

2010 Lake Shelbyville Spring Gobbler Season Results

In order to obtain information on the status of Lake Shelbyville's wild turkey population as well as information on characteristics, attitudes and preferences of wild turkey hunters at Lake Shelbyville, annual spring gobbler data collection was initiated in the spring of 2007. Results are helping to focus habitat management in areas of the lake that have low populations of turkeys. Timber stand improvements (TSI) which consist of thinning the timber to enhance mast production and understory growth (150 acres in 2008, 370 acres in 2009 and 337 in 2010), nesting cover establishment, prescribed burning, wildlife plantings, and invasive species eradication (such as bush honeysuckle and autumn olive), are all being implemented on Lake Shelbyville to enhance the overall habitat.

Participation in these surveys is critical to being able to track population trends and management efforts over time. We are already starting to see some positive trends. Hunters that returned their surveys are greatly appreciated!

METHODS

The feedback form was self-administered and distributed to all hunters successfully drawing a Lake Shelbyville turkey permit (n=110). The 2 part feedback form requested information from daily hunts, opinions, and other information. Cooperators were asked to record hunting information and return their forms at the end of the season. Follow-up mailings were not attempted. Return rates were 60% (30/50) for Moultrie County and 60% (36/60) for Shelby County. Persons who returned their results are referred to as cooperators in the following tables. Results were calculated by county rather than by Lake Shelbyville as a whole due to hunters only being able to hunt portions of the lake.

RESULTS AND DISCUSSIONS

Hunter Statistics

Effort – Feedback forms were returned by 66 individuals and daily records were returned by 62. Moultrie County cooperators (n=30) reported data on 288 hours of hunting over 72 hunts. The average Moultrie hunter scouted for 4.5 days prior to the season, hunted 2.8 days and hunted approximately 4.0 hours/trip. Several cooperators did not miss a day. Hunting effort appeared to peak in season 2 (4.8 hours/hunt). Shelby County cooperators (n=32) reported data on 491.5 hours of hunting over 103 hunts. The average hunter scouted 2.9 days prior to the season, hunted 3.4 days and averaged 4.7 hours/hunt. Hunting effort appeared to peak in season 3 (6.1 hours/hunt). Decoy use was higher for Shelby hunters (90%) than Moultrie hunters (80%; Table 1).

Table 1. Hunting effort, scouting, and decoy use by County for cooperating wild turkey hunters at Lake Shelbyville.

Year	County	Hunters (n)	Hunting Days (n)	Average Hunts/Hunter	Average Hours Hunted/Day	Average Scouting Days/Season	% using Decoys
2010	Moultrie	30	72	2.8	4.0	4.5	80
2010	Shelby	32	103	3.4	4.7	2.9	90

Hunter Success. – Let me preface this by saying that a disproportionate number of successful hunters turned in their surveys. A total of 12 gobblers were killed in Moultrie County and 11 in Shelby County according to the Illinois Department of Natural Resources (IDNR) Telecheck for a success rate of 24% and 18%, respectively. However, just going by the surveys, 40% (Moultrie) and 34% (Shelby) of hunters were successful indicating a higher percentage of successful hunters returned their data sheets than unsuccessful hunters. Graph 1 shows the turkey harvest from 2007-2010 by county as reported to IDNR Telecheck. Note the 50% increase in harvest in Shelby County between 2007 and 2009 and sustained in 2010.

The following data pertains to the cooperators. During the 2010 turkey season Moultrie County had a higher success rate than Shelby County hunters but heard fewer birds. Moultrie county cooperators on average heard 2.9 gobblers, called in 1.8 gobblers, saw 1.9, and killed 0.3 birds/hunter over their season. On a per hunt basis, cooperators heard 1.2 birds, called in 0.76, saw 0.81 and killed 0.13 birds/hunt (Table 2-5). Moultrie cooperators killed 13.6% of all gobblers heard and approximately 22% of gobblers called in. Seventy three percent were killed by 800 A.M with the other 27% killed from 0900 – 1000 A.M. Age distribution for harvested birds was 30% adults and 70% juveniles. Only 13.3% of cooperators said they would/did intentionally pass a Jake.

