

2016 Spring Gobbler Survey Report

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Since 1987 the Department of Game and Inland Fisheries (DGIF) has sought the assistance of spring gobbler hunters to participate in this survey which is intended to provide important biological information about turkey populations. This long-term survey provides important information for the Department's wild turkey management program. Furthermore, the survey provides an excellent platform to survey hunter attitudes and opinions regarding spring hunting. This year will mark the 30th anniversary of the Spring Gobbler Season (SGS) survey, and special thanks are extended to those individuals that have participated since the survey began and others that have participated for many years.

Your participation in the 2017 Spring Gobbler Hunter Survey will provide information that is valuable to the Department's turkey management program. For example, we used information from the SGS this year to reply to a proposal to increase the spring gobbler daily bag limit. The survey also provides a lot of information that many hunters find useful, and at times, opportunities to share good laughs and the miracles of nature. Thanks to Jimmy Poole, VDGIF Volunteer, for summarizing your comments and remarks. Cale Godfrey, Assistant Bureau Director, for his helpful comments and suggestions that improved this report.

2016 Results and Discussion

The number of survey cooperators (311) increased when compared to 2015 (275). Cooperators in the 2016 survey submitted information on 2,544 hunts from 91 counties and cities. Results in this report are summarized by region (Fig. 1), counties east (EBR) and west (WBR) of the Blue Ridge Mountains and on a statewide basis.

State Gobbling and Harvest Rates

Spring Gobbler Survey (SGS) cooperators heard 15% fewer gobblers per hour in 2016 (0.48/hr) compared to 2015 (0.63/hr; Fig.2). Cooperators killed 2.3 birds per 100 hours of hunting, down 21% from 2015 (2.9 killed/100 hours). The decrease in gobblers heard (19%) and killed (21%) by survey respondents was similar to the decrease in the statewide harvest of gobblers (16%) reported by electronic checking. A significant percentage of the spring gobbler harvest is typically made up of 2-year old birds. Because turkey reproduction was average in 2014, we were surprised to see the decline in 2016 gobbling rates and harvest.

The decline in gobbling rates in 2016 follows on the heels of record high gobbling rates in 2015 (Fig.2). Over the past 10 years, our turkey population has increased 3.2% annually, which is very encouraging. Since the survey has begun in 1987, gobbling rates have increased 1.6% annually. Turkey populations in other regions of the nation have been declining in recent years; the cause is unknown. Many state wildlife agencies have begun research programs with the goal of determining the cause of the declines. While our turkey populations have generally increased over the past 10 years, we do have concerns about some counties, notably Alleghany, Bath, and Highland. The Department has reduced the fall season in these and other counties with the hopes of jump starting a population recovery.

Gobbling and Harvest Rates by Region

Survey data suggest EBR hunters heard slightly more birds (0.49 heard/hr) than WBR hunters (0.47 heard/hr). Harvest rates (kill/100hr) were also slightly higher for counties EBR (2.4) than those WBR (2.2).

The number of gobblers heard varied little among regions in 2016. The highest gobbling rate (heard/hr) was reported in the Southwest Region (0.51) and Western Piedmont (0.50). The Tidewater (0.48) and Eastern Piedmont (0.48) tied for the third highest ranking regions. Finally, the Northern Mountain Region (0.45) and Central Region (0.45) witnessed the lowest gobbling rates (Fig. 4). In comparison, gobbling rates in 2015 varied more among regions of the state with the highest gobbling rates reported in the Piedmont regions (Fig. 4).

Gobbling and Harvest Rates by Week and Day

Gobbling rates (heard/hr) were low (0.44) during the opening weekend, presumably because of poor weather. Gobbling increased in the first full week of the season (0.56), but declined steadily through the remaining weeks of the spring season (Fig.6). In the 2015 season gobbling rates remained relatively high through the 3rd and 4th weeks of the survey (Fig. 6).

Hunter harvest rate (kill/100 hrs) was high during the opening weekend (2.9). Following that, harvest rates dropped to 2.2 (kill/100hr) and remained at that same level through the 3rd week of the season. Harvest rates increased during the last 2 weeks of the season (2.5, 2.4, respectively). Interestingly, cooperators odds of killing a bird increased towards the end of the season even though gobbling rates declined (Fig. 7).

On a daily basis, the highest gobbling rates (heard/hr) were heard on April 17 and April 18. Peak gobbling in counties WBR occurred 1 week later (April 25), than counties EBR (April 17). The lowest rates were reported on May 11 and May 12 (Fig. 8).

Daily harvest rates (kill/100 hrs) were highest on May 3 during the peak time when hens begin incubating nests (Fig.8).

Gobbling Intensity

Gobbling intensity was divided into 3 categories (no gobbling, roost -poor gobbling, or fair-good gobbling). Fair-good gobbling was highest in the second week of the season (Fig. 9), but more than 25% of respondents reported fair-good gobbling intensity during the first and third weeks. Gobbling intensity declined in the last 2 weeks of the season as the percentage of hunts with no or roost-poor gobbling peaked. Based on gobbling intensity, the best hunting period appeared to be the second week of the season.

While gobbling intensity and gobbling (heard/hr) were lower at the end of the season, harvest rates generally increased. Thus, while challenging, those that hunted at the end of the season enjoyed higher odds of connecting with a gobbler.

