

Louisiana Gobbling Activity Survey - 2009

INTRODUCTION

Significant changes were made in hunting season structure beginning with the 1999 turkey season. The turkey season was shortened in Area A (central and south Louisiana) by 7 days and began 1 week later. In Area B the season length was unchanged but the season opened 1 week earlier. These changes were made in response to concern over high harvest rates, deteriorating habitat, and declines in some regional population indices. The goals of these changes were to reduce gobbler harvest and develop more uniform opening dates.

Since 2000, Louisiana has had a uniform opening date, with all turkey hunting areas opening the fourth Saturday in March. The opening day remains a controversial subject, with some hunters favoring an earlier opening, and others favoring a later opening. A common complaint regarding the opening day structure involves the perceived lack of gobbling activity.

In anticipation of hunter concerns about reduced gobbling activity with the later season opening in Area A, we initiated this gobbling activity survey prior to the 1999 turkey season. The goals of this survey are to monitor gobbling activity and identify active periods and trends. The survey coverage was reduced in 2009 to 1 site in each of 3 regions of the state (north, south, central).

METHODS

Survey routes were set up in areas with moderate to high turkey populations. Each survey route consisted of at least 4 stops. More stops were used provided the survey could be completed in 1 hour. At each stop the observer listened for 8 minutes and recorded the number of gobblers heard and the number of individual gobblers. Stops were located so that the same turkeys could not be heard from more than 1 stop. Stops were run in the same order each day and the survey route began at 30 minutes before sunrise. Observers were permitted to use a crow call to stimulate gobbling; however, once a gobble was heard no further calling was conducted. The survey period was March 9 – 27. Routes were run 5 days per week during the first and second weeks of the survey. Weather conditions were recorded each day.

Summary statistics were developed by Excel statistical functions. Linear and moving average trends were graphed using MS Power Point trend line function.

RESULTS AND DISCUSSION

Routes were established and run on 2 Wildlife Management Areas (WMA) and the Catahoula Ranger District of the Kisatchie National Forest in central Louisiana. Wildlife Management Areas with routes were Jackson-Bienville in northern Louisiana and Sherburne in southern Louisiana.

Gobbling activity varied among routes. Mean gobblers per stop ranged from 0.99 on Jackson-Bienville WMA to 4.63 on Sherburne WMA. Mean individual gobblers per route ranged from 1.67 on Jackson Bienville WMA to 3.38 on Sherburne WMA (Table 1 and Figs. 1-3). Gobbling activity generally increased from the first to the second week, but declined during the third week.

Weather probably influenced gobbling activity and the resulting trend. The first week of the survey (March 9-13) was characterized by relatively warm temperatures and an overcast sky and gobbling activity was low. During the second week (March 16-20) when gobbling activity increased, a cool front passed through the state and resulted in cool temperatures and clear skies. During the third week (March 23-27) of the survey gobbling activity declined and skies were generally overcast with occasional rain.

The number of gobblers heard (calls per stop) was above the long-term average for the central and south Louisiana routes despite periods of unfavorable weather conditions (Table 1 and Appendix A). Calls per stop was below the long term mean for the north Louisiana route. The average number of individual gobblers heard per route was below the long-term average for the northern and southern regions, but above average for the central region. Production indices for much of the state indicate that wild turkey production over the last three years has been relatively low and this may have contributed to the lower than average number of gobblers heard on the southern and northern routes.

Caution should be used in interpreting the data relative to gobbling peaks. The levels of gobbling activity fluctuated daily on most routes with high counts one day and often zeroes the next. Weather or other disturbance factors can have profound effects on gobbling activity on any given day. Trends and sustained high levels of gobbling activity, such as depicted by the 3-period moving average, should be used to determine gobbling activity peaks.

Table 1. Summary statistics from Louisiana gobbling activity survey, 3 March - 20 March, 2008.

