

2015 Spring Gobbler Survey Report

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Since 1987 the Department of Game and Inland Fisheries (DGIF) has sought the assistance of avid 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 29th 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 2016 Spring Gobbler Hunter Survey will provide information that is valuable to the Department's turkey management program. 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. Also, as a token of appreciation for your participation in the survey, the Department provides cooperators with a copy of our Virginia Wildlife Calendar. If you participated last year and did not receive a calendar please let me know. Sometimes cooperators forget to include their mailing address or I receive a survey that was damaged by the Postal Service and your name and address are missing. So, if you participated last year and did not get a calendar please send me an email (gary.norman@dgif.virginia.gov) or call 540-248-9360. Thanks to Jim Bowman, VDGIF Terrestrial Manager, for reviewing this document and Jimmy Poole, VDGIF Volunteer, for summarizing your comments and remarks.

2015 Results and Discussion

The number of survey cooperators (275) declined slightly compared to last year (286). Cooperators in the 2015 survey submitted information on 3,286 hunts. The geographic distribution of survey respondents was good as reports were submitted from almost every county and several cities (Fig. 1).

Gobbling and Harvest.—Spring Gobbler Survey (SGS) cooperators heard 20% more gobblers per hour in 2015 (0.63/hr) compared to 2014 (0.53/hr) (Fig.1). The increase in gobblers heard (19%) was similar to the increase in the harvest of gobblers (17%) hunters reported by electronic checking. A significant percentage of the spring gobbler harvest is made up of 2-year old birds. Because turkey reproduction was high in 2013, we were not surprised to see the increase in the 2015 gobbling rates and harvest: The challenge was to estimate how much of an increase we might expect, after all, weather is an important factor that can affect hunter effort. The prospects for the 2016 season are also encouraging based on the number of broods and turkeys staff observed during August, 2014 (Fig.2). Similar to 2015, we expect an increase in the 2016 gobbler season harvest, assuming Mother Nature is generous with good hunting weather, particularly on weekends early in the season.

The 2015 survey marked a new record high gobbling rate (0.63 gobblers/hr), narrowly beating the previous highs seen in 2001 (0.62) and 2006 (0.61; Fig. 1). Over the past 10 years, our turkey population has increased 2.7% annually, which is very encouraging. Turkey populations in other regions of the nation have been declining in recent years; the cause is unknown but many state agencies are beginning research programs with the goal of determining the cause of the declines.

Forecast.--It is important to note that population estimates and gobbling rates may not be directly correlated every year. For example, a sharp decline in gobbling may not be due to a sharp population decline, but may simply be the result of an abnormally cold and wet hunting season. There are many factors that affect gobbling including weather, hunter pressure, and perhaps some biological impacts that are hard to quantify,

such as the impact of growth rates on turkey populations when they reach their maximum carrying capacity. But from a long-term perspective, we believe gobbling rates do reflect turkey abundance.

The number of broods (per 1,000 miles and poults/ hen) Department staff have seen in August have been good in each of the past 5 years except 2012, when reproduction was low. Overall, turkey recruitment levels have been good and stable over the past 5 years. Barring any unforeseen influence, turkey populations are expected to continue to increase because we have many areas we believe are below carrying capacity. However, turkey populations will not continue to increase forever as the population will eventually reach biological carrying capacity.

Gobbling by Region.-- Survey data suggest turkey hunters hunting east of the Blue Ridge Mountains (EBR) (0.70 birds/mi² forest range) heard more birds than hunters hunting in counties west of the Blue Ridge Mountains (WBR) (0.54 birds/mi² forest range). Both regions of the state saw significant increases in spring harvest between 2014 and 2015. The 2015 harvest in EBR counties was 20% above year while the harvest in WBR counties increased 12% in 2014. Fall (2014-15) and spring (2015) county harvest totals over the past 10-years can be found on the Department's web site (<http://www.dgif.virginia.gov/wildlife/turkey/>). You will note that we present the harvest data based on kill by square mile of forest range and suitable turkey habitat. We developed the suitable habitat variable because the number of acres of forest range does not incorporate a number of important habitat characteristics such as the diversity of openings, young and old forest types, and a mix or mosaic that we believe are important to wild turkeys.