Cooperator Profile

Cooperators averaged hearing 21 birds throughout the 2016 season. Last year cooperators heard an average of 27 birds through the season. Cooperators were seasoned hunters, averaging 55 years of age and 29 years of experience hunting in the spring. Many cooperators (39%) were self-taught; others learned to hunt from friends (35%) or family members (27%).

Cooperators averaged killing 1.0 bird during the 2016 season; this rate is slightly lower than 2015 where cooperators averaged killing 1.2 birds. Cooperators' partners killed 0.4 birds per season in 2016 which is lower than 2015 where partners averaged killing 0.6 birds per season. Cooperators, or their partners, killed 7% of birds they heard in 2016. Approximately 34% of gobblers called-in were successfully harvested by the cooperator or their partner. These rates are comparable to recent years.

There were 5 Sundays during the 2016 season (excluding the Youth and Apprentice Sunday). Sunday participation was modest accounting for only 8% of all the hunts taken. Of those hunts that took place on Sundays, most of the effort took place on the first (30%), second (26%) and third Sundays (23%) of the season.

2016 Survey Questionnaire Results

The Department's Wild Turkey Management Plan recommended we manage the wild turkey resource in a way that provides for the recreational opportunities outside of the hunting season. Cooperators agreed that

efforts to provide non-hunting enjoyment of our wild turkey resource were very important (52%) or important (30%). Viewing wild turkeys was an enjoyable past-time for many cooperators. Most (65%) cooperators took trips to view turkeys in the spring prior to the gobbler season. Some (34%) likewise take trips in the fall before the fall turkey season. Many cooperators make trips to simply see wild turkeys (20%). Most (61%) enjoyed a surprise occasion where they saw turkeys.

Many questions on the 2016 survey focused on recruitment of hunters in both the spring and fall turkey seasons. Cooperators felt recruitment of young and apprentice hunters was very important (68%) or important (28%). In likewise proportions, cooperators felt the Department's focus on the recruitment of young and apprentice hunters was very important (63%) or important (31%). Fewer numbers of cooperators felt these efforts are of slight (8%) or no importance (4%). Despite indicating the importance of these efforts, only 20% of respondents were able to take young or apprentice individuals hunting in the spring gobbler season. Fewer (6%) cooperators were able to take young or apprentice people hunting in the fall turkey season.

It is remarkable that all cooperators were interested in taking young or apprentice hunters; however, a wide range of considerations prevented them from doing so. Almost half (47%) of cooperators indicated young/apprentice hunters were not available. Sixteen percent of young/apprentice hunters indicated they did not have enough time. Some were hindered by weather (6%) on planned hunting days. A small number (4%) did not have a good place to take young/apprentice hunters hunting in the spring.

As mentioned above, interest in taking young/apprentice hunters in the fall season was lower than in the spring season. The greatest limiting factor facing cooperators was the lack of young/apprentice hunters (47%). Competition from other leisure time activities in the fall was a problem 12% of hunters faced. Ten percent of potential young/apprentice hunters were not interested in fall turkey hunting. A few (6%) cooperators had problems finding places for young/apprentice hunters to hunt in the fall. A significant number of other (22%) causes were listed, these were difficult to categorize.

Several gray-haired friends maintain that turkeys have gotten harder to hunt. Cooperators are split equally on this question, 48% agreed they are harder while the balance (48%) didn't agree. Four percent had no opinion. So for Jim and Henry, your excuse for not killing as many birds these days compared to yesteryear has some doubters.

Forecast for 2017

The Department's Brood Surveys suggests reproduction has been average over the past 4 years (Fig. 2). Under these conditions we can expect stable populations. Given that turkeys are believed to be at record levels for the Commonwealth, stable is desirable. However, turkeys are not uniformly spread across our landscape. Stable but low population levels are red flags that the Department is addressing with shorter fall seasons. Unfortunately, we have not had above-average recruitment in these problem areas for many years. Fortunately, most Commonwealth turkey hunters should enjoy quality spring gobbler hunting in 2017.

The unseasonable warm weather in February has accelerated the signs of spring, including gobbling. Some hunters have expressed concern that we will miss peak gobbling times this spring.

My thinking on this concern is: (1) March weather generally has more impact than February on the chronology of mating, egg-laying, incubation, and hatching, and it's presumptive to think March will be as warm as February. However, we can expect some early springs and 2017 may turn out to eventually be one. (2) While an early spring can accelerate reproduction, such conditions only move the timetable up by 10-14 days. Day-length is more critical to these biological processes than warmer temperatures. (3) Starting hunting closer to nest incubation will improve, not detract from hunter success rates. Currently, we start spring hunting at the peak of egg-laying (mid-April). A 2-week advance in reproduction would start our season when most hens are on the nest and under these conditions; gobblers are typically more responsive to calling. Our long (5-week, 6 weekends) season should capture this peak gobbling period. If there is any impact, I expect to see it at the end of the 2017 spring season.

Finally, a mentor of mine, Mr. Jim Pack, retired Turkey Biologist for the WV DNR would always qualify his gobbler season forecast by saying "Good gobbling requires good weather". You may have seen me use that line before. That's definitely difficult to forecast but ever so true.

I would like to thank everyone that contributed to this survey and I hope you find it interesting reading. Best wishes to you for a safe and enjoyable spring season.