Route	Dates	Stops	Days	Gobbles Per Stop				Individual Gobblers Per Route			
				Mean	SE	Range	LT Mean ¹	Mean	SE	Range	LT Mean ¹
Catahoula R.D.	3/10 – 3/27	5	14	3.2	1.30	0 – 17.0	1.96	2.79	0.89	0 – 11	1.85
Jackson-Bienville	3/9 – 3/27	5	15	0.99	0.36	0 – 4.4	2.96	1.67	0.50	0 – 5	2.38
Sherburne	3/9 – 3/26	5	13	4.63	1.36	0 – 15.8	4.19	3.38	0.17	0 – 9	4.48

¹Long-term mean (1999-2008)

Gobbling Activity Routes Catahoula Ranger District - 2009

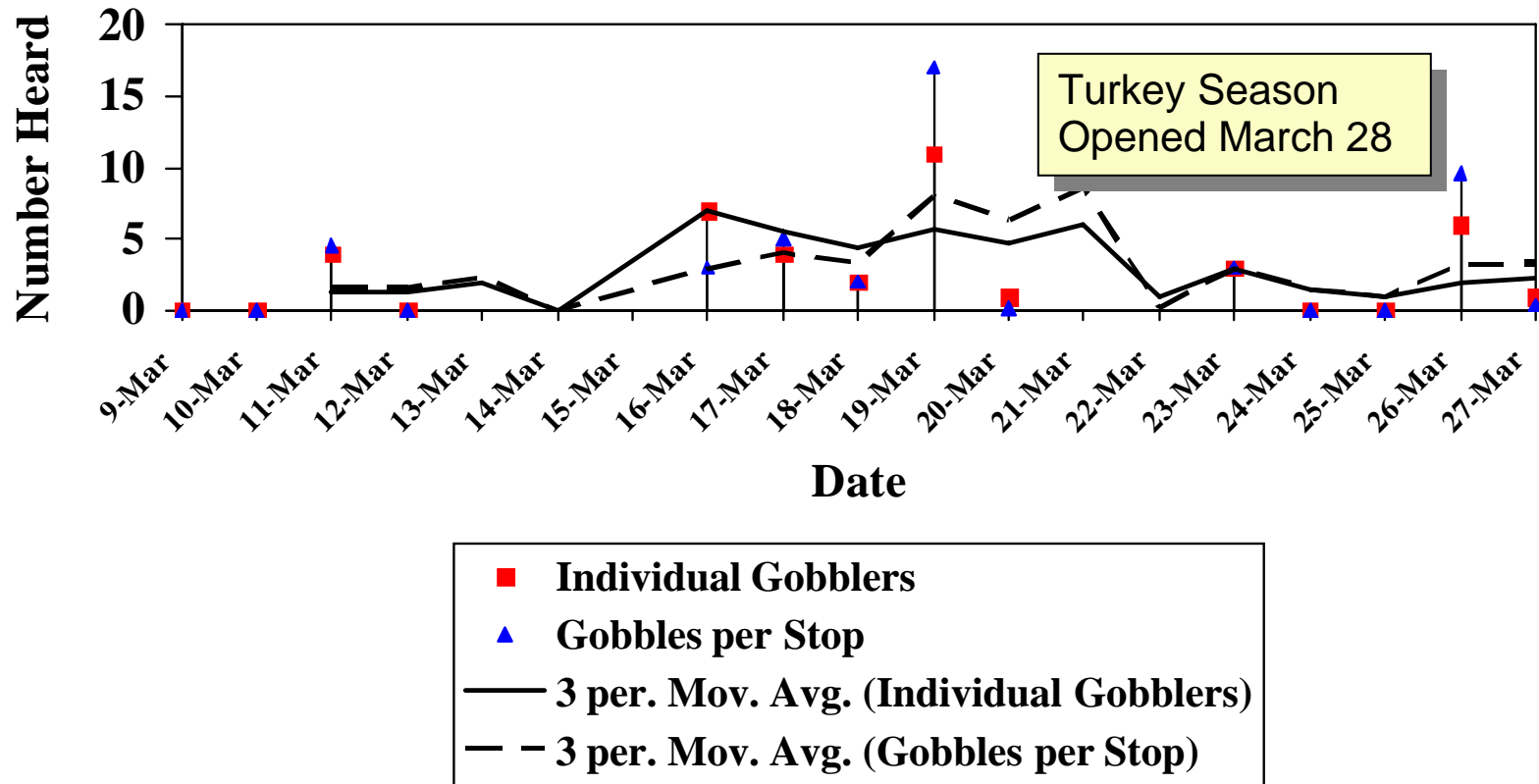


Figure 1.