Shelby County cooperators heard 5.06 gobblers, called in 1.6, saw 2.9, and killed 0.31 birds/hunter over their season (Table 2-5). On a per hunt basis, Shelby cooperators heard 1.6, called in 0.5, saw 0.9, and killed 0.10 gobblers/hunt. Shelby cooperators killed 6.7% of gobblers heard and approximately 21.6% of gobblers called in. Forty-five percent were killed by 8:00 A.M. and 55% between 8:00 and 11:30 A.M. Shelby County harvest was made up of 30% jakes and 70% adults. Twenty-two % of cooperators said they would intentionally pass a Jake.

Graph 1. Turkey Harvest by Year for Lake Shelbyville as reported to Telecheck. *Note 50% increase in Shelby County harvest between 2007 and 2010.*

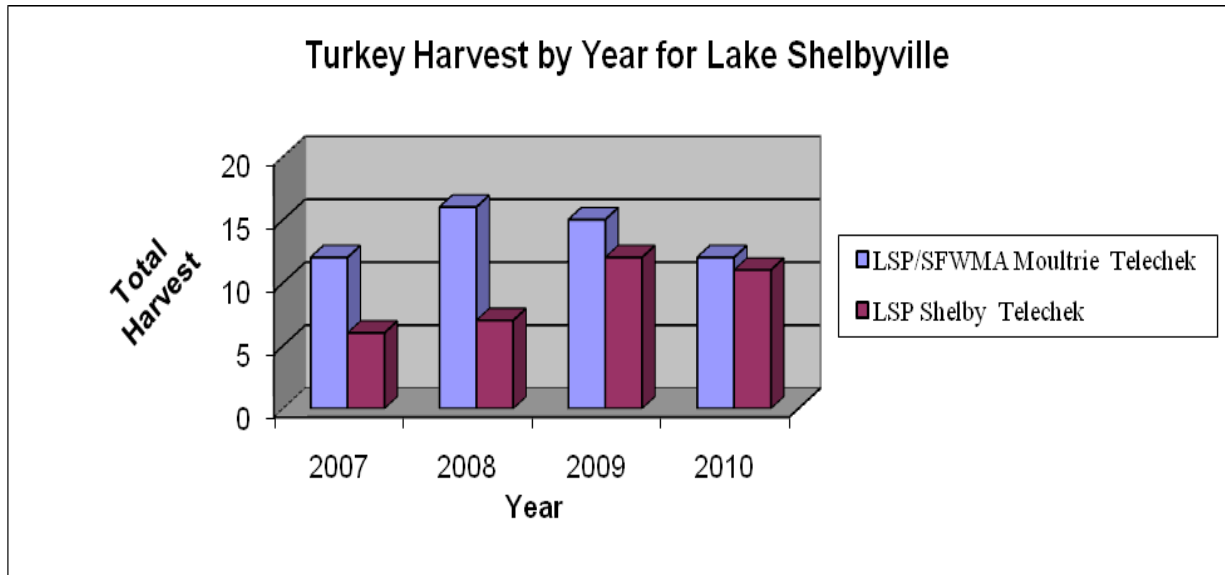


Table 2. Hunting effort (Hours/Hunt) by season for Moultrie and Shelby Counties at Lake Shelbyville.

Year	County	Season 1	Season 2	Season 3	Season 4	Season 5
2010	Moultrie	3.0	4.8	3.0	3.6	3.9
2010	Shelby	3.7	3.7	6.2	4.7	5.2

Table 3. Season gobbler statistics by County reported by cooperating wild turkey hunters at Lake Shelbyville.

Year	County	Gobblers Heard	Gobblers Called In	Gobblers Seen	Gobblers Killed	Gobblers Missed
2010	Moultrie	2.9	1.8	1.9	0.30	0.03
2010	Shelby	5.0	1.6	2.9	0.31	0.09

Table 4. Per hunt gobbler statistics as reported by cooperating wild turkey hunters by County at Lake Shelbyville.