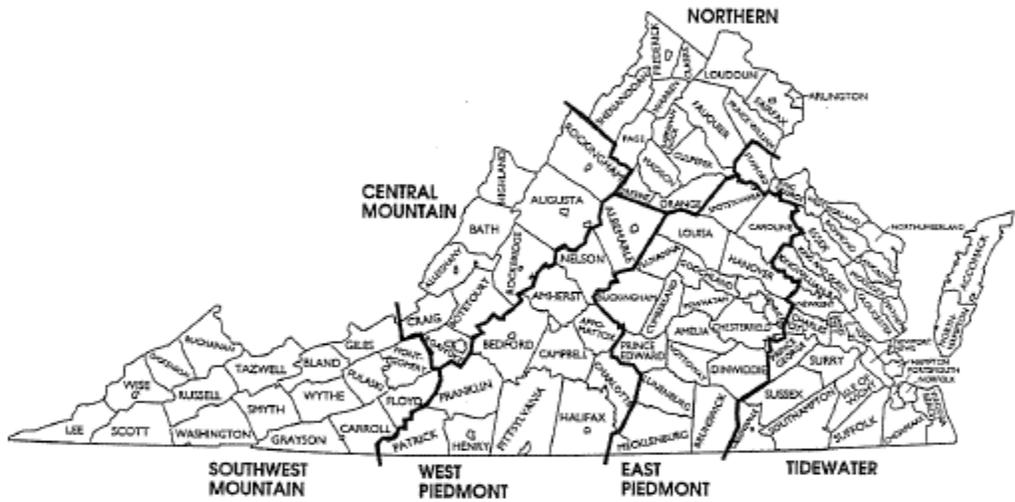


Figure 1. Regional boundaries for Virginia Spring Gobbler Season Survey

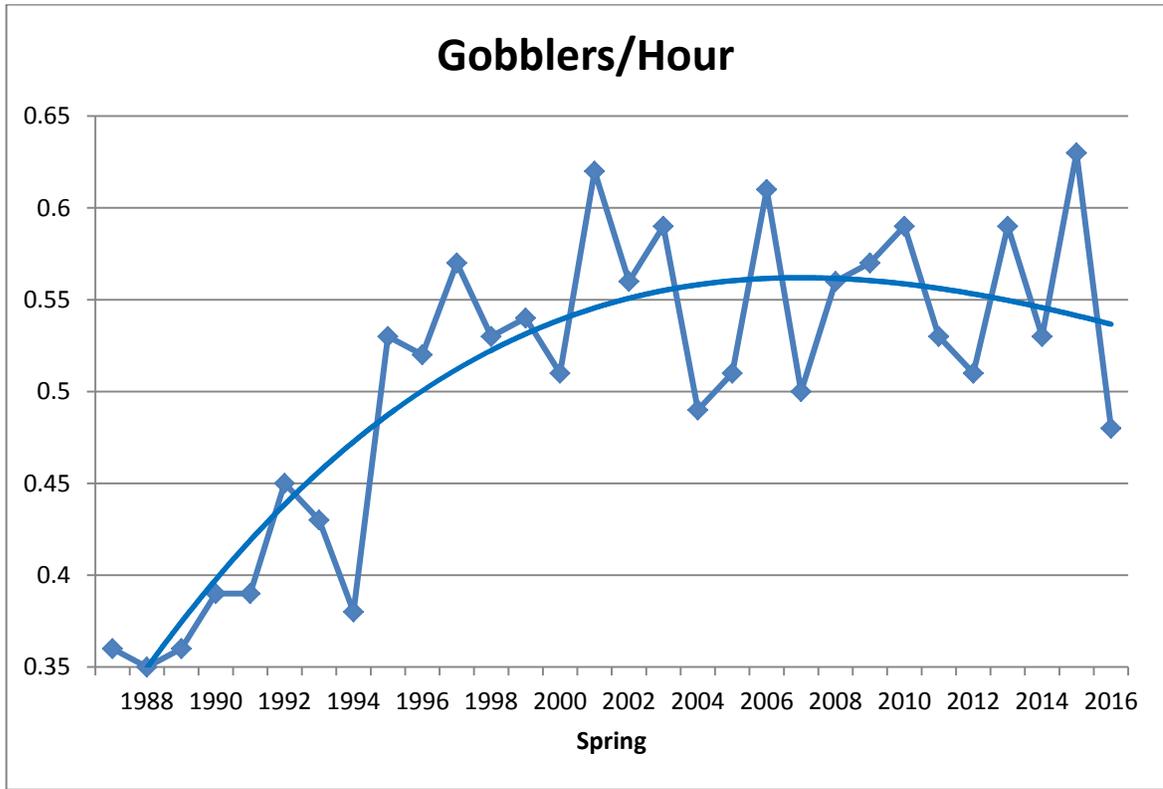


Figure 2. Gobblers heard per hour as reported by Virginia Spring Gobbler Season Cooperators.