The highest gobbling in counties EBR (April 12) was about the same date as counties WBR (April 13). However, the gobbling rate in counties EBR on April 12 was 0.92 gobblers heard/hr compared to 0.71 heard/hr in counties WBR. Among regions of the state, the highest gobbling rate was seen in the East Piedmont Region (0.74 gobblers/hr) followed by the West Piedmont (0.70 gobblers/hr), Tidewater (0.69 gobblers/hr), Northern Region (0.61), Southwest (0.59 gobblers/hr), and finally the Central Mountain Region (0.48 gobblers/hr; Fig. 1). It is encouraging to note that there is little difference in gobbling rates among the top 3 regions of the state. Historically, the highest gobbling rate has been found in the Tidewater Region, and having other regions reach the Tidewater gobbling rate is very encouraging. Gobbling rates are also very respectable in the Southwest and North Mountain Regions. The Central Mountain Region is the only region that is noticeably lower than the rest of the state (Fig. 1). The low gobbling rates and low harvest reported in the Central Mountain Region are difficult to explain. Reproduction (poults/hen and broods seen/1,000 miles) in the region has been low for the past 5 years. New predator communities that now include the black bear and coyote may have some bearing on the fate of nests and eventually poult recruitment.

Gobbling and Harvest by Week.-- On a statewide basis, gobbling was highest during the opening weekend and the first week of the season (Fig 4). Gobbling rates dropped in Week 2, picked up again in Weeks 3 and 4, and declined in the last week of the season (Fig.5).

Hunter success rates dropped sharply through April 26st (Fig.4). Following that, there were a series of 3 distinct increases in harvest rates that were followed by declines. These periods came around April 29, May 10, and May 16 (Fig. 4). Increases in hunter success rates can be correlated with hens beginning to incubate nests. Putting the number of gobblers heard and hunter success together, the best days of the season appeared to be April 12-18, and April 29-May 3.

Gobbling Intensity.-- Gobbling intensity was grouped into 3 categories (no gobbling, poor gobbling, or fair-good). Good hunting conditions, characterized by a high percentage of hunts with fair-good gobbling, were highest during the first week of the season (Fig. 7). These good conditions remained high during the 2nd and 3rd week of the season but began to decline in Week 4 and were lowest in Week 5. It is interesting to note that intensity does not correlate with gobbling rates. Periods of Roost/Poor Gobbling varied little among weeks of the season; the lowest rate was seen in Week 5. Hunts with no gobbling activity were low through the first 3 weeks of the season but began to increase in Week 4 and reached its highest level in Week 5. Based on intensity, the best hunting period was the first Week of the season, and Weeks 2 and 3 were close behind. However, intensity began to wane in Week 4 and bottomed out in Week 5. Clearly, the end of the season presents more of a mental challenge to spring gobbler hunters because of the drop in gobbling rates (Fig. 4) and lower gobbling intensity (Fig. 7); however, those hunters that remain dedicated to the end of the season are oftentimes generously rewarded with very high success rates as the season draws to a close (red line, Fig. 4). Any spring hunt, with or without a bird to clean, ought to be a great day. They're even better if shared with a friend, young hunter, and challenging gobbler that leaves you with memories of the hunt that last a lifetime.

Cooperator Summary. Cooperators averaged hearing 27 birds throughout the 2015 season. This is higher than any rate reported over the past 5 years.

Cooperators averaged killing 1.2 birds per season in 2015; this rate is identical to 2013 but is much higher than the rates of 0.9 in 2011 and 2012. Cooperators' partners killed 0.6 birds per season in 2015 which is lower than 2014 where partners averaged killing 0.8 birds per season. Cooperators, or their partners, killed 7% of birds they heard in 2015. Approximately 31% of gobblers called-in were successfully harvested by the cooperator or their partner. These rates are comparable to 2012 and 2013. Less than 10% of cooperators scouted before the season, but those that did scout averaged almost 3 days afield.

There were 5 Sundays during the 2015 season (excluding Youth and Apprentice). Sunday participation was modest as they accounted for 8.3% of all the hunts taken. Of those hunts that took place on Sundays, most of the effort took place on the first (33%) and second Sunday (25%) of the season.

Survey Questionnaire.— A majority of cooperators (65%) felt the turkey population they hunt is just right, although some (34%) indicated their population was too low. Only two cooperators felt they had too many turkeys. Half of (50%) cooperators heard enough birds to keep them happy during the 2015 season while 17% heard more than enough birds to keep them satisfied. However, 17% were disappointed with the number of gobblers they heard during the season. A majority of cooperators (59%) were content with the number of birds they killed during the season and killing more birds was not important to their season satisfaction, although many (41%) would have liked to kill more birds.