Gobbling Activity Routes

Jackson-Bienville WMA - 2009

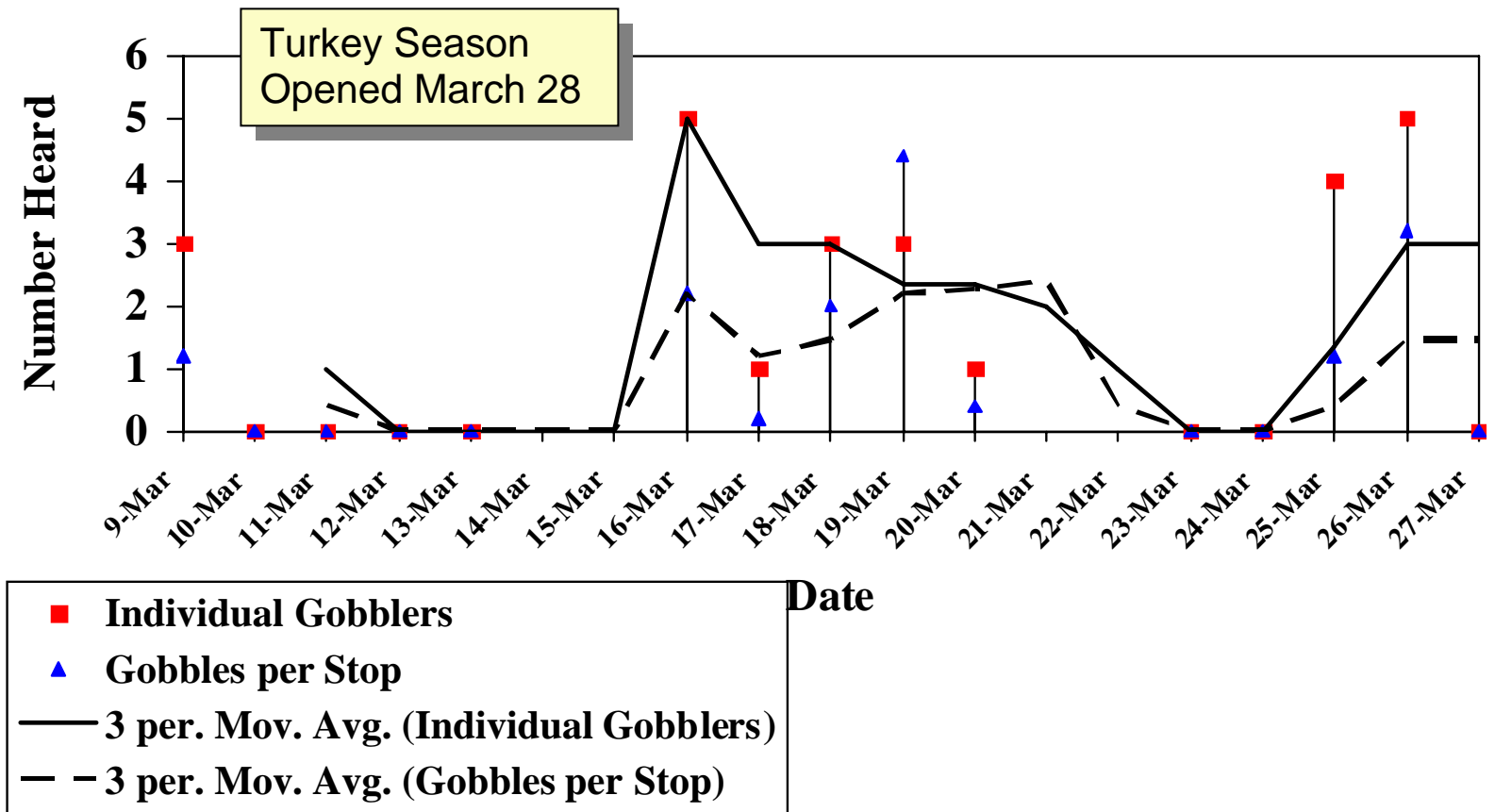


Figure 2.