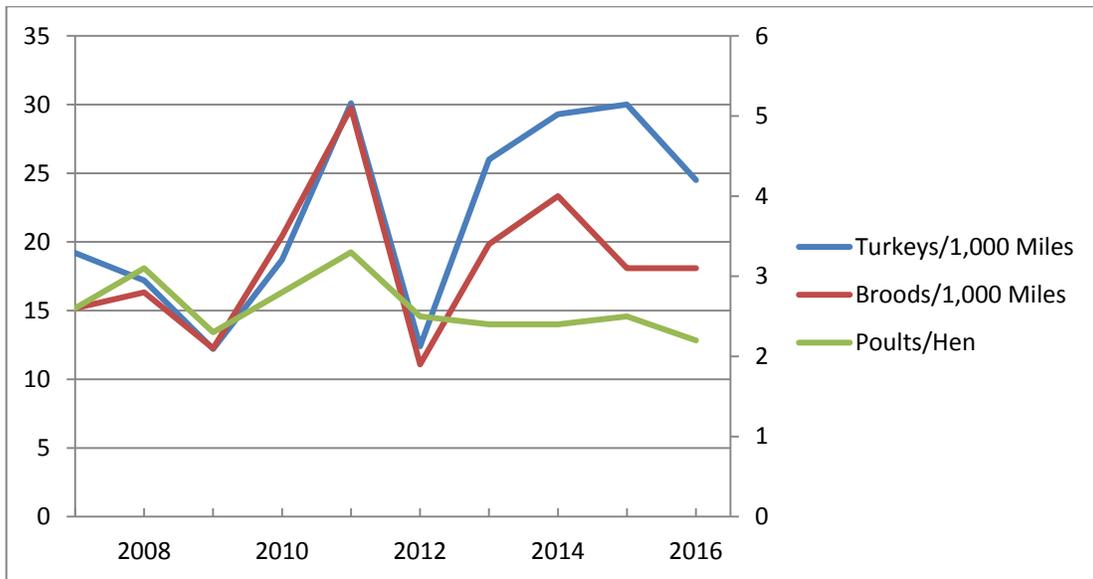


Figure 3. Turkeys seen, broods seen, and poults per hen in Virginia from 2007-2016 as observed by Department staff.

Gobbling Rates by Region

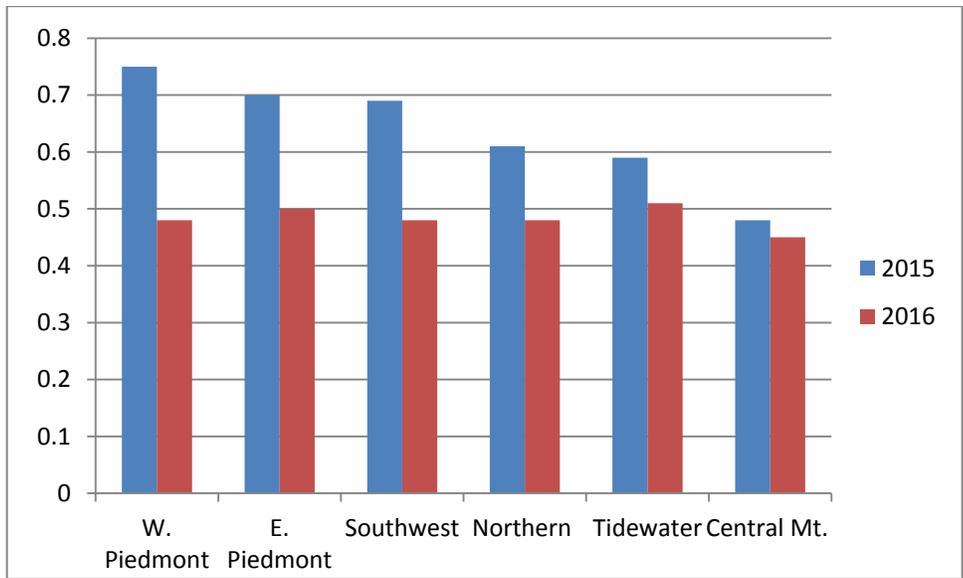


Figure 4. Gobbling rates (heard per hour) by region in Virginia, 2015 and 2016.