Year	County	Gobblers Heard	Gobblers Called In	Gobblers Seen	Gobblers Killed	Gobblers Missed
2010	Moultrie	1.22	0.76	0.81	0.13	0.01
2010	Shelby	1.57	0.50	0.90	0.10	0.03

Table 5. Total Gobbler's Killed, Hunter Success, Average Distance, and Season Killed.

Year	County	Killed*	Missed	Success Rate %*	Average Shot Distance (Yards)	Season Killed*
2010	Moultrie	(10) 12	2	(40) 24%	30	1 (2), 2 (2), 3(3), 4 (0), 5 (3)
2010	Shelby	(8) 11	0	(34) 18%	28	1 (1), 2 (3), 3 (2), 4 (1), 5 (3)

Numbers in () were reported by cooperators.

Ratings

Overall, 65% (up from 58% in 2009) of Moultrie County cooperators opinions of their season were favorable with ratings of fair (24%), good (34%), and excellent (7%). However, 24% of hunters rated their season as poor. Overall favorable ratings for Shelby County were 65% with ratings of fair (27%), good (30%), and excellent (18%). Eighteen percent rated their season as poor (Table 6).

Table 6. Percent of cooperators rating their season by County for Lake Shelbyville.

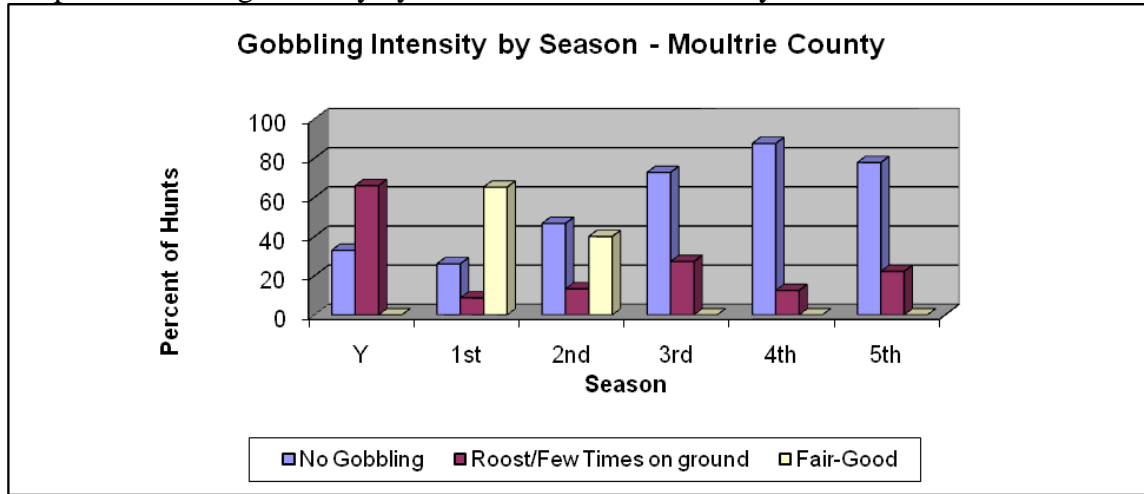
Year	County	Excellent	Good	Fair	Poor	No Opinion
2010	Moultrie	7%	34%	24%	24%	11%
2010	Shelby	18%	30%	27%	18%	7%