Gobbling Activity Routes

Sherburne WMA- 2009

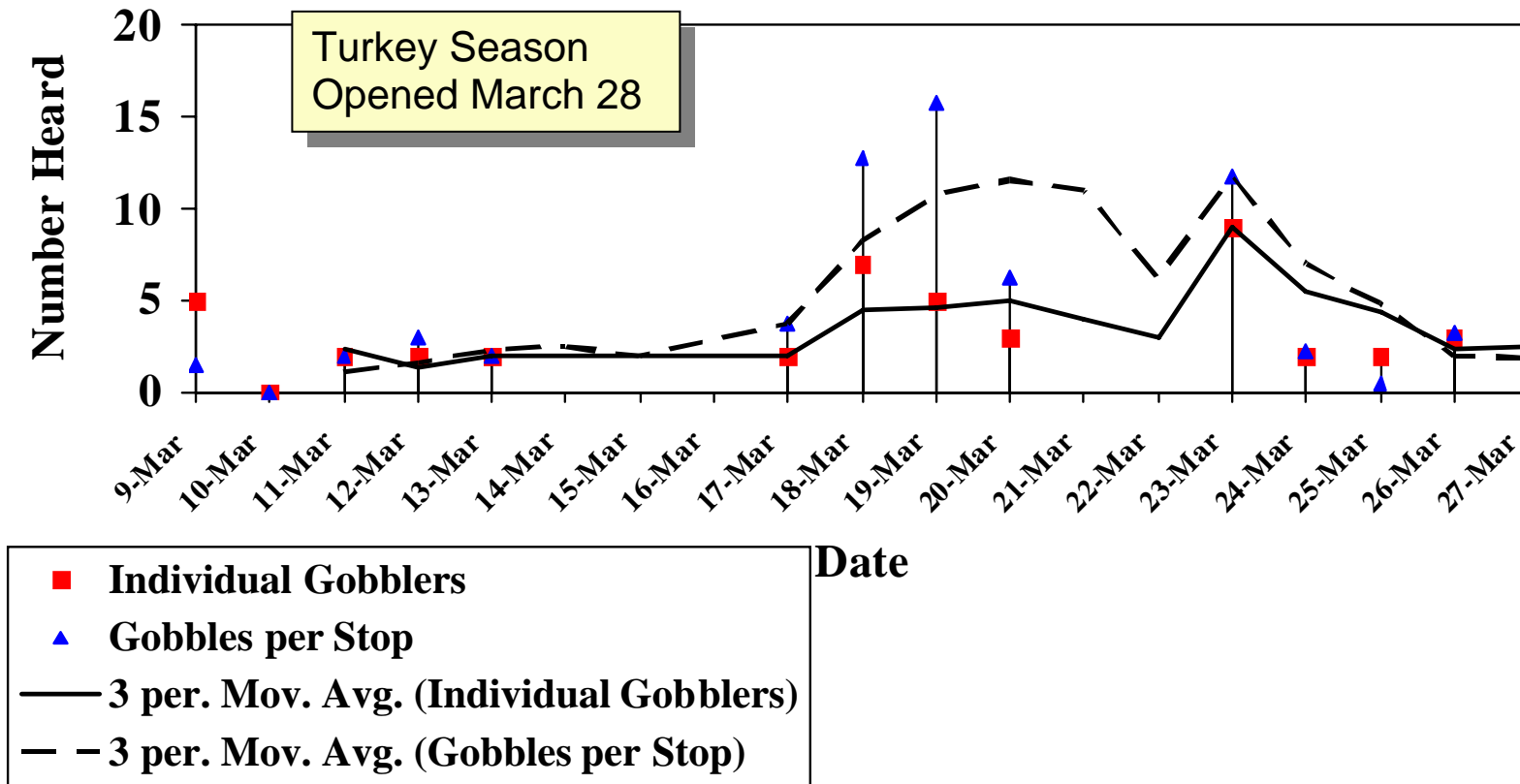


Figure 3.

Appendix A.

Amite River (Livingston Parish)

Year	Dates	Stops	<u>Gobbles Per Stop</u>			High Date	<u>Individual Gobblers</u>			High Date(s)
			Mean	SE	Range		Mean	SE	Range	
2004	3/8 - 26	4	4.48	1.05	0 - 11.5	3/20	3.3	0.61	0 - 7	3/20
2005	3/7 - 24	4	3.75	1.28	0 - 15.3	3/24	3.5	0.76	0 - 8	3/11, 3/21
2006	3/6 - 23	4	1.43	0.47	0 - 0.48	3/16	1.5	0.44	0 - 4	3/10, 3/17, 3/17
2007	3/5 - 23	4	2.8	0.95	0 - 11.8	3/23	2.43	0.55	0 - 5	3/17, 3/18, 3/22

Bens Creek WMA (Washington Parish)

