LONG RANGE PERFORMANCE REPORT

Grant Title: State Funded Wildlife Survey

Period Covered: July 1, 2010 - June 30, 2011

Study Title: 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

Twenty-nine percent more Poults+Hens were observed in 2010 (4,800) versus 2009 (3,709), compared to the same value for harvest season population index (Hours Hunted/Turkey Seen) in 2011 (1.7) as 2010 (1.7), and the exact same as what was predicted. An inverse correlation coefficient of r = -0.90 was obtained between the new production index and population indices for the entire survey period which began in 1978. Hunter success (67.4%) was similar to past seasons (2010 = 67.3%, 2009 = 64.3% and 2008 = 66.8%). The average number of poults per hen was 1.9, which was up 76% from 2009 (which was tied with 2007 for the worst season ever).

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.

Cooperators involved in data collection for this survey were field personnel of the Game Management Section, Fisheries Management Section, Non-Game Section, and Law Enforcement Section of the Wildlife Resources Division. We have also obtained cooperators from the Georgia Forestry Commission. 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. Starting in 1990, 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.

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, November 2, 2010.

Job B. Planned dates and dates of accomplishment coincide, August 31, 2011.

C.   Significant Deviations:

Job A. None

Job B. None

D.   Finds:

Job A. In 2010, 356 broods were observed (Table 1). This total is more than in 2009 (308 broods were observed), the best since 2006 and 8% greater than the 5-year average (330, 2005-09). The average brood size for 2010 was 8.9 poults 41% more than the 2009 average of 6.3, and 6% greater than the 5-year average (8.4). Twenty-nine percent more Poults+Hens were observed in 2010 (4,800) versus 2009 (3.709; Table 6), and 5% greater than the 5-year average (4,570). The total number of poults observed/estimated was 3,164 and was 63% more than 2009 (1,943), and 15% greater than the 5-year average (2,748).

Examination of poults/observer revealed that statewide it too was more by 82% for 2010 (16.4) compared to 2009 (9; Table 3), and 29% greater than the 5-year average (12.76). Poults/observer was up in all physiographic regions from 2009 except for Ridge and Valley (decreased by 35%). The index for Upper and Lower Coastal Plain (UCP [IV] and LCP [V]) increased greater than 78 % from 2009. Piedmont (III) and Blue Ridge mountains (II) were up greater than 23% over 2009.

The number of hens reported totaled 1,636 (Table 4) and was down 10% from the 5-year average (1,821). The percent of hens with poults (46%) was 34% more than the 2009 (Table 5) and 18% greater than the 5-year average (39%). The average number of poults per hen, 1.9, increased by 76% from 2009 and 27% greater than the 5-year average (1.5) and therefore production was considered fair for 2010. 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.

Gobblers observed was down in 2010 (653) by 31% from 2009 (952), and down by 13% from the 4-year average (754, 2006-09, Table 7). The hen:gobbler ratio observed in 2010 (2.5) was up 32% from 2009 (1.9), and almost equal to the 4-year average (2.6, Table 8).

Job B. Usable hunt data was supplied by 457 cooperators (above the 5-year average of 440). Of these, 430 came from the permanent cooperator list and 27 from the NWTF list which resulted in a reporting rate (after deleting wrong addresses, deceased, quit hunting, incorrect data collection, etc.) of 37.7% and 3.5% from the permanent and NWTF list cooperators, respectively. These cooperators reported spending a total of 16,327.5 hours hunting (which is above the 5-year average of 16,194.6; Table 9). The average season hunter effort was 10.2 trips (which is less than the 5-year average of 10.8) totaling 35.7 hours (which is less than the 5-year average of 36.8). They reported observing 9,579 turkeys (which is less than the 5-year average of 9,762) and hearing 7,517 gobblers (which is less than the 5-year average of 7,682). The statewide population index of 1.7 was the same as last year (and the 5-year average of 1.7; Table 10). The effort per gobbler heard of 2.2 was 18% worse than last year (1.8 = 2010) and slightly less than the 5-year average of 2.1, which corresponds with the 24.3 hours/turkey harvested being 13% worse than last year (21.2, 2010, but similar to the 5-year average of 24.1; Table 10). The least hunting effort per turkey seen occurred in the Ridge and Valley, Upper and Lower Coastal Plain. The effort per gobbler heard was least in Upper and Lower Coastal Plain and greatest in the Blue Ridge Mountains.