Gobbling Statistics

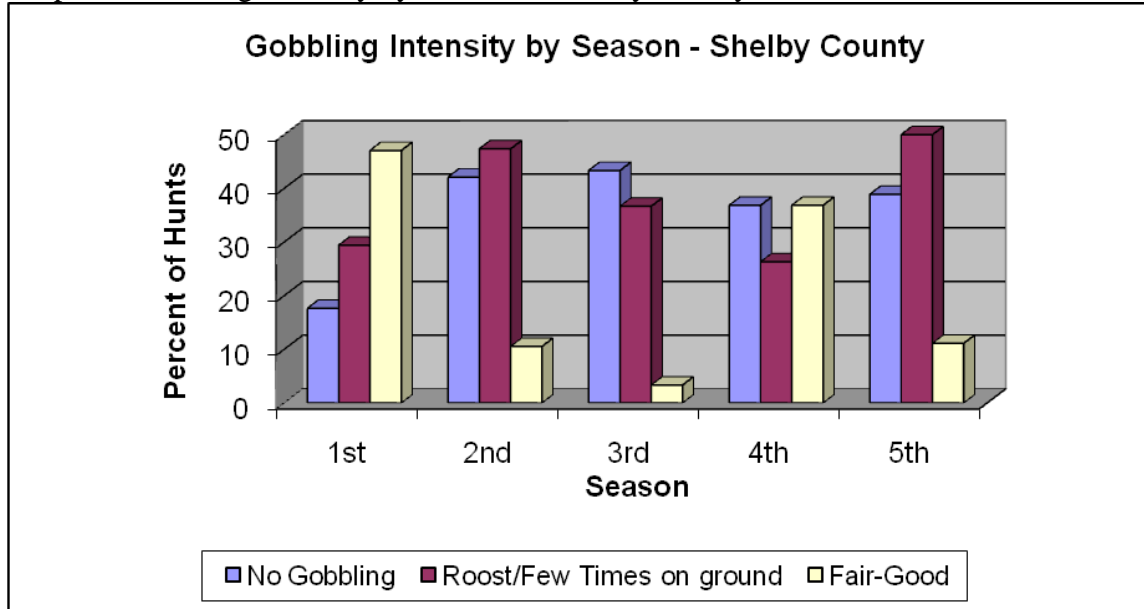
Gobbling is thought to have 2 peak periods through the season. The first peak comes as gobblers attempt to attract hens. Gobbling declines during peak mating. A second peak may occur as hens leave the gobblers to begin incubating nests.

Moultrie County showed good gobbling activity on the ground during Season 1 and 2, with peak gobbling on the roost during the Youth season (Graph 2). Shelby County cooperators heard the most fair – good gobbling activity during season 1 followed closely by Season 4 with peak gobbling on the roost in season 3 (Graph 3).

Graph 2. Gobbling intensity by season for Moultrie County.



Graph 3. Gobbling intensity by season for Shelby County.



Weather and Gobbling

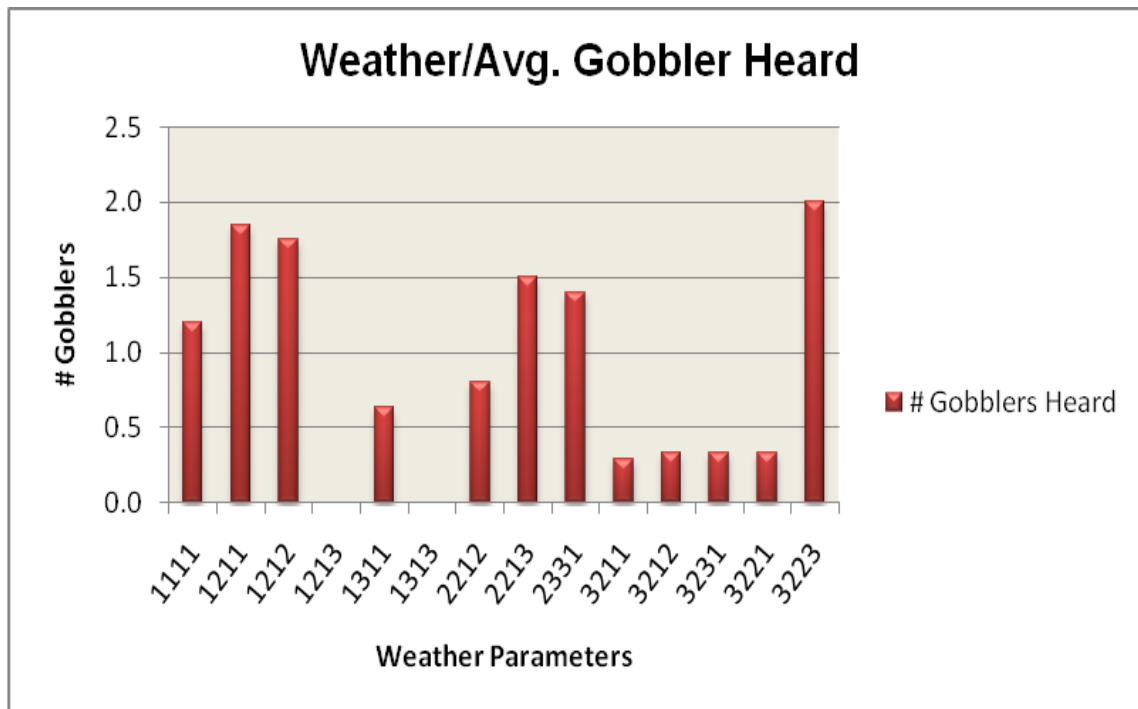
National Weather Service (NWS) weather data were consulted for each day during the season and the cloud cover, wind, precipitation, and temperature recorded. These parameters were used to graph the average number of gobblers heard (# gobblers heard divided by the number of hunts for each weather pattern; see Table 7 for weather parameters). The two counties were analyzed separately and together in an attempt to determine the weather parameters that best induced gobbling.

