1.8	1.9	2.4
	2006	2.2	3.2	2.7	1.9	1.7	2.3

Table 8. Cor	ntinued.						
Population	Hunt		Phys	iographic R	egion		
Index	Season	Ι	II	Ĩ	IV	V	Statewide
Hours/Gobbl	er 1979	96.5	79.8	35.1	27.5	23.3	35.7
Killed	1980	13.2	35.7	39.6	35.8	19.1	35.9
	1981	10.7	29.5	31.0	29.9	23.0	30.7
	1982	25.5	90.3	29.7	30.0	19.0	31.3
	1983	30.9	29.7	27.8	28.3	22.6	27.4
	1984	31.1	45.8	35.3	31.4	12.8	34.0
	1985	22.2	48.2	38.7	24.0	32.4	33.6
	1986	23.0	42.1	28.6	21.9	16.0	26.7
	1987	35.4	68.3	30.4	25.8	32.1	32.1
	1988	17.6	25.3	35.9	18.9	18.7	28.0
	1989	22.6	41.4	29.8	17.0	21.1	24.8
	1990	29.8	55.2	29.3	26.4	16.3	28.3
	1991	42.7	48.4	36.9	24.7	23.2	33.9
	1992	44.9	49.4	45.3	20.9	22.0	36.7
	1993	32.2	46.5	46.0	19.8	38.7	34.9
	1994	36.2	42.0	36.9	20.9	18.7	30.1
	1995	25.4	29.9	25.3	18.6	18.7	22.7
	1996	28.9	34.1	29.3	25.9	26.0	26.8
	1997	28.7	38.8	31.9	19.6	20.7	27.7
	1998	29.2	35.8	29.2	23.3	19.0	26.3
	1999	28.0	50.6	33.6	19.1	24.2	27.8
	2000	27.8	34.0	28.5	22.9	23.0	26.4
	2001	60.6	48.3	22.6	25.7	23.2	27.9
	2002	59.7	43.6	21.1	27.6	19.2	34.2
	2003	21.6	22.8	26.7	26.4	25.4	25.7
	2004	21.5	44.6	27.4	18.5	21.2	23.4
	2005	26.3	42.3	31.0	18.0	18.1	24.4
	2006	20.8	40.2	31.0	21.6	16.9	25.1

Da	ate	Physiographic Region					
Weekend	Weekday	Ι	II	III	IV	V	
3/25-3/26		2.1	1.4	2.1	2.2	2.2	2.2
	3/27-3/31	1.3	1.0	1.7	2.0	2.3	1.8
4/01-4/02		1.8	1.4	1.6	1.7	2.0	1.7
	4/03-4/07	1.2	0.8	1.3	1.6	1.8	1.4
4/08-4/09		1.8	1.5	1.2	1.7	1.8	1.5
	4/10-4/14	1.3	2.1	1.4	2.1	1.9	1.7
4/15-4/16		0.4	1.3	1.2	1.6	1.5	1.3
	4/17-4/21	1.4	1.4	1.0	1.2	1.6	1.2
4/22-4/23		1.1	0.7	1.2	1.4	1.6	1.2
	4/24-4/28	1.1	0.7	1.2	1.3	1.0	1.2
4/29-4/30		0.7	0.4	1.0	1.0	1.7	1.0
	5/01-5/05	1.4	0.5	0.8	1.2	1.1	1.0
5/06-5/07		2.3	1.3	0.8	1.5	1.0	1.1
	5/08-5/12	1.6	0.4	0.8	0.7	0.9	0.8
5/13-5/14		1.3	1.2	0.9	0.9	1.9	1.0
	5/15	0.0	0.7	0.6	1.4	1.0	0.8
Season		1.4	1.1	1.4	1.7	1.7	1.5

Table 9. Number of turkey gobblers heard per hunting trip in Georgia, 2006.

Table 10. Chronological summary of turkey gobbler harvest in Georgia, 2006.