Statewide peak gobbling activity, 2.5 gobblers heard per trip, occurred during the first (March 26-27) weekend (which is equal to the 5-year average for the first week of 2.5). The next highest period recorded 2.1 gobblers heard per trip was the second weekend (April 2-3). This season there were 2 periods with greater than or equal to 2.0 gobblers heard per trip, whereas last year there were 6. For most of the state the

greatest amount of gobbling activity was the first 7 days (Mar 26 – April 1) and the 7-day period of April 2- April 8 (the second week of the season; Table 11). Peaks of gobbling by region occurred during the first and sixth weekends (2.2 gobblers heard/hour; March 26-27 and April 30-May 1) for the Ridge and Valley, the third weekend (1.6 gobblers heard/hour; April 9-10) for the Blue Ridge Mountains, the first weekend for the Piedmont (2.4 gobblers heard/hour; March 26-27), first weekend for the Upper Coastal Plain (2.6 gobblers heard/hour; March 26-27), and the first weekend for the Lower Coastal Plain (3.1 gobblers heard/hour; March 26-27).

The statewide gobbler harvest during the first seven days of the season amounted to 30% of the total season harvest (which is just slightly less than the 5-year average of 32 %; Table 12). Peak harvest was generally seen within the first seven days of the season in all parts of the state, except for the Blue Ridge Mountains which peak harvest was from April 4-22 (Tables 13 and 14).

Similar to previous seasons, the greatest number of trips made was during the first seven days of the season (Tables 15 and 16). Only minor variations in hunting effort have occurred over the years.

Hunter success (67.4 %) was equal to last year (2010 = 67.3 %; which corresponds well with the 5-year average 67.1 % [2006-2010]; Table 17) with 308 of 457 hunters reported taking or assisting in taking at least one gobbler. Of the successful hunters, 123 (26.9 %, 5 year average was 25.6 %) took or assisted in taking one bird, 80 (17.5 %, 5 year average was 18.4 %) took or assisted in taking two birds, and 105 (23.0%, 5 year average was 23.1 %; Table 18) took or assisted in taking three birds. Cooperators reported 183 gobblers killed by companions (which is greater than the 5-year average of 156).

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 (1978-2011) is:

Constant + (Slope *2010 Total Poults+Hens) = 2011 Hours Hunted/Turkey Seen

Therefore:

3.3190 + (-0.00034*4,800) = 1.7 Hours Hunted/Turkey Seen in 2011.

After the production data from 2010 was entered and updated the model, the prediction for the 2011 harvest season was 1.7 hours hunted per turkey seen, which is what was observed. A relatively high inverse correlation r = -0.90 was obtained from the comparison of the new nesting season population index versus the following years harvest season population index.

Jobs A&B

In summary, the 2010 reproductive season was much better than 2009 (tied for worst

on record) and slightly better than the 5-year average. For the 2011 harvest season, hunters took fewer trips, hunted less hours than the 5-year average, and heard fewer gobblers than last year (2010 a record year for hearing gobblers) and the 5-year average. Hunter success and hours/turkey seen were equal to last year and the 5-year average. The hours/turkey harvested was equal to the 5-year average, but less than last year.

Hopefully, the reproduction we experienced in 2010 (while fair) will produce more 2-year olds for next spring (2012). This past spring was better than we believed it would be considering hunter success and hours to harvest a turkey. We did predict the time it would take to see a turkey and to hear a gobbler would go up based on last year being a great year for 2-year olds (thanks to the reproduction in 2008) while this past season was going to be tougher due to the terrible reproductive season a majority of the state experienced in 2009. Last year's harvest season experienced 6 periods with at least 2.0 or more gobblers heard per trip, whereas this year hunter's only experienced 2. However, many people still did very well and the percentage of hunters that took or assisted in the harvest of 3+ birds was equal to the 5-year average. All of this reveals how important the hatch is to not only the following year, but also the year after. We've had one good hatch and 2 fair hatches in the past 7 years and last year hunters saw the benefits of the good hatch (2008), this year they saw the results of a bad hatch in 2009, and hopefully next year they will see the results of last' years (2010) fair hatch. One of the most important things to consider when managing turkeys is the effect of harvest and the ability to carry over adult birds into the next year.

Weather extremes, changes in land management and human population growth rates (several GA counties ranked in the top 20 fastest growing nationwide in the past decade) have negatively impacted and likely will continue to negatively impact turkey populations.   We are losing turkey habitat and are continuing to suffer regional declines in quality and quantity of turkey habitat leading to an overall lower turkey population than occurred in the previous decade. It is becoming more common to have local population declines in certain areas of the state while others are seeing increasing populations, likely a direct result of changing habitat conditions. For these reasons it is critical that we continue to monitor turkey populations closely into the future.