Table 7. Numbers indicating the measured weather parameter. Note: The numbers are in this order in the graphs below.

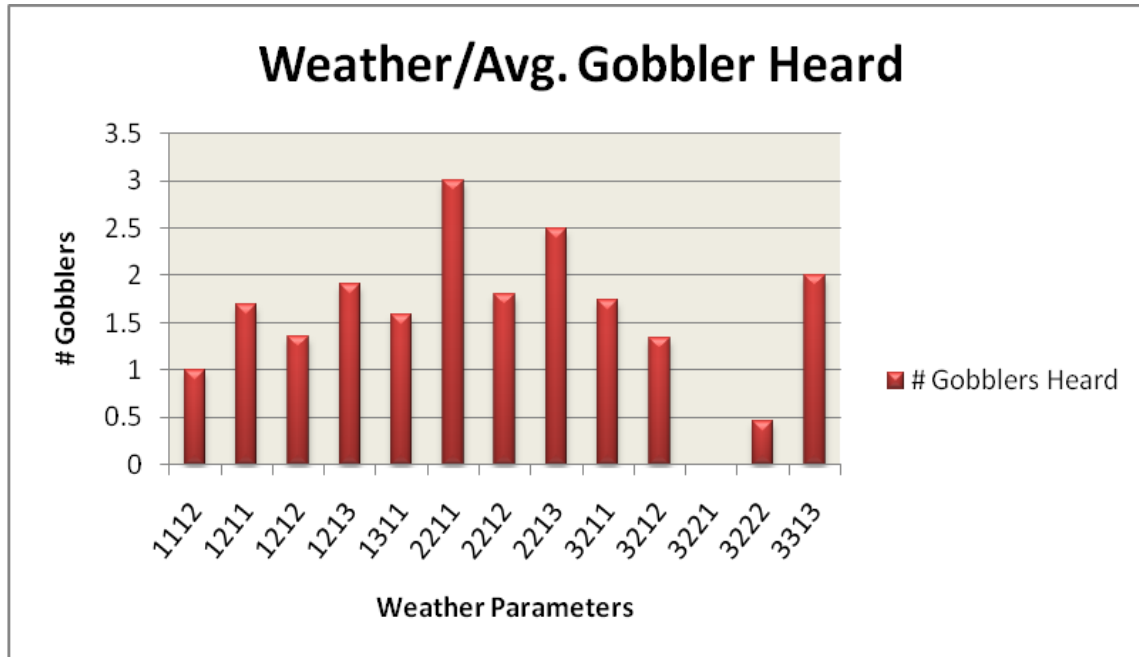
Cloud Cover	Temperature	Precipitation	Wind
1. Clear	1. Hot (70°+)	1. None	1. Light (0-10 mph)
2. Partly Cloudy	2. Mild (50 - 69°)	2. Drizzle	2. Breezy (10-20 mph)
3. Overcast	3. Cool (30-49°)	3. Moderate	3. Strong (20-30 mph)
		4. Downpour	
		5. Snow	

Example: 1311 = Clear, cool, no precipitation, and light winds.