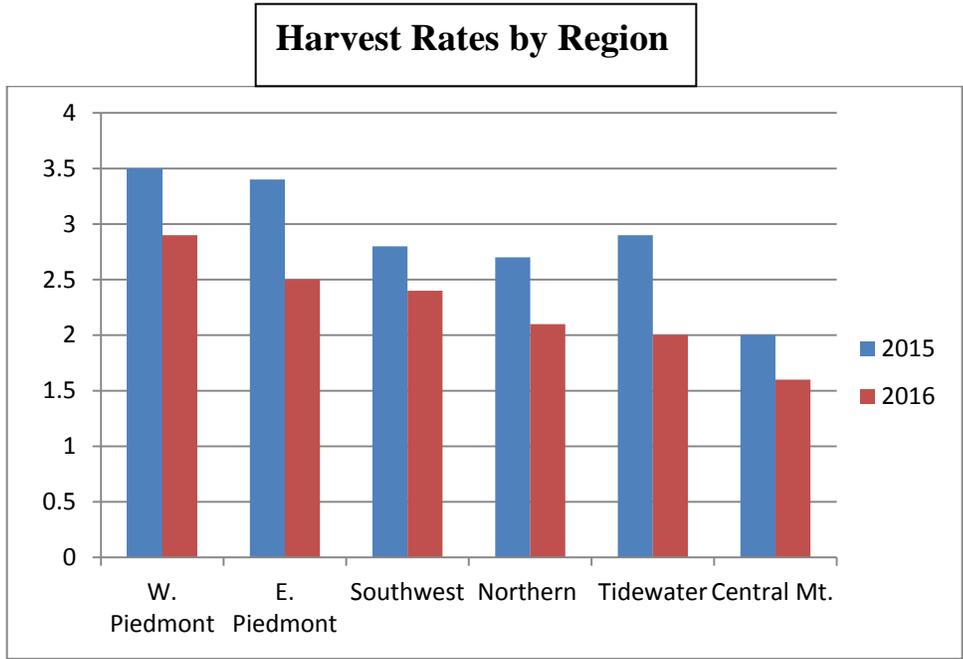


Figure 5. Harvest rates (killed/100 hrs) of gobblers by region in Virginia, 2015 and 2016.

Gobbling Rates by Week

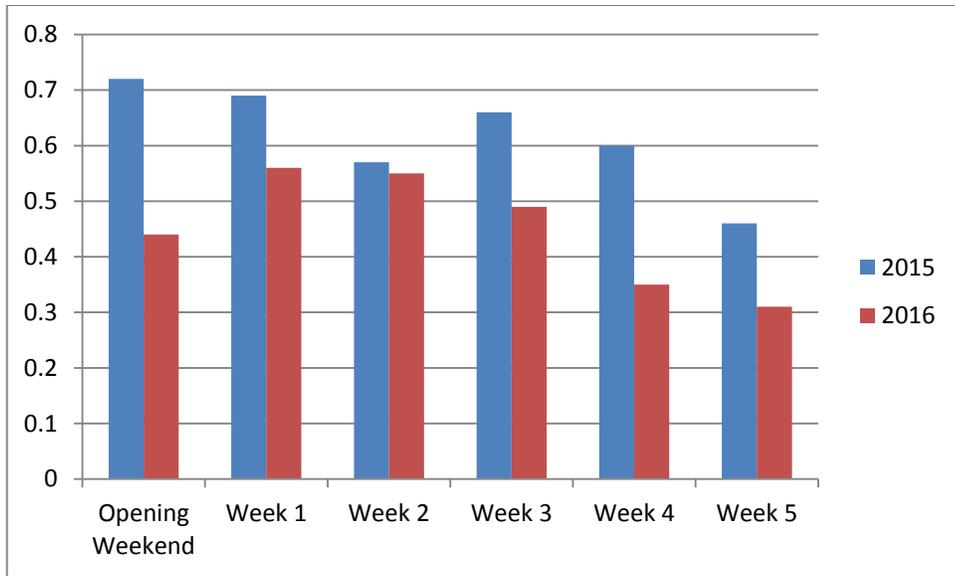


Figure 6. Gobbling rates (heard/hr) by time period of the 2015 and 2016 spring gobbler seasons in Virginia.

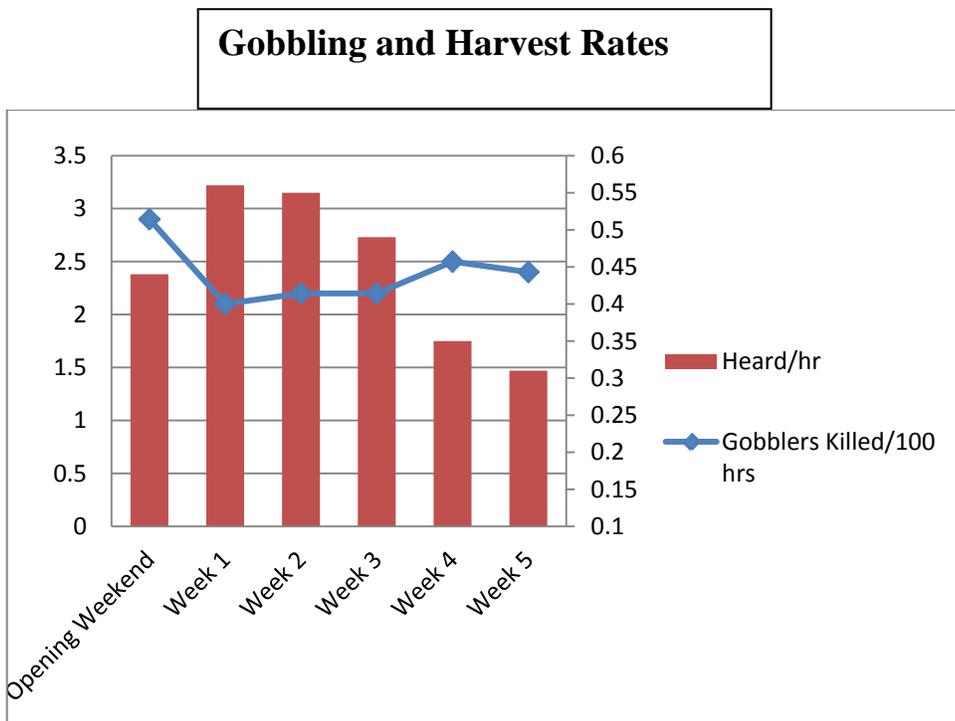


Figure 7. Gobbling (heard/hr) and harvest (killed/100hr) rates reported in 2016 in Virginia.