E.   Recommendations:

Job A & B.   It is recommended to continue further analyses to determine if there is a better predictor than Total Poults+Hens from what is available within the long-term data.

Table 1. Turkey broods and poults observed statewide in Georgia, 1978-2010.

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
2006	426	426	8.4	3,579
2007	336	336	6.3	2,116
2008	333	333	10.9	3,635
2009	308	308	6.3	1,943
2010	356	356	8.9	3,164

Table 2. Turkey brood observations by physiographic region and month in Georgia, 2010.

Month	I	II	Region[1] III	IV	V	Total
June	11	6	28	27	20	92
July	16	15	46	32	16	125
August	29	7	54	40	9	139
Totals	56	28	128	99	45	356

[1]Roman 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

Table 3. Average number of turkey poults seen per observer in Georgia, 1978-2010

Physiographic 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	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. Continued.

Physiographic Region	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
I	38.68	66.3	32.3	20.8	42.9	30.3	33.6	48.8	47.3	40.27	34.65	28.96	52.27	30.73	21.94	36.18
II	20.11	22.06	16.2	13.7	21.5	19.9	37.0	32.2	23.2	13.63	23.10	14.28	20.92	18.43	18.60	16.65
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	15.14	13.00	11.66	11.33
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	14.62	5.30	19.61	6.97
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	9.29	3.13	14.27	2.28
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	15.88	10.00	16.04	9.01

Table 3. Continued.

Physiographic Region	2010
I	23.52
II	20.61
III	16.67
IV	12.37
V	17.62
Statewide	16.40

Table 4. Turkey hens observed with poults, without poults, and uncertain of accompanying poults statewide in Georgia, 1978-2010

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
2006	932	864	412	2,208
2007	645	928	316	1,889
2008	809	617	178	1,604
2009	607	891	268	1,766
2010	752	680	204	1,636

Table 5. Percent of turkey hens accompanied by poults (2nd potential population index) and the average number of poults per hen statewide in Georgia, 1978-2010

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
2006	42	1.6
2007	34	1.1
2008	50	2.3
2009	34	1.1
2010	46	1.9

Table 6. Estimated Total Poults + hens population indices (Production Index) in Georgia, 1978-2010

Population Index	Nesting Season	Statewide Est. 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
	2006	5,787
	2007	4,005
	2008	5,239
	2009	3,709
	2010	4,800

Table 7. Gobblers observed during Reproductive season in Georgia, 2006-2010.

Hunt	Physiographic Region					
Season	I	II	III	IV	V	Statewide
2006	67	73	189	284	155	768
2007	100	129	176	216	79	700
2008	65	106	183	203	42	599
2009	111	103	315	284	139	952
2010	73	65	193	246	76	653

Table 8. Hen:Gobbler ratio observed during Reproductive season in Georgia, 2006-2010.

Hunt	Physiographic Region					
Season	I	II	III	IV	V	Statewide
2006	4.2	3.9	3.4	2.4	2.1	2.9
2007	2.8	3.3	2.6	2.0	3.8	2.7
2008	2.2	2.7	2.2	2.4	6.8	2.7
2009	1.9	2.4	1.7	1.8	1.9	1.9
2010	2.0	2.8	2.2	1.7	6.1	2.5

Table 9. Summary of turkey hunter cooperator data in Georgia, 2011.

Item	Physiographic Region[1]					
	I	II	III	IV	V	Statewide
Total Hunters	47	31	253	170	71	457**
Total Hours	1,278.3	914	7,627.5	4,600.5	1,907.3	16,327.5
Total Trips	386	219	2,030	1,454	561	4,650
Avg. Hours	27.2	29.5	30.1	27.1	26.9	35.7
Avg. Trips	8.6	7.2	8.0	8.6	7.9	10.2
Avg. Hrs./Trip	3.3	4.2	3.8	3.2	3.4	3.5
Total Turkeys Seen	1,079	394	3,397	3,055	1,654	9,579
Hrs./Turkeys Seen	1.2	2.3	2.2	1.5	1.2	1.7
Total Gobblers Heard	588	181	3,140	2,479	1,129	7,517
Hrs./Gobbler Heard	2.2	5.0	2.4	1.9	1.7	2.2
Total Kill*	60	25	264	225	97	671
Companion Killed	12	5	51	91	24	183
Hours/Kill	21.3	36.6	28.9	20.4	19.7	24.3

[1]Roman 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

Table 10. Turkey hunting population indices in Georgia, 1979-2011.