Most (85%) felt the spring season length was just-right, although some (10%) felt the season was too short. A few cooperators (6%) felt the season was too long. Most (71%) of cooperators were happy with the opening date of the spring season. Some (28%) felt the opening date was too late while a few (1%) felt it was opening too early. A majority (71%) preferred a one-bird daily bag limit but 29% would have preferred a two-bird daily bag limit. Eighty percent of cooperators like the annual bag limit of 3 birds. However, about equal numbers of cooperators wanted a higher bag limit (11%) while others wanted a lower bag limit (9%). A majority (76%) of hunters were satisfied with the number of days of the season with all-day hunting.

An over-whelming majority (96%) of cooperators felt the regulations were clear. Most (77%) cooperators liked the phone/internet checking system although many (20%) feel some hunters were not reporting their kills. A few (3%) do not like the system because they feel it is too complicated. Regarding separating the deer, turkey, and bear licenses, most felt management would be best served with no change (63%). Some (11%) liked the idea of separating the licenses, but many (26%) had no opinion on the subject. Some states require new turkey hunters to take a specialized hunter education course dealing with turkey hunting. A significant majority (75%) did not support requiring such a course in Virginia.

A slight majority (58%) liked the length of their fall season. About equal numbers feel their fall season was too short (20%) while others feel it was too long (22%). Most (73%) cooperators think the youth season is long enough although many (24%) feel it is too short. A small number (2%) felt it was too long.

Having good places to hunt is obviously important to all hunters but a significant majority (81%) of cooperators felt they didn't need any help finding places to hunt. However, almost half (49%) of cooperators indicated they would like more public land to hunt. The other half indicated they didn't want more public land or wouldn't use it. Most (55%) cooperators had no opinion of habitat management on Department-owned lands. However, of those with an opinion, most felt the Department was doing a good (34%) or fair (48%) job; 17% of cooperators rated our habitat work as poor. A majority of cooperators (56%) also had no opinion about habitat work on US Forest Service lands. However, of those with an opinion, a majority (58%) felt habitat management on Forest Service lands they hunt was poor. On the positive side, some felt they were doing a fair (29%) or good (13%) job.

Cooperators largely had no opinion of turkey populations on DGIF (60%) or USFS (56%) lands. However, of those with an opinion, half most (50%) felt the turkey population was fair on DGIF lands, while some rated them good (22%). A disappointing twenty-eight percent of cooperators rated turkey populations on Department lands as poor. Turkey populations on Forest Service lands were primarily rated as fair (52%) while some rated those turkey populations as excellent (8%). Unfortunately, many cooperators rated their USGS turkey populations as poor (40%). The quality of hunts on public, or any lands for that matter, is often dependent on pressure from other hunters. Of cooperators with an opinion, most (52%) felt hunting pressure on public lands was reasonable and a few felt it was low (6%). However, a significant number (43%) felt

hunting pressure on public lands was too high. Many (31%) cooperators indicated they pay a fee to hunt on private land. Most do not pay a fee and they reported hunting on lands owned by friends and coworkers (49%) or family-owned (20%) lands.

Cooperators were nearly equally divided about the need for more Conservation Police Officers (CPO). A slight majority (52%) felt we did not need more CPOs, while the balance (48%) wanted more CPOs. Some cooperators (7%) reported using the Crime Line.

Of the cooperators with land to manage, some (15%) have received advice on habitat management from DGIF Biologists. Many (45%) felt the Department should provide landowners more information on habitat management.

Cooperators generally held strong feelings about predators and their impacts on turkey populations. A majority (69%) felt the Department should be involved in predator control if a mechanism were found to reduce predator populations. The balance felt predator control was not necessary (14%) or they did not have an opinion (17%). A very high number of cooperators (80%) wanted the Department to do more research on the impacts of predators on wild turkeys.

A majority (55%) of cooperators wanted the Department to provide more “how to” or other useful information in our publications. Most of the balance of responses to this question had no opinion (38%).

On the positive side, only 2 cooperators reported issues with wild turkeys impacting their crops, property, or children. An over-whelming 99% reported no nuisances from turkeys.