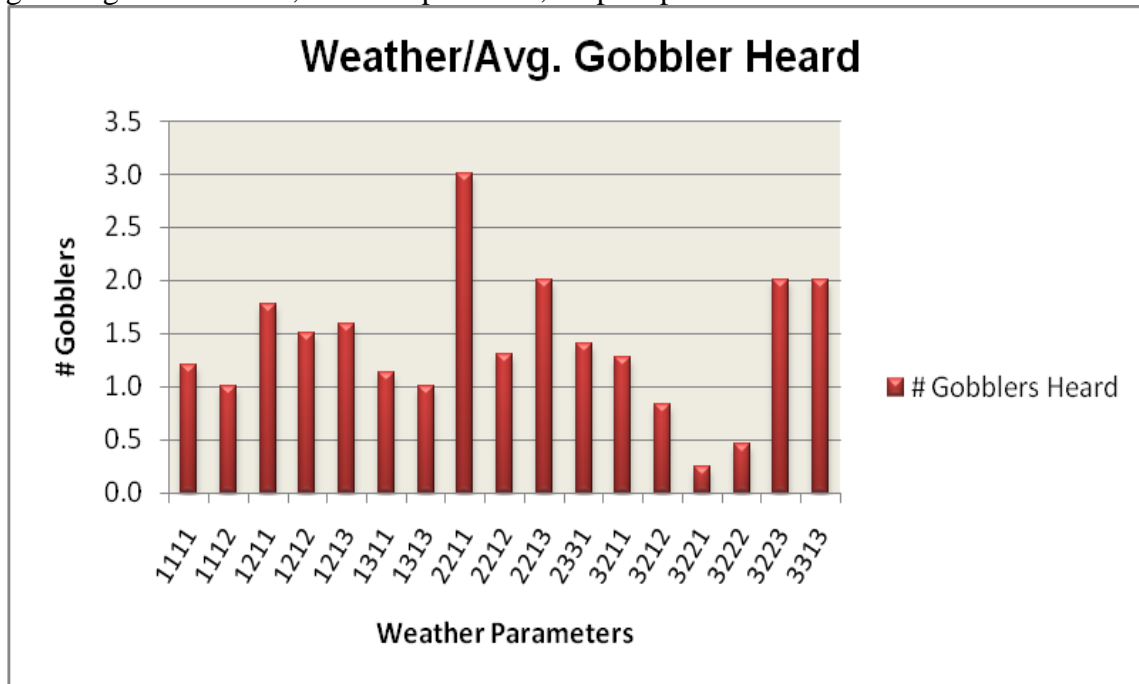
Graph 4. Weathers effect on average number of gobbler's heard per day in Moultrie County. Clear, mild, no precipitation, and light to breezy winds produced the 2nd and 3rd most gobbling. Oddly enough, overcast, mild, drizzly rain and strong winds produced the most gobbling.



Graph 5. Weathers effect on average number of gobbler's heard per day in Shelby County. Partly cloudy, mild, no precipitation, and light winds produced the most gobbling with partly cloudy, mild, no precipitation, and strong winds 2nd and overcast, cold, moderate rainfall and breezy winds a close second.



Graph 6. Weather's effect on average number of gobbler's heard per day in Moultrie and Shelby County combined. Combining all 175 hunter attempts, the weather that produced the best gobbling was overcast, mild temperatures, no precipitation and calm winds.



Hen Statistics

Hen statistics were looked at on a per hunter basis and reflect an average for each cooperator. Moultrie cooperators heard 0.8 and saw 1.3 hens/season and Shelby cooperators heard 2.1 and saw 3.5 respectively. Cooperators flushed 0 hens/season off nests in Moultrie and 0.15 hens/season in Shelby County (Table 8).

Table 8. Hen observations by County per cooperating wild turkey hunter for Lake Shelbyville.