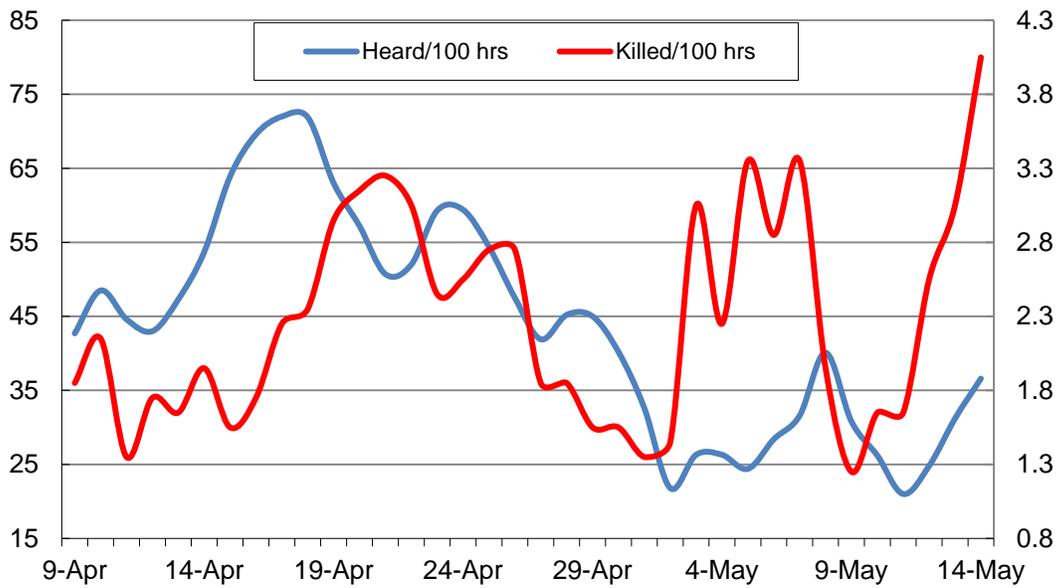


Figure 8. Daily gobbling rates (heard/hr) and harvest rates (killed/100 hr) in Virginia in 2016.

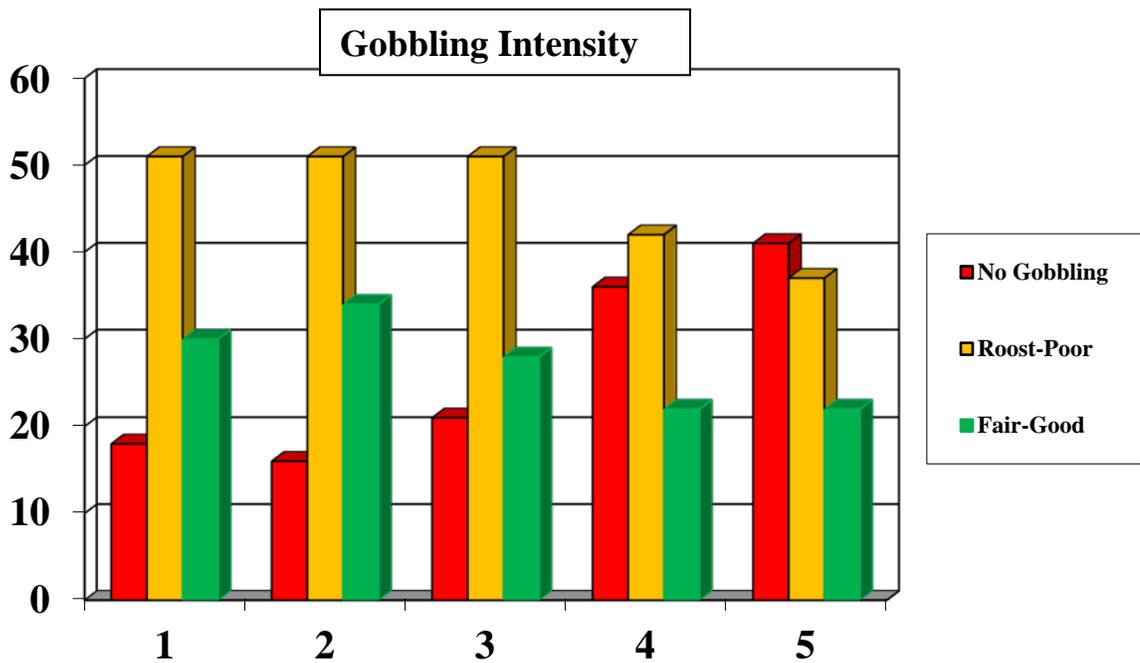


Figure 9. Percentage of spring gobbler hunts by intensity category by week in Virginia in 2016.

Appendix A. Cooperator observations and comments from 2016 season. Numbers following comment are Cooperator's ID Number. If names are not provided on the survey form, the cooperators observations and comments will not be included. Comments on rifles are not included.