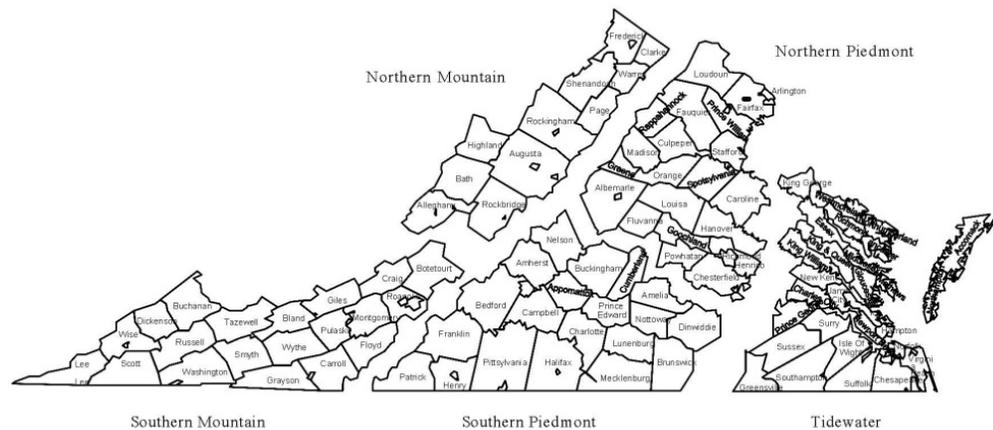


Figure 1. Regional boundaries for Virginia Spring Gobbler Season Survey

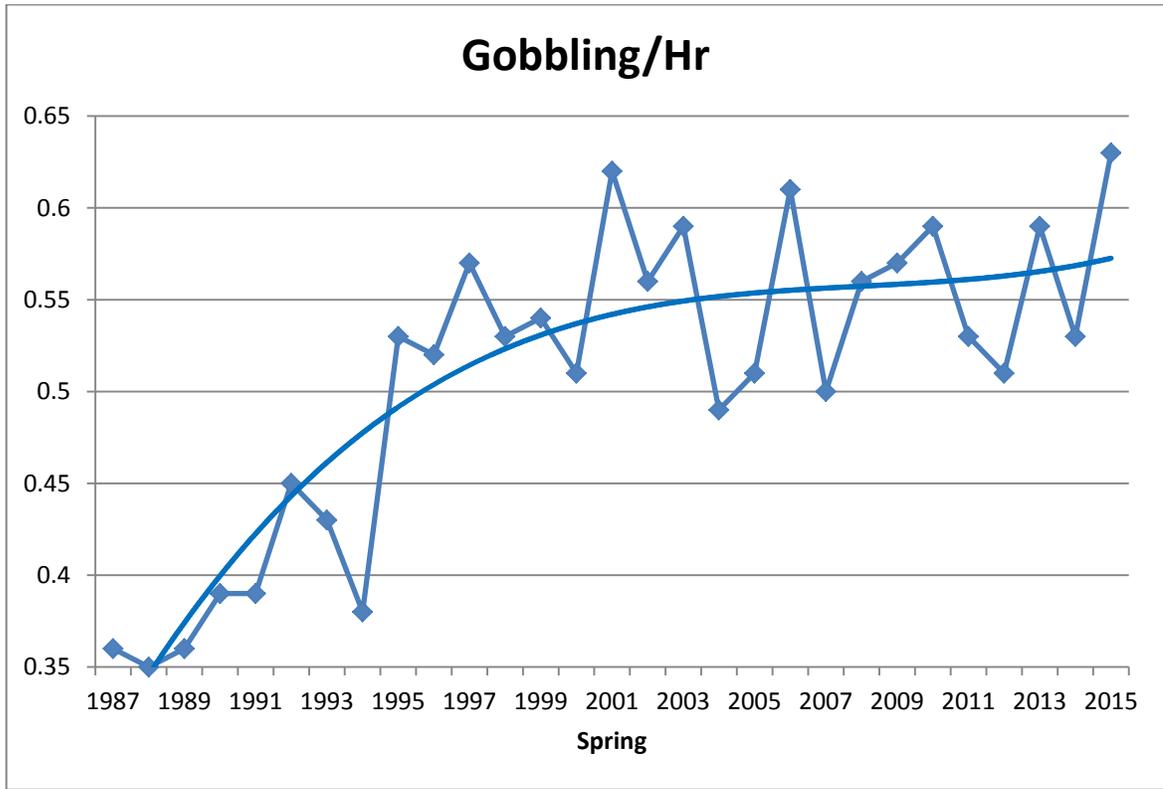


Figure 2. Gobbling per hour reported by Virginia Spring Gobbler Season Cooperators.