Year	County	Hens Heard	Hens Seen	Hens Called In	Hens Flushed off Nest
2010	Moultrie	0.8	1.3	0.2	0.0
2010	Shelby	2.1	3.5	0.75	0.16

Interference

Hunters. – In Moultrie County, 47% of cooperators reported seeing other hunters and in Shelby County, 42% of cooperators encountered at least 1 other hunter. The percentage of hunts actually disturbed by other hunters was low with 10% in Moultrie and 11% in Shelby County. Ten percent of hunters in Moultrie County reported seeing dogs while hunting but only 3.3% reported the dogs impacting their hunt. Only one hunter in Shelby County reported seeing dogs and having their hunt disturbed. Non-hunters (the majority were mushroom hunters and fisherman) disturbed 11% of the hunts in Moultrie County and 10% of hunts in Shelby County. At least 1 coyotes was called in by 17% (down from 47% in 2008) of the Moultrie and 27% of the Shelby County cooperators (Table 9).

Table 9. Interference reported by County by cooperating wild turkey hunters at Lake Shelbyville.

Year	County	% Hunters Encountering Other Hunters	% Hunts Disturbed By other hunters	Avg. # of Hunters Seen/Hunter	% of Hunters Disturbed by Dogs	% Hunters Disturbed by Non-Hunters	% Hunters Calling in Predators
2010	Moultrie	47%	10%	0.6	3.3%	11%*	17%
2010	Shelby	42%	11%	0.9	3.3%	10%**	27%

* 44% Mushroom Hunters, 44% Boating/Fishing, 6% Target shooting, 6% Farming

Remarks

Cooperators provided a variety of comments on their observations, preferences and opinions of the 2010 season. A summary of these remarks is included and are unedited along with the county, the rating of their season and whether they killed a bird (Table 10).

Table 10. Comments are broken down by County and were left unedited for cooperating wild turkey hunters at Lake Shelbyville.

County	Rating	Killed Bird	Comment
Moultrie	No Opinion	No	Perfect weather, sunny, warm breezy
Moultrie	Poor	Yes	Too many permits issued for amount of birds to hunt. Need to cut back on number of permits countywide. Need supplemental stocking. I really enjoy turkey hunting around home, but hate to see all the birds killed off. As you can see I scouted a lot, as well as hunted in other Moultrie County seasons. I heard very little gobbling activity and seen very few birds for the amount of time spent compared to previous years. I hope this info is helpful.
Moultrie	Poor	Yes	Did not hear or see any gobblers - killed bearded hen.
Moultrie	Poor	No	Didn't shoot any turkey
Moultrie	Poor	No	Very windy during season 4. Lots of fishermen and mushroom hunters. Saw turkeys using railroad tracks as movement corridors.
Moultrie	Fair	Yes	Can't control the rain. Birds weren't vocal, heard no hens and just 1 gobble. Nothing heard at roost time.
Moultrie	Excellent	No	The 2nd season was very good. All 6 days I was close to 2 or 3 gobblers gobbling. However, none were within 100 yards except 1. I would have killed him, my gun jammed on the second shot.
Moultrie	Fair	No	Nice weather - I was glad to get to hunt on Corps ground. Thank you all. I think turkeys are doing well. Also you people are doing a fine job. I didn't get a turkey.
Moultrie	Excellent	Yes	Great weather! I passed shots at jakes on day #2 & decided to kill a Jake on day #3. Could not find a Tom. First time I killed a Jake in Spring. Great hunt!
Moultrie	Fair	No	During youth season had a gobbler working and an adult with youth walked into our setup. Why would an adult take a young hunter into an area they knew other hunters were in?
Moultrie	No Opinion	No	First day was raining. Second day nice but too early. I would like to see youth season pushed later 1 week. 4/10 & 4/11.
Moultrie	Good	Yes	Birds not very vocal
Moultrie	Good	No	I had a turkey behind me and a coyote chase another Jake past my decoy and after it flew away the coyote turned and was startled by my decoy. I just stood up and scared him off; I had scared the same coyote the day before in the middle of a field.
Moultrie	Good	No	Weather good. Should have shot a longbeard at 36 yards but waited and he walked away with hen.
Moultrie	Good	Yes	Weather great. Pre-season scouting was key to this year's hunt.
Moultrie	Good	No	Great weather during my season. I never heard one gobble in all the time I hunted.