Year	Dates	Stops	<u>Gobbles Per Stop</u>			High Date	<u>Individual Gobblers</u>			High Date(s)
			Mean	SE	Range		Mean	SE	Range	
1999	3/15 - 26	4	2.28	0.52	0-4.8	3/24	2.9	0.67	0 - 6	3/23, 3/24
2000	3/6 - 24	4	2.54	0.76	0 - 8.0	3/21	2.4	0.58	0 - 6	3/22, 3/23
2001	3/5 - 23	4	0.48	0.24	0 - 3.5	3/23	0.8	0.34	0 - 5	3/23
2002	3/4 - 22	4	2.20	0.80	0 - 9.0	3/19	2.2	0.63	0 - 8	3/20
2003	3/3 - 21	4	0.52	0.21	0 - 3.0	3/20	1.1	0.41	0 - 5	3/20
2004	3/8 - 26	4	0.83	0.47	0 - 7.3	3/25	0.9	0.27	0 - 3	3/25
2005	3/7 - 24	4	0.30	0.14	0 - 1.5	3/23	0.6	0.23	0 - 2	3/18, 3/22, 3/24
2006	3/6 - 23	4	0.95	0.33	0 - 4.75	3/16	1.4	0.37	0 - 5	3/16
2007	3/5 - 23	4	0.82	0.21	0 - 3.0	3/12	1.07	0.18	0 - 2	3/7, 3/8, 3/12, 3/14
2008	3/3 - 20	4	0.21	0.21	0 - 3.0	3/12	0.21	0.21	0 - 3	3/12

Big Lake WMA (Franklin, Madison, and Tensas Parishes)

Year	Dates	Stops	<u>Gobbles Per Stop</u>				<u>Individual Gobblers</u>			
			Mean	SE	Range	High Date	Mean	SE	Range	High Date(s)
2003	3/10-21	4	4.44	0.35	2.8 – 5.8	3/12	6.0	0.53	4 – 8	3/12,21
2004	3/8 – 23	4	5.19	0.99	0.7 – 9.5	3/12	9.0	1.72	1 – 16	3/23
2006	3/7 –24	5	4.97	0.77	1 – 10.4	3/15	11.2	1.41	5 - 21	3/17
2007	3/5 – 23	5	2.95	0.68	0 – 5.8	3/6,3/7	5.8	1.05	0 – 11	3/6
2008	3/3 –20	5	3.60	1.04	0 – 9.4	3/5,3/6	5.2	1.33	0 – 11	3/5,3/6,3/10

Bodcau WMA (Bossier Parish)

Year	Dates	Stops	<u>Gobbles Per Stop</u>				<u>Individual Gobblers</u>			
			Mean	SE	Range	High Date	Mean	SE	Range	High Date(s)
1999	3/15 -26	4	5.2	1.48	0 - 15.3	3/21	2.1	0.55	0 - 4	3/15, 3/18, 3/21, 3/26
2000	3/6 -24	4	4.30	1.71	0 - 21.3	3/21	2.0	0.53	0 - 6	3/21
2001	3/13 -30	4	0.65	0.40	0 - 6.0	3/23	0.7	0.28	0 - 4	3/23
2002	3/4 - 22	4	2.25	0.69	0 – 9.5	3/5	1.8	0.38	0 - 5	3/5
2003	3/3 -21	4	1.20	0.48	0 – 6.5	3/17	0.8	0.26	0 – 3	3/18
2004	3/8 – 26	4	3.12	1.19	0 – 17.3	3/16	1.5	0.36	0 – 5	3/16
2005	3/7 - 24	4	1.61	0.44	0 – 4.3	3/19, 3/24	1.5	0.37	0 - 4	3/17
2007	3/5 – 23	10	0.78	0.40	0 – 5.5	3/21	1.5	0.49	0 – 6	3/19

Boise-Vernon WMA (Vernon Parish)

Year	Dates	Stops	<u>Gobblers Per Stop</u>			High Date	<u>Individual Gobblers</u>			High Date(s)
			Mean	SE	Range		Mean	SE	Range	
2004	3/8 -26	4	4.48	1.05	0 - 11.5	3/20	3.3	0.61	0 - 7	3/20

Catahoula Ranger District (Grant and Winn Parishes)

Year	Dates	Stops	<u>Gobblers Per Stop</u>			High Date	<u>Individual Gobblers</u>			High Date(s)
			Mean	SE	Range		Mean	SE	Range	
1999	3/15 - 26	4	4.83	1.48	0 - 14	3/15	3.9	0.87	0 - 8	3/22
2000	3/6 - 24	5	0.93	0.34	0 - 4.4	3/20	1.4	0.37	0 - 4	3/13, 3/20
2001	3/6 - 30	5	4.06	1.18	0 - 12.5	3/22	3.6	0.57	0 - 6	3/11, 3/18
2002	3/4 - 22	5	3.68	0.82	0 - 11.4	3/18	3.9	0.58	0 - 7	3/18, 3/22
2003	3/3 - 20	5	0.02	0.02	0 - 0.02	3/18	0.1	0.08	0 - 1	3/18
2004	3/8 - 26	5	3.37	0.72	0 - 7.2	3/17,23	2.4	0.58	0 - 7	3/17
2005	3/7 - 24	5	0.36	0.15	0 - 1.6	3/11	0.79	0.35	0 - 4	3/11
2006	3/6 - 24	5	0.20	0.14	0 - 1.6	3/21	0.20	0.14	0 - 2	3/21
2007	-	-	-	-	-	-	-	-	-	-
2008	3/3 - 20	5	0.17	0.5	0 - 1.4	3/10	0.36	0.22	0 - 3	3/10
2009	3/9 - 27	5	3.2	1.30	0 - 17	3/19	2.7	0.89	0 - 11	3/19