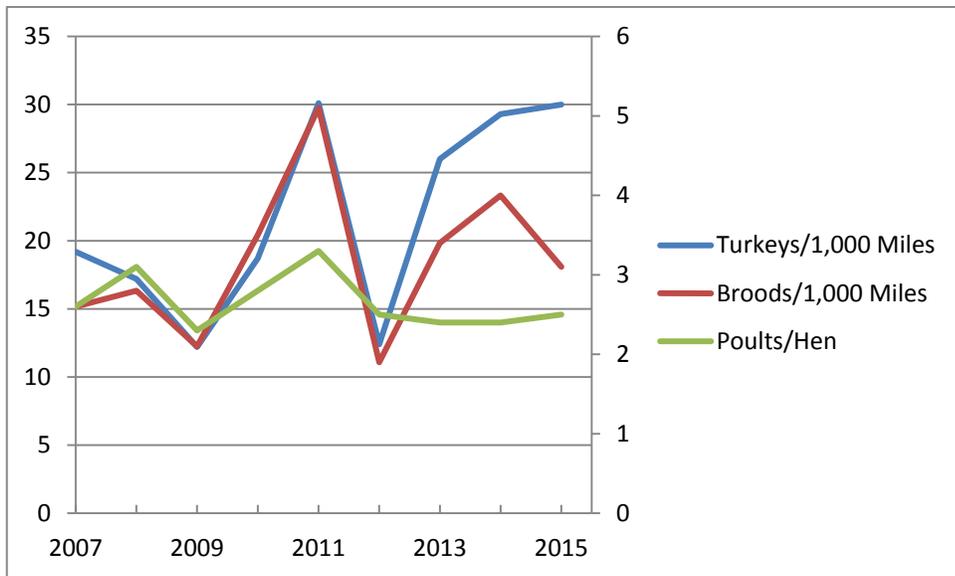


Figure 3. Turkeys seen, broods seen, and poults per hen in Virginia from 2007-2015.

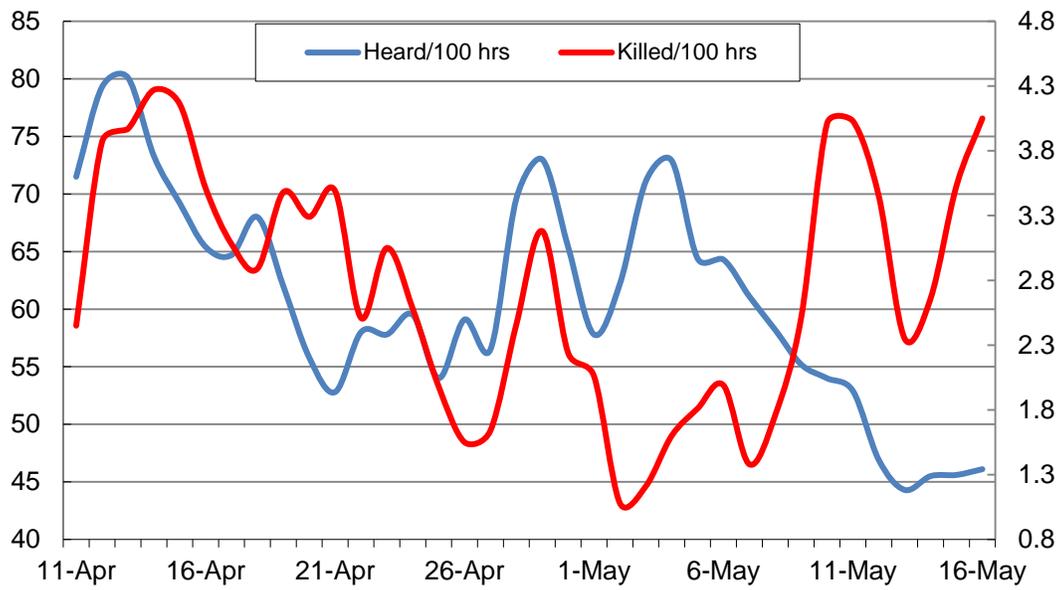


Figure 4. Statewide gobbling and harvest moving averages for Virginia in 2015.