SEASON

Bad or not very good: 1344, 1964, 0000, 2959, 5437, 1638, 6202, 0776, 0253, 9713, 9315, 1208, 5531, 0000, 2626, 0840, 9851, 9713, 9315, 1208 5531, 0000, 2626, 0840, 9851, 6586, 7429, 9375, 6063

Wet or cold spring: 0000, 6956, 1717, 4833, 3508, 6415, 6289, 5180, 1755, 0000, 8041, 0000, 1927, 3771, 0776

Early spring: 3353

Weather affects turkey populations year to year: 0422

Blizzard conditions first day: 1158, 6415

Windy: 7851, 3771, 6202, 3416, 2339, 1344

GOBBLING

Good: 9161, 8511, 3437

Poor: 9510, 0840, 4384, 9777, 6931, 8507, 5337, 1964, 4952, 2959, 1927, 7581, 0000, 4517, 2370, 8146, 6586, 9305, 2719, 4719

Less than before: 6415, 1755, 6838, 0000, 9495, 0000, 0198, 3732, 6951, 4743, 5245, 9401, 8935

Last two weeks no gobbling: 3197

Gobbled on roost then not on ground: 2157, 6239, 6352, 6164, 8041, 4796, 5992, 0256, 9401, 2719

Not much gobbling early in morning: 8507

Toms silent coming in: 9846

Not much gobbling last 2 weeks: 9401

Gobbled best 2 weeks before season: 0000

Gobbled less second week of season: 6972, 7341

POPULATION

Populations up: 1007, 4137, 8511, 1344, 4499

Population down or low: 0000, 5245, 9777, 6931, 4796, 3266, 1627, 1230

Lots of jakes: 1007, 3508, 0349, 9160

Few jakes: 9024, 5180, 6838

Populations OK: 1831, 3979

Very few or not many hens: 1852

Few turkeys on Federal Land: 3458

Too many hens in Nelson County: 1230

SURVEY RECOMMENDATIONS

Need column for jakes: 9835, 7727

Send survey earlier: 6415, 9835, 9499, 3810, 3244, 7670, 9315, 0198, 2215, 9580, 1339, 4520, 8718, 8926, 5245, 6406, 0840, 7727, 3186, 9602, 5917, 9777, 6586, 9327, 9395, 8486, 2719

Send two surveys: 6886

Need column for weight and shot distance: 3331

Need column for gobbling intensity (roost or ground): 7246

Liked survey: 3353

Put correct year on surveys: 3107, 0349, 9355

LIKED SEASON OR NOT

Enjoyed the season: 3107, 0349, 9395

Good season: 3331, 5543, 0000, 5321

Difficult: 6415, 1927, 2592, 8964, 9336, 6837, 9401, 2719

THANK YOU

CPOs doing a good job in Carroll County: 1831
Thanks Gary Norman for good work: 6415, 9336, 9472, 9851, 7341, 8511, 7196, 1344, 9395, 7181
Thanks Gary Norman, VDGIF & NWTF: 3458, 0000, 8239, 7191
Thanks VDGIF: 1755, 1831, 5289, 9336, 5593, 0000
Good turkey management plan: 4455, 6838, 7151, 9395, 6415
VDGIF is doing a great job for disabled veterans: 6415

POACHERS, HUNTER PRESSURE AND CHECK IN SYSTEM

Lots of hunting pressure: 9401, 1549, 6063
Too many people not checking turkeys: 6951
Stop poaching: 2959, 3771
Need spring check in stations for gobblers: 6951
Need more enforcement in March: 1158, 0000
Need CPOs in several counties: 2959
More CPOs on National Forest: 3233
Hunters take over limit of three: 1158
Less hunters this season: 6795
Public lands too pressured by hunters: 9713
Poachers printing extra license: 6951

DOGS

To many dogs: 1002, 0000, 93952
Deer hounds in woods in spring: 3771

LENGTH OF DAY HUNTING AND SUNDAY

Yes to Sunday hunting: 3353
Sunday hunting on all lands and not just private land: 0567
No to Sunday hunting: 8954, 9602, 2339, 1305, 5434
Likes all day hunting: 6195
Extend hunting time to 1:00 PM: 6956
Hunt all day full season: 1158, 3353
Sunday hunting laws outdated: 1158

SEASON DATES

Open season 1 April: 2090
Open 1 week earlier: 0000, 2858, 9580, 6972, 7725, 1627
Open 2 weeks earlier: 5434, 0000, 9445
Start season earlier: 0000, 5884, 0332, 2198, 1023
End season 1 week earlier: 5434
All day season all season: 3080, 2090, 9072, 9846, 0000, 3805, 2526
All day season 1 week longer: 0198
Cut back season to 4 weeks: 9580
Reduce all day hunting by one week: 3508
No to all day season: 5434, 2215, 7341
Shorten all day season to 3:00 PM
Season dates OK: 6415, 7341
Close season every other year: 3264
Leave season as is: 0422
Extend season by 2 weeks: 2526

FALL SEASON

Close fall turkey season during deer season: 9510, 5339
Allow more hunting days during deer season: 0332
Hens only in fall: 2338
Stop hen hunting only in fall: 9472, 9580, 1964
Increase fall season: 0000
Need to add fall only tag: 3080
Fall season to long: 2215, 9160
Fall season OK: 6631
Do not need season in January: 9999
Shorten fall season: 1755, 7219, 9602
January season a good idea: 6631
No fall season: 8041, 9159
Most hunters concentrate on deer in fall and not turkeys: 8084
Keep fall season with dogs legal: 4499