Dewey Wills WMA (LaSalle Parish)

Year	Dates	Stops	<u>Gobblers Per Stop</u>			High Date	<u>Individual Gobblers</u>			High Date(s)
			Mean	SE	Range		Mean	SE	Range	
2002	3/4 - 22	4	0	0	-	-	0	0	-	-

Ft. Polk (Vernon Parish)

Year	Dates	Stops	<u>Gobbles Per Stop</u>			<u>Individual Gobblers</u>				
			Mean	SE	Range	High Date	Mean	SE	Range	High Date(s)
2002	3/4 -22	4	1.48	0.34	0 - 4.0	3/21	1.9	0.40	0 - 5	3/18
2003	3/12 -21	4	0.50	0.79	0 - 6.0	3/19	1.8	0.53	0 - 4	3/19, 3/20
2004	3/8 - 26	5	0.76	0.15	0 - 1.8	3/23	1.9	0.34	0 - 5	3/10
2005	3/7 - 24	7	0.56	0.17	0 - 2.1	3/21	2.3	0.45	0 - 6	3/21
2006	3/6 - 20	5	0.87	0.29	0 - 2.8	3/10	1.0	0.27	0 - 3	3/10
2007	3/5 - 22	5	0.54	0.28	0 - 3.8	3/14	1.36	0.40	0 - 5	3/14
2008	3/3 - 21	5	0.28	0.11	0 - 1.4	3/5	0.62	0.21	0 - 2	3/5,3/6

Grassy Lake WMA (Avoyelles Parish)

Year	Dates	Stops	<u>Gobbles Per Stop</u>			<u>Individual Gobblers</u>				
			Mean	SE	Range	High Date	Mean	SE	Range	High Date(s)
2007	3/5 - 22	5	5.76	1.04	1.4 - 15.8	3/19	5.1	0.53	2 - 8	3/6, 3/19
2008	3/3 - 20	5	2.63	0.54	0.4 - 6.2	3/19,3/20	6.4	0.54	1 - 12	3/20

Jackson-Bienville WMA (Jackson and Bienville Parishes)

Year	Dates	Stops	<u>Gobbles Per Stop</u>				<u>Individual Gobblers</u>			
			Mean	SE	Range	High Date	Mean	SE	Range	High Date(s)
1999	3/15 - 28	4	5.38	1.43	0 - 13.8	3/17	4.5	0.97	0 - 8	3/17, 3/18, 3/27
2000	3/7 - 24	4	8.17	1.22	0 - 19.3	3/20	2.2	0.36	0 - 4	3/8, 3/13
2001	3/12 -30	4	6.38	1.98	0 - 27.3	3/22	4.2	1.08	0 - 14	3/23
2002	3/4 - 22	4	1.29	0.33	0 - 4	3/20	2.0	0.42	0 - 4	3/07, 3/18, 3/20, 3/21
2003	3/3 - 21	5	0.28	0.16	0 - 2.2	3/21	0.5	0.24	0 - 3	3/4
2004	3/8 - 26	5	2.53	0.78	0 - 10.6	3/17	3.2	0.79	0 - 10	3/17
2005	3/7 - 24	4	1.46	0.43	0 - 6.5	3/24	1.79	0.43	0 - 6	3/24
2006	3/6 - 24	4	0.88	0.35	0 - 4.3	3/14	1.47	0.58	0 - 8	3/15
2007	3/5 - 23	5	1.47	0.44	0 - 6.0	3/7	2.40	0.55	0 - 6	3/23
2008	3/3 - 20	5	1.78	0.82	0 - 8.6	3/10	1.50	0.56	0 - 6	3/10
2009	3/9 - 3/27	5	0.99	0.36	0 - 4.4	3/19	1.67	0.55	0 - 5	3/16, 3/26