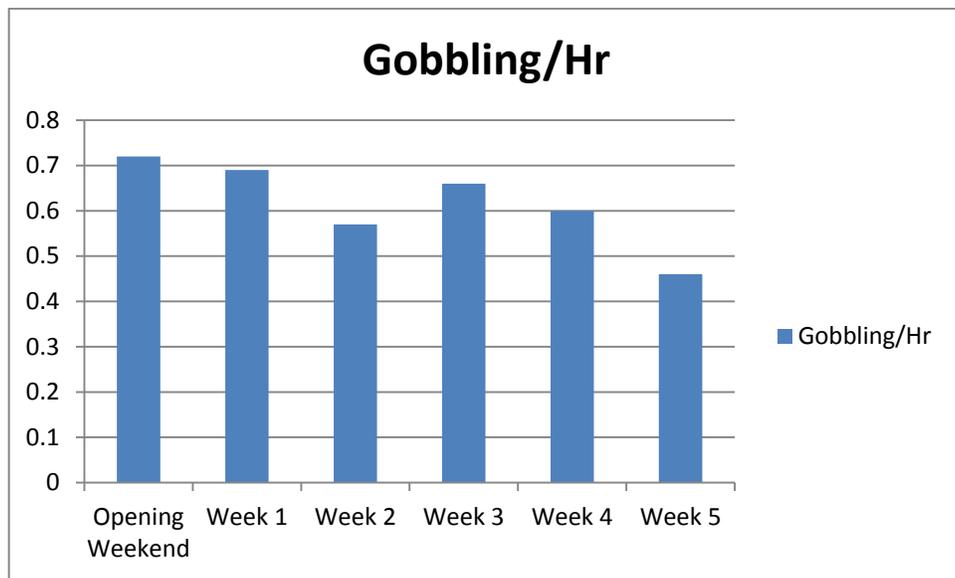


Figure 5. Gobbling by time period of the 2015 spring gobbler season in Virginia.