LIMITS AND LICENSE

Limit is good: 6415, 2566
Cut limit back to 2: 8954, 3197
Reduce to 2 birds in spring: 5434, 9401, 7868, 4137, 2339
No hens any season: 7727
Add hen only tag in fall: 3080, 1230
Need to be able to take more than 1 bird per day: 2765, 0000
Limit to 2 birds a day: 4517, 2526
Keep license as is: 6415, 0422
License is good as is: 6415, 8084
Regulations OK: 6202
Only one hen in fall and one gobbler in spring: 1230

OTHER ANIMALS

Called in coyote: 9851
Called in and shot coyote: 9024
Too many coyotes: 5337, 0000, 3266, 1831, 8947, 4952, 2959, 1548, 3138, 0000, 0000, 6951, 6571, 9851, 3146, 1549, 6063
Predator population too high: 6352, 1755, 2635, 3771, 9602
Decrease predator population, bobcats and coyotes: 6352, 1755, 2635, 3771, 9602, 1852, 0000
Coyote bounty: 2959, 3278
Coyote attacked decoy: 1755
Lots of red and grey fox: 3353
Saw 8 blue heron nesting in sycamore tree: 0753
Bobcat killed and buried turkey: 1927
Skunk came upon me at dusk: 7219
Called in bobcat: 9999
Son killed coyote stalking turkey: 2193
Saw 4 turkey carcasses near nesting site killed by predators: 1852
Populations of bear to high in Buchanan County, need to bait and thin population: 7191
Killed 6 coyotes: 8646
Saw hen with beard: 1755, 9495
Saw 2 bear cubs: 0349
Saw 2 small bear cubs: 7937
Bear overturned rocks for ½ mile in old trail: 5036
Lots of bear sign: 0349
Need predator research and how it affects turkey population: 6352
Called in coyote at Ft. Pickett: 6696

YOUTH DAY

Took youth hunting: 0472
Adults shooting youth birds: 7937, 3771
Mandatory check stations on youth days: 7937

NESTING

Flushed hen off nest with 12 eggs:
Poor hatch last spring: 9024
Saw 2 nesting hens: 6586
Saw hen on 13 eggs: 9113
Saw hen with poults late April: 9713

OPINIONS

Gobblers with hens early in season: 3416, 0584
Late breeding season: 5337, 5764
Put turkey hunting back in hunter Ed: 6195
Call hens and jakes as there may be a gobbler nearby: 2858
Restock turkeys in low population areas: 0000
Study turkeys on National Forest in Bedford Co. as populations have declined: 3107
Both gobblers I took had tail feathers missing indicating predators: 1852
Have DGIF work with landowners for more hunting: 6847
Need better turkey management on National Forest: 6239, 5289, 0000
Hunting pressure on National Forest reasonable: 1964
Federal land needs timber cut as it matures: 5289, 9401, 7727, 8511
Shut down access roads: 5036
More prescribed burns on timber cutovers: 2157, 5289
Provide small clear cuts: 5036
Need better Habitat on National Forest like select cutting and food plots: 6239, 5337, 1964, 3458, 1852, 8964, 0332
Bobwhite Quail gone: 2719
Share hunting experience: 6847
Less logging: 9024
Deer hunters kill most turkeys in fall: 2338
Many hunters abusing limits: 7868
Witnessed baiting: 7868
4 wheeler access for 60+ hunters appreciated: 5337
Saw goose with 6 little ones and wood duck with 8: 3748
Kill more bear, coyote and fox: 9315
Reduced gobbling due to predators: 6415
Improve food plots and habitat: 9024, 5180, 8964, 6837, 0151, 0840
Toms with hens: 5337, 5864, 2765, 9315, 9395
Need education on dogs, cats and coyotes: 8113
Good mushroom hunting: 5531
Some National Forest roads in Craig County nearly impassable: 1150
More enforcement to hold people accountable: 6415, 3080, 3458
Hunting pressure high in King George County: 9510
Too many hens killed in spring: 9510
Strutting decoy chased away 2 gobblers: 5884
Killed 3 coyotes: 5434
Game camera caught gobbler mating with hen: 3138
Cardinal landed on gun barrel while calling gobbler: 3107
Turkeys mated early this year: 3732

Make literature available to landowners on turkeys: 0256
Plant more hardwoods: 0198
Archery only first week: 2526
Plant clover on public lands: 1007
Warren County has pockets of turkeys depending on poachers and hunters: 0957
Have seen a few chestnut turkeys in Amherst: 0567
Need more public hunting in SE Virginia: 5339
Saw hen with 14 poults: 2157
I don't use gun, just like calling them in: 6415
Heard coyotes several mornings: 8947
Coyote den found near home with bones outside: 0472
Need clover food plots in Highland WMA: 7863
Good monitoring should continue: 0877, 8947
Saw 2 flocks of 40+ birds before season and little since: 4465
Called in several big owls: 3278
I plant food plots for turkeys: 1608
47 turkeys at one time on farm: 1608
Killed gobbler 12 days after wounding him: 4559
Plant food plots for turkeys: 1831
Close gates on public land: 9401
More assistance to private landowners to improve turkey populations: 7727
Should check turkeys at check station: 2193
Hens being shot by hunters not identifying birds: 2719
Sunday hunting attracting lots of hunters misidentifying birds: 2719
Have turkey tags like bear tags: 2719