Mosher Hill Hunting Club (Washington Parish)

Year	Dates	Stops	<u>Gobblers Per Stop</u>			<u>Individual Gobblers</u>				
			Mean	SE	Range	High Date	Mean	SE	Range	High Date(s)
2000	3/6 - 24	4	5.21	1.23	0 - 13.5	3/20	3.2	0.55	0 - 7	3/22
2001	3/5 - 30	4	1.27	0.32	0 - 4.3	3/21	1.6	0.31	0 - 3	3/13, 3/18, 3/20, 3/21, 3/22
2002	3/4 - 22	4	2.82	0.96	0 - 10.25	3/20	2.1	0.53	0 - 6	3/20
2003	3/4 - 22	4	0.48	0.23	0 - 2.5	3/20, 3/21	0.9	0.41	0 - 5	3/21
2004	3/8 - 26	4	0.35	0.17	0 - 2	3/25	0.5	0.19	0 - 2	3/17, 3/25
2005	3/7 - 24	4	0.56	0.34	0 - 4.5	3/17	0.54	0.18	0 - 2	3/23
2006	3/6 - 23	4	1.89	0.58	0 - 7.0	3/13	1.36	0.27	0 - 3	3/10, 3/13
2007	3/5 - 23	4	3.90	0.73	0 - 9.3	3/16	2.07	0.28	0 - 4	3/13

Pomme De Terre WMA (Avoyelles Parish)

Year	Dates	Stops	<u>Gobblers Per Stop</u>			<u>Individual Gobblers</u>				
			Mean	SE	Range	High Date	Mean	SE	Range	High Date(s)
2007	3/5 - 22	4	1.82	0.67	0 - 7.5	3/15	0.86	0.23	0 - 2	3/5, 3/15, 3/19, 3/20
2008	3/3 - 20	4	0.47	0.29	0 - 4	3/5	0.28	0.16	0 - 2	3/5, 3/12

Red River WMA (Concordia Parish)

Year	Dates	Stops	<u>Gobblers Per Stop</u>			<u>Individual Gobblers</u>				
			Mean	SE	Range	High Date	Mean	SE	Range	High Date(s)
2003	3/3 - 21	4	1.58	0.44	0 - 5.0	3/12	1.0	0.28	0 - 3.0	3/12, 3/13
2004	3/8 - 26	4	5.17	1.55	0 - 16	3/11	2.7	0.70	0 - 8	3/17
2005	3/7 - 24	4	0.73	0.31	0 - 3.8	3/9	0.43	0.17	0 - 2	3/7
2006	3/6 - 23	4	2.91	0.96	0 - 11	3/15	2.14	0.51	0 - 7	3/15
2007	3/5 - 22	4	3.31	0.78	0 - 7.7	3/12	3.0	0.57	0 - 6	3/21,3/22
2008	3/3 - 16	4	2.71	1.47	0 - 19.8	3/12	2.4	0.62	0 - 8	3/12

Sherburne WMA (Pointe Coupee, St. Martin, and Iberville Parishes)

Year Range	Dates	Stops	<u>Gobbles Per Stop</u>				<u>Individual Gobblers</u>			
			Mean	SE	Range	High Date	Mean	SE	High Date	
1999	3/16 - 26	6 ^a	6.90	0.91	2.7 - 11.8	3/19	7.2	1.45	2 - 13	3/26
2000	3/6 - 23	6 ^a	5.52	1.42	0 - 15.7	3/21	7.5	1.30	0 - 15	3/23
2001	3/5 - 30	6 ^a	3.74	0.93	0 - 11.3	3/22	3.3	0.63	0 - 17	3/19
2002	3/4 - 22	7 ^a	0.57	0.35	0 - 5.0	3/7	1.0	0.52	0 - 7	3/07
2003	3/3 - 21	7 ^a	3.27	0.84	1 - 10.6	3/14	3.5	0.58	0 - 7	3/19
2004	3/8 - 26	7 ^a	7.34	1.84	0.5 - 24.4	3/17	5.1	0.80	1 - 11	3/23
2005	3/7 - 24	7 ^a	5.34	1.83	0 - 25.1	3/18	4.5	1.07	0 - 14	3/18
2006	3/6 - 24	7 ^a	3.35	1.26	0 - 19.1	3/22	3.27	0.65	0 - 9	3/22
2007	3/5 - 3/23	7 ^a	3.46	1.13	0.1 - 15.0	3/20	4.27	0.85	1 - 13	3/19
2008	3/3 - 20	4	2.43	1.07	0 - 14.0	3/12	1.79	0.66	0 - 8	3/10
2009	3/9 - 3/27	4	4.63	1.36	0 - 15.8	3/19	3.38	0.68	0 - 9	3/23