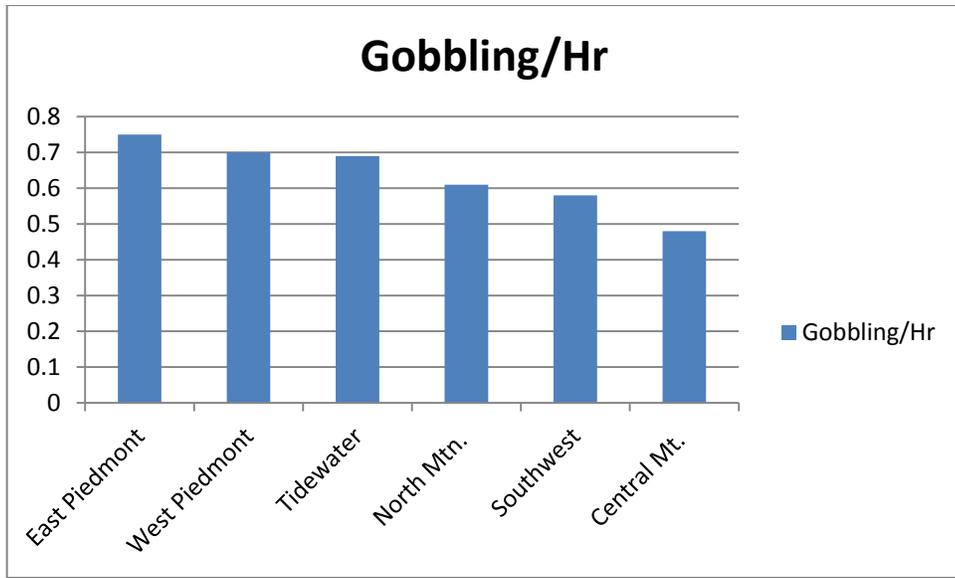


Figure 6. Gobbling by region in Virginia during the 2015 spring gobbler season

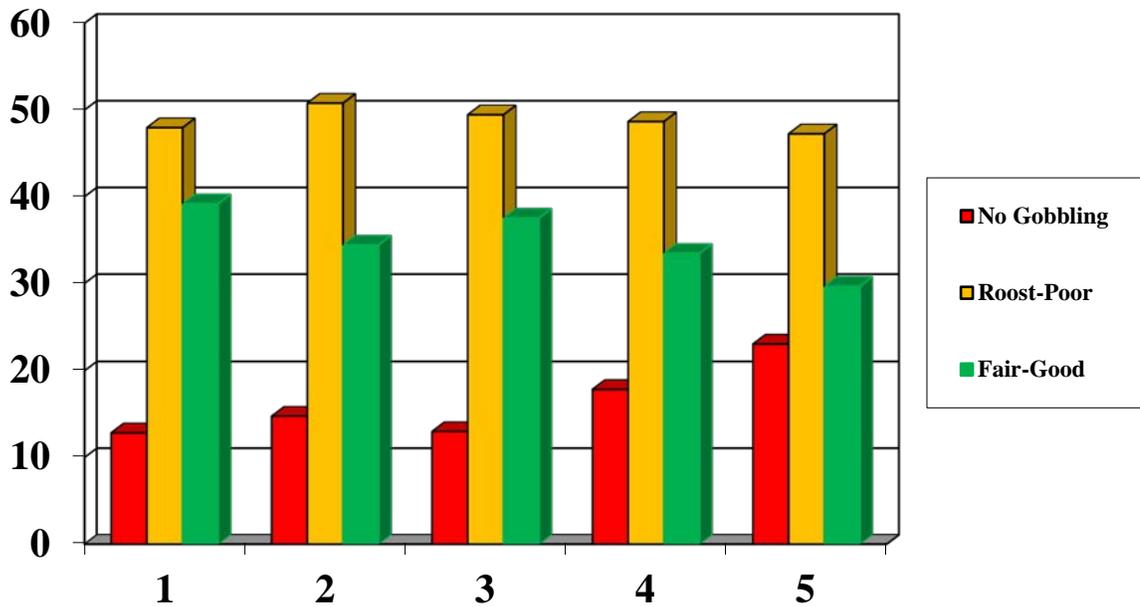


Figure 7. Gobbling intensity per week in Virginia in 2015.

Appendix A. Cooperator observations and comments from 2014 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.

WEATHER

Bad or not very good: 8760, 9437

Good: 1964

Wet or cold spring: 9164, 3344, 5294, 3353, 8854, 7868, 6203, 1501, 0753, 0000

Long cold winter: 9904, 2338, 8511, 5943, 6195, 0408, 0675, 0000

GOBBLING

Poor: 3458, 0101, 8511, 7045, 6951, 8854, 6951

Good: 0840, 2198, 8884, 7868, 6164, 2794, 0000

Less than before: 8964, 0244, 3825, 0584, 5587, 0256, 6203, 5584, 9847, 4499, 0000

Worst: 3749, 5339, 3186, 3344, 6837, 8964, 9880, 1002, 1501, 0000

Did not respond or hard to call in: 1755, 6591

Gobbled on roost then not on ground: 9401, 8760, 9024, 5304, 5943, 1548, 8041, 9315, 7191

Gobbled before season or early in season: 9401

Very little gobbling on roost: 8507

Gobbling was better later in the season: 9417, 6239

Gobblers with hens early in season: 0753, 8646

Gobblers with hens late in season: 0584

Turkeys never broke up: 0000

POPULATION

Populations up: 5337, 9024, 6302, 4833, 1608, 6571, 5587, 0256

Lots of jakes: 5943, 2198, 4340, 5764, 0000

Large number of hens: 9904, 9713, 3344, 2198, 6837, 6220, 9198, 9847

Plenty of gobblers: 6302, 1007, 4499

Very few or not many hens: 1171, 0253

Population low: 1171, 5827, 3525, 2858

Gobblers were with hens: 5000, 0840, 8511, 5186, 3458, 1755

No turkeys on National Forest: 3107

SURVEY RECOMMENDATIONS

Need column for jakes: 7342

Consider fall survey: 1380

Send envelope for personal info: 9237

Send survey electronically save money: 9237

Concerned that sending 700 surveys to NWTF members may bias survey: 2050

Make survey available in stores that sell license: 4178

Thanks for survey: 3353

Add column for hunting partner: 6180

LIKED SEASON OR NOT

Enjoyed the season: 3229

Terrible to bad: 1002

Difficult: 6406

THANK YOU

Thanks Gary Norman for good work: 8718, 6631, 1339, 0256, 4499, 7181

Thanks Gary Norman, VDGIF & NWTF: 6415, 3458, 1608, 8646, 8239, 5245, 0015

Thanks VDGIF: 1831, 5289,

Good turkey management plan: 9161, 0573, 3316, 4578, 1964
VGDF is doing a great job for disabled veterans: 6415