Population Index	Hunt Season	Physiographic Region					Statewide
		I	II	III	IV	V	
Hours/Turkey Seen	1979	20.5	3.5	2.9	3.1	2.8	3.0
	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
	2007	1.2	1.6	2.0	1.5	1.0	1.6
	2008	1.2	2.2	2.2	1.9	1.6	1.9
	2009	1.0	2.7	1.8	1.3	1.0	1.5
	2010	1.4	1.6	2.1	1.4	1.4	1.7
	2011	1.2	2.3	2.2	1.5	1.2	1.7

Table 10. Continued.

Population Index	Hunt Season	Physiographic Region					Statewide
		I	II	III	IV	V	
Hours/Gobbler Heard	1979	50.7	7.3	3.3	2.1	1.8	3.2
	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
	2007	2.3	4.3	2.4	1.7	1.6	2.1
	2008	2.9	5.4	2.4	1.7	1.2	2.0
	2009	2.5	4.1	2.8	2.1	2.4	2.5
	2010	2.0	4.3	2.1	1.6	1.1	1.8
	2011	2.2	5.0	2.4	1.9	1.7	2.2

Table 10. Continued.

Population Index	Hunt Season	Physiographic Region					Statewide
		I	II	III	IV	V	
Hours/Gobbler Killed	1979	96.5	79.8	35.1	27.5	23.3	35.7
	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
	2007	27.0	33.4	29.9	17.8	14.5	23.1
	2008	19.6	38.7	29.9	18.6	13.2	22.4
	2009	19.4	45.7	32.6	26.3	25.0	28.7
	2010	23.1	37.1	26.4	18.2	12.3	21.2
	2011	21.3	36.6	28.9	20.4	19.7	24.3

Table 11. Number of gobblers heard per hunting trip in Georgia, 2011.

Date Weekend	Date Weekday	Physiographic Region I	II	III	IV	V	Statewide
3/26-3/27		2.2	0.8	2.4	2.6	3.1	2.5
	3/28-4/1	1.2	0.8	1.4	1.5	1.8	1.4
4/2-4/3		1.8	0.9	1.9	2.4	3.0	2.1
	4/4-4/8	1.5	0.7	1.6	1.6	2.3	1.6
4/9-4/10		1.7	1.6	1.8	1.9	1.9	1.8
	4/11-4/15	1.5	0.9	1.7	2.0	1.7	1.7
4/16-4/17		1.1	0.5	1.3	1.7	0.9	1.3
	4/18-4/22	1.4	0.8	1.4	1.5	1.7	1.4
4/23-4/24		1.9	0.9	1.2	1.5	1.5	1.4
	4/25-4/29	1.2	0.9	1.2	1.2	1.6	1.2
4/30-5/1		2.2	0.9	1.8	2.2	2.1	1.9
	5/2-5/6	1.2	0.8	0.9	1.0	1.6	1.0
5/7-5/8		1.5	0.4	1.2	1.3	1.5	1.3
	5/9-5/13	1.2	0.9	0.8	0.9	1.8	1.0
5/14-5/15		1.0	0.7	0.9	1.0	1.3	1.0
Season		1.5	0.8	1.5	1.7	2.0	1.6

Table 12. Chronological summary of gobbler harvest in Georgia, 2011.

Date Weekend	Date Weekday	Gobblers Killed	% of Season Kill* Date	Cumulative
3/26-3/27		112	17	17
	3/28-4/1	85	13	30
4/2-4/3		79	12	42
	4/4-4/8	60	9	51
4/9-4/10		34	5	56
	4/11-4/15	50	7	63
4/16-4/17		41	6	69
	4/18-4/22	48	7	76
4/23-4/24		22	3	79
	4/25-4/29	28	4	83
4/30-5/1		26	4	87
	5/2-5/6	28	4	91
5/7-5/8		21	3	94
	5/9-5/13	21	3	97
5/14-5/15		16	2	99
Total		671	99	99

*under 100% because of rounding

Table 13. Chronological distribution of gobbler harvest by physiographic region in Georgia, 2011.

Dates Weekend	Weekday	I	II	III	IV	V	Statewide
3/26-3/27		8	2	38	41	23	112
	3/28-4/1	10	2	34	30	9	85
4/2-4/3		6	2	39	23	9	79
	4/4-4/8	5	3	27	19	6	60
4/9-4/10		3	3	13	9	6	34
	4/11-4/15	6	3	17	16	8	50
4/16-4/17		0	3	20	11	7	41
	4/18-4/22	4	3	21	14	6	48
4/23-4/24		4	1	9	8	0	22
	4/25-4/29	2	1	12	9	4	28
4/30-5/1		2	0	7	13	4	26
	5/2-5/6	3	2	11	9	3	28
5/7-5/8		3	0	7	9	2	21
	5/9-5/13	3	0	4	7	7	21
5/14-5/15		1	0	5	7	3	16
Season		60	25	264	225	97	671

Table 14. Chronological distribution of gobbler harvest (%) by physiographic region in Georgia, 2011.