County	Rating	Killed Bird	Comment
Moultrie	Good	No	Good habitat. Some really good clover fields. 2 young hounds were abandoned at the west end of Allenville in March. Animal control says they can't catch them. They chase deer every day.
Moultrie	Fair	Yes	Not many gobbles.
Moultrie	Good	No	It rained the 1st day but we saw 10 turkeys, mostly gobblers. I couldn't shoot. The 2nd day it was calm so we went to a different field but they were at 60 yards, this time they were all gobblers or jakes. No shot.
Shelby	Excellent	Yes	Saw and heard more turkeys this year. Population is up from previous years. Thank you. I wish we could do something about the hawks and owls. I saw a hawk chasing wood ducks in the timber. The map is fine but we need points of interest such as Windsor water tower, Lithia springs pointed out. I saw lots of 4-wheeler ruts on Lake Property.
Shelby	Good	Yes	Bush honeysuckle and Autumn Olive are taking over parts of the management area.
Shelby	Excellent	Yes	It was difficult to hear birds gobbling and how many.
Shelby	No Opinion	No	I didn't but hear the gobblers once...I didn't shoot any this year.
Shelby	Good	Yes	5/8/2010, It was very windy, could not hear gobbling. 5/11/2010, Windy morning, could not hear any birds. Saw many birds this season although responses to calling were poor. Too much wind.
Shelby	Excellent	Yes	Seen and heard a lot of gobblers, at least four or more each day. I was able to call in several gobblers each day but they were "Decoy" shy. As soon as they got within 100-75 yards. They would freeze and hang up. I had one gobbler come in at 11:45 to 75 yards. Sit and stare at the decoys till 1:15 when I got tired of sitting I went ahead and spooked him off.
Shelby	Fair	Yes	The weather was warm earlier, then it cooled off and rained. I did not hear many gobbles. Population seems down. I also did not see any Jakes.
Shelby	Excellent	Yes	The weather was warm all April. I think most of the breeding must have all ready been over.
Shelby	Fair	No	Rain in the AM both days, couldn't really get a good feel for the location of the birds.
Shelby	Excellent	Yes	Perfect weather during 2nd season! No morels this year though.
Shelby	Poor	No	The population seemed down, did not hear any gobbling activity.
Shelby	Poor	No	Had heavy rain for most of the three day hunt.
Shelby	Poor	No	Did not see or hear much gobbling this season.
Shelby	Good	No	Rainy, windy, and cool. Under growth was tall.
Shelby	Good	No	Only hunted half the third season because of bad weather.
Shelby	Poor	No	To see only a few birds and to have no gobbling in a zone where I have been successful in the past was very disappointing. Central Illinois turkey seasons should be moved up by at least 1 week.
Shelby	Poor	No	Saw 3 eagles at Sand Creek
Shelby	Excellent	No	More Jakes seen than expected, # birds seems up. Got in woods late 4/22 rain early.

County	Rating	Killed Bird	Comment
Shelby	Good	No	Gobbled well on roost, but no gobbling after they were down.
Shelby	No Opinoin	No	I saw no signs or heard any turkeys while scouting so I did not go hunting.
Shelby	Fair	No	Hunted with a long bow. Had one gobbler within 75 yards but don't know where he went.
Shelby	Fair	No	Lots of wind. No complaints.
Shelby	No Opinion	No	Weather was perfect, gobbling was great. The write up in 12 tells the rest. In my 20 years of turkey hunting this was a 1st.
Shelby	Good	No	First time hunting public ground (only 2nd year to hunt). Saw birds both days, couldn't call in a Tom, had hens within 10 feet, they didn't care one way or another about my calls. Wish more weekend hunting for each permit. Can't get off work thru the week.
Shelby	No Opinion	No	Confident the early good weather & 4 seasons of hunting pressure contributed to why I didn't hear or see any turkeys.

Thank you for your cooperation and good luck this season!

Lee R. Mitchell
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