Date		Gobblers	% of Seas	son Kill*
Weekend	Weekday	Killed	Date	Cumulative
3/25-3/26		144	24	24
	3/27-3/31	78	13	37
4/01-4/02		54	9	46
	4/03-4/07	46	8	54
4/08-4/09		31	5	59
	4/10-4/14	52	9	68
4/15-4/16		31	5	73
	4/17-4/21	42	7	80
4/22-4/23		19	3	83
	4/24-4/28	23	4	87
4/29-4/30		11	2	89
	5/01-5/05	23	4	93
5/06-5/07		19	3	96
	5/08-5/12	22	4	100
5/13-5/14		7	1	101
	5/15	7	1	102
Total		609	102	102

*over 100% because of rounding

Da	ites		Phys	Statewide			
Weekend	Weekday	Ι	II	ÎII	IV	V	
		1.5	2	~ =	10	10	1.4.4
3/25-3/26		15	2	65	49	13	144
	3/27-3/31	9	1	30	27	11	78
4/01-4/02		6	0	20	22	6	54
	4/03-4/07	5	2	18	14	7	46
4/08-4/09		4	0	12	9	6	31
	4/10-4/14	3	3	21	18	7	52
4/15-4/16		1	0	16	12	2	31
	4/17-4/21	5	1	19	9	8	42
4/22-4/23		1	0	7	6	5	19
	4/24-4/28	1	1	12	8	1	23
4/29-4/30		3	0	2	4	2	11
	5/01-5/05	2	0	9	8	4	23
5/06-5/07		1	1	5	10	2	19
	5/08-5/12	2	2	9	7	2	22
5/13-5/14		0	0	2	2	3	7
	5/15	1	0	1	4	1	7
Season		59	13	248	209	80	609

Table 11. Chronological distribution of turkey gobbler harvest by physiographic region in Georgia, 2006.

Table 12. Chronological distribution of turkey gobbler harvest (%) by physiographic region in Georgia, 2006.

Da	ite		Physiographic Region			Statewide	
Weekend	Weekday	Ι	Π	III	IV	V	
							.
3/25-3/26		25	15	26	23	16	24
	3/27-3/31	15	8	12	13	14	13
4/01-4/02		10	0	8	11	8	9
	4/03-4/07	8	15	7	7	9	8
4/08-4/09		7	0	5	4	8	5
	4/10-4/14	5	23	8	9	9	9
4/15-4/16		2	0	6	6	3	5
	4/17-4/21	8	8	8	4	10	7
4/22-4/23		2	0	3	3	б	3
	4/24-4/28	2	8	5	4	1	4
4/29-4/30		5	0	1	2	3	2
	5/01-5/05	3	0	4	4	5	4
5/06-5/07		2	8	2	5	3	3
	5/08-5/12	3	15	4	3	3	4
5/13-5/14		0	0	1	1	4	1
	5/15	2	0	0	2	1	1

Da	ites		Phy	siographic Reg	Statewide		
Weekend	Weekday	Ι	II	III	IV	V	
			_	• • •	100		
3/25-3/26		51	7	240	180	35	513
	3/27-3/31	70	13	298	218	58	657
4/01-4/02		31	8	171	125	42	377
	4/03-4/07	33	16	197	160	75	481
4/08-4/09		20	8	108	86	23	245
	4/10-4/14	38	18	217	137	48	458
4/15-4/16		15	9	119	61	19	223
	4/17-4/21	25	13	114	76	32	260
4/22-4/23		15	9	96	45	20	185
	4/24-4/28	14	9	125	74	19	241
4/29-4/30		14	5	82	47	11	159
	5/01-5/05	25	12	95	69	21	222
5/06-5/07		4	6	84	41	19	154
	5/08-5/12	23	11	89	62	23	208
5/13-5/14		12	5	61	32	9	119
	5/15	4	3	21	14	4	46
Season		394	152	2,117	1,427	458	4,548

Table 13. Chronological distribution of turkey hunting trips by physiographic region in Georgia, 2006.

Table 14. Chronological distribution of turkey hunting trips (%) by physiographic region in Georgia, 2006.

Dates			Physiographic Region			St	Statewide	
Weekend	Weekday	Ι	II	III	IV	V		
2/25 2/26		10	~	11	12	0	11	
3/25-3/26		13	5	11	13	8	11	
	3/27-3/31	18	9	14	15	13	14	
4/01-4/02		8	5	8	9	9	8	
	4/03-4/07	8	11	9	11	16	11	
4/08-4/09		5	5	5	6	5	5	
	4/10-4/14	10	12	10	10	11	10	
4/15-4/16		4	6	6	4	4	5	
	4/17-4/21	6	9	5	5	7	6	
4/22-4/23		4	6	5	3	4	4	
	4/24-4/28	4	б	б	5	4	5	
4/29-4/30		4	3	4	3	2	3	
	5/01-5/05	6	8	4	5	5	5	
5/06-5/07		1	4	4	3	4	3	
	5/08-5/12	6	7	4	4	5	5	
5/13-5/14		3	3	3	2	2	3	
	5/15	1	2	1	1	1	1	