Date Weekend	Weekday	I	II	III	IV	V	Statewide
3/26-3/27		13	8	14	18	24	17
	3/28-4/1	17	8	13	13	9	13
4/2-4/3		10	8	15	10	9	12
	4/4-4/8	8	12	10	8	6	9
4/9-4/10		5	12	5	4	6	5
	4/11-4/15	10	12	6	7	8	7
4/16-4/17		0	12	8	4	7	6
	4/18-4/22	7	12	8	6	6	7
4/23-4/24		7	4	3	4	0	3
	4/25-4/29	3	4	5	4	4	4
4/30-5/1		3	0	3	6	4	4
	5/2-5/6	5	8	4	4	3	4
5/7-5/8		5	0	3	4	2	3
	5/9-5/13	5	0	2	3	7	3
5/14-5/15		2	0	2	3	3	2

Table 15. Chronological distribution of turkey hunting trips by physiographic region in Georgia, 2011.

Dates			Physiographic Region				Statewide
Weekend	Weekday	I	II	III	IV	V	
3/26-3/27		37	14	215	161	67	494
	3/28-4/1	49	22	222	148	63	504
4/2-4/3		34	12	210	129	48	433
	4/4-4/8	41	23	232	170	55	521
4/9-4/10		25	12	128	92	42	299
	4/11-4/15	28	12	188	107	42	378
4/16-4/17		16	11	96	68	29	219
	4/18-4/22	29	18	150	104	51	352
4/23-4/24		25	10	86	60	26	207
	4/25-4/29	23	20	112	90	36	281
4/30-5/1		10	14	82	62	25	193
	5/2-5/6	18	22	100	88	17	245
5/7-5/8		13	9	77	57	22	176
	5/9-5/13	23	10	72	67	20	194
5/14-5/15		15	10	60	51	18	152
Season		386	219	2,030	1,454	561	4,650

Table 16. Chronological distribution of turkey hunting trips (%) by physiographic region in Georgia, 2011.

Dates			Physiographic Region				Statewide
Weekend	Weekday	I	II	III	IV	V	
3/26-3/27		10	6	11	11	12	11
	3/28-4/1	13	10	11	10	11	11
4/2-4/3		9	5	10	9	9	9
	4/4-4/8	11	11	11	12	10	11
4/9-4/10		6	5	6	6	7	6
	4/11-4/15	7	5	9	7	7	8
4/16-4/17		4	5	5	5	5	5
	4/18-4/22	8	8	7	7	9	8
4/23-4/24		6	5	4	4	5	4
	4/25-4/29	6	9	6	6	6	6
4/30-5/1		3	6	4	4	4	4
	5/2-5/6	5	10	5	6	3	5
5/7-5/8		3	4	4	4	4	4
	5/9-5/13	6	5	4	5	4	4
5/14-5/15		4	5	3	4	3	3

Table 17. Turkey hunter success, 1979-2011.

Harvest Season	Statewide Hunter Success	
1979	56	
1980	63	
1981	57	
1982	61	
1983	66	
1984	65	
1985	64	
1986	73	
1987		
1988		
1989		
1990		
1991		
1992	63	
1993		
1994		
1995	70	
1996	70	
1997	70	
1998	70	
1999	67	
2000	66	
2001	47	
2002	74	
2003	68	
2004	69	
2005	65	
2006	69	
2007	68	
2008	67	
2009	64	
2010	67	
2011	67	

Table 18. Turkey hunter success (%) by number harvested and/or assisted statewide in Georgia, 1995-2011

Year	0	1	2	3+
1995	29.3	25.0	23.2	22.5
1996	30.2	26.0	20.7	23.1
1997	30.1	27.1	19.5	23.3
1998	30.4	29.4	21.1	19.1
1999	32.8	27.1	19.4	19.8
2000	34.1	23.8	30.0	10.3
2001	53.4	19.6	15.0	12.0
2002	25.8	53.8	15.7	11.8
2003	32.0	40.2	16.3	11.4
2004	30.7	25.7	18.9	24.8
2005	34.6	26.9	17.3	21.2
2006	30.9	28.2	19.1	21.8
2007	32.1	24.6	18.6	24.6
2008	33.2	26.0	17.1	23.7
2009	35.2	28.8	17.1	18.4
2010	32.7	20.4	19.9	27.0
2011	32.6	26.9	17.5	23.0