^a Consists of 2 routes of 3 and 4 stops each, run simultaneously

Sicily Island WMA (Catahoula Parish)

Year	Dates	Stops	Mean	<u>Gobbles Per Stop</u>			<u>Individual Gobblers</u>			
				SE	Range	High Date	Mean	SE	Range	High Date(s)
2003	3/4 - 21	4	3.98	1.33	0 - 14.0	3/12	4.4	1.18	0 - 13.0	3/12
2004	3/8 - 26	4	9.02	2.01	0.5 - 27.0	3/23	7.9	1.24	1 - 18	3/11
2005	3/7 - 24	5	1.36	0.45	0 - 5.6	3/24	2.71	0.81	0 - 9	3/24
2006	3/6 - 24	5	1.63	0.33	0 - 4.2	3/16	3.36	0.51	0 - 7	3/16
2007	3/5 - 23	4	5.45	1.09	0 - 13.3	3/8,3/15	5.47	0.81	0 - 10	3/8,3/15
2008	3/3 - 20	4	1.07	0.32	0 - 3.75	3/20	1.86	0.52	0 - 6	3/20

Three Rivers WMA (Concordia Parish)

Year	Dates	Stops	Mean	<u>Gobbles Per Stop</u>			<u>Individual Gobblers</u>			
				SE	Range	High Date	Mean	SE	Range	High Date(s)
2003	3/3 - 19	4	3.12	1.12	0 - 12.5	3/13	2.3	0.68	0 - 7.0	3/19
2004	3/8 - 26	4	6.17	3.11	0 - 40.0	3/24	3.2	1.08	0 - 11	3/24
2005	3/7 - 24	4	0.68	0.31	0 - 3.8	3/10	0.79	0.28	0 - 3	3/10
2006	3/6 - 24	4	3.16	0.97	0 - 12.5	3/7	1.53	0.53	0 - 6	3/10
2007	-	-	-	-	-	-	-	-	-	-
2008	3/3 - 19	4	5.69	1.91	0 - 21.3	3/13	5.69	1.67	0 - 15	3/12,3/13

Union (Union Parish)

Year	Dates	Stops	Mean	<u>Gobbles Per Stop</u>			<u>Individual Gobblers</u>			
				SE	Range	High Date	Mean	SE	Range	High Date(s)

Year	Dates	Stops	<u>Gobbles Per Stop</u>				<u>Individual Gobblers</u>			
			Mean	SE	Range	High Date	Mean	SE	Range	High Date(s)
2002	3/4 - 22	4	2.76	0.96	0 - 12.5	3/19	2.20	0.52	0 - 7	3/19
2003	3/3 - 21	5	2.23	0.66	0 - 10.0	3/17	2.73	0.53	0 - 8	3/17
2004	3/8 - 26	5	6.38	1.35	0 - 17.2	3/17	3.87	0.52	0 - 6	3/8, 16, 17, 18
2005	3/7 - 24	5	3.63	0.80	0 - 10.6	3/18	3.0	0.55	0 - 6	3/17, 3/18, 3/24
2006	3/6 - 24	5	2.09	0.99	0 - 14.2	3/15	1.93	0.52	0 - 6	3/15
2007	3/5 - 3/23	5	2.32	0.52	0 - 6.2	3/12	1.93	0.33	0 - 4	3/12, 3/20
2008	3/3 - 20	5	0.89	0.29	0 - 3.4	3/20	1.36	0.36	0 - 4	3/10

West Bay WMA (Allen Parish)

Year	Dates	Stops	<u>Gobbles Per Stop</u>				<u>Individual Gobblers</u>			
			Mean	SE	Range	High Date	Mean	SE	Range	High Date(s)
2002	3/5 - 21	4	1.37	0.62	0 - 8.25	3/20	2.0	0.68	0 - 8	3/18
2004	3/8 - 26	4	0.18	0.07	0 - 0.8	3/22	0.4	0.13	0 - 1	3/12, 13, 15, 18, 22, 23
2005	3/8 - 24	5	0.18	0.12	0 - 1.4	3/18	0.90	0.55	0 - 5	3/18
2006	-	-	-	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-	-	-
2008	3/3 - 17	5	0.62	0.26	0 - 2.6	-	1.5	0.48	0 - 4	