DOGS

Free roaming dogs are a problem: 3771

Lots of dogs running deer: 9336

LENGTH OF DAY HUNTING AND SUNDAY

Yes to Sunday hunting: 5339, 7670, 0753, 6063

No to Sunday hunting: 3107, 9713, 5593, 8755, 6373, 0137, 7181, 4499, 5041, 6586, 9147, 0015, 6784, 1305,

Likes all day hunting: 4559, 5339, 2097, 9072, 6195, 3353

Keep hunting times as is: 5434, 7342

SEASON DATES

Open 1 week earlier: 2526

Open 2 weeks earlier: 1844

Start 1 week earlier and end 1 week earlier: 2098, 0000

Start season earlier: 1158, 0840

All day season need to be earlier: 2338, 5719, 0000

Season dates OK: 6415, 4578, 1904, 0000

No hen hunting in fall: 8024

Run season longer: 6789

Keep season as is: 6415, 8755

FALL SEASON

Keep fall season as is: 0015, 2959

Close in deer season: 7992

Keep season as is: 0472

Stop hen hunting only in fall: 5232, 2719

Bearded turkeys in fall only: 3316, 0472

Do not support fall season: 3316

Need to add fall only tag:

Fall season to long: 5304

Longer fall early season: 5186

Fall season as it used to be: 0573

LIMITS AND LICENSE

Unused tags in spring should be used in fall: 9835

Limit is good: 6415, 1964

Cut limit back to 2: 8024

Reduce to 2 birds in spring: 6415

Need to be able to take more than 1 bird per day: 9880

Reduce limit to 2 birds in spring or even 1 gobbler: 1150

No hens in fall: 9680

Need separate license for spring gobbler: 9126

DGIF should sell separate fall and spring licenses: 9126

WEAPONS AND SHOT

Do not allow rifles in spring: 0332, 4520, 9680, 2684, 3458, 8864, 9981, 2526, 5289, 8732, 1266, 1755, 4333, 8239, 1844

No rifles allowed for hunting turkeys: 6961, 5339, 7670, 8732, 4791, 4455, 1627, 4644, 5584, 8646, 1852, 3825

Rifles should be allowed in spring: 6373, 2050, 4756

Likes option of combination gun: 9237, 0151, 6289, 6415
No shot size above #2 in fall: 5339

OTHER ANIMALS

Called in coyote: 4644 Called in and shot coyote: 3107, 1208, 5764, 0349
Too many coyotes: 9851, 5764, 7191, 9847, 1196, 6951
Saw 4 coyotes: 3879
More coyote sign: 0840, 0000
Female Coyote had 3 pups: 3107
Saw skunk 4 days in a row: 6164
First sighting of grouse in 30 years: 4952
Saw raccoon fishing: 6586
Bobcats and coyotes killing off chicks: 5232
Coyote chasing hen: 3353, 5764
Called in hen and Red Tailed Hawk attacked her: 5000
Found dead doe in fawn birth: 0464
Saw hen with beard: 0679, 9835, 3825, 2929
Saw bear: 2338, 3810
Saw 3 bear: 6415
Saw 4 bear cubs: 3749
Saw gobbler mating with peacock and then peacock attacked decoy: 0000
Called in pair of wood ducks: 6180
Saw many grouse in Highland County: 7863

OPINIONS

Lots of hunting pressure: 3771
Fall turkey season should not overlap deer season in Pittsylvania County: 3229
Bears, coyotes and golden eagles have effect on turkey populations: 4644
Stop logging on WMAs during spring gobbler season: 1964, 7863
No controlled burns on Natural Forest during grouse nesting season: 3186, 1549
Private land birds are easier to get than on National Forest: 2215
Need better habitat on National Forest: 0573, 4130
Make "Hunter in Area" sign available in VA Wildlife Store: 5339
Flushed 2 woodcock: 5764
Some dog hunters exceed bag limits: 2959
Logging helps government lands: 9161
No to decoys: 4687, 3825
More enforcement to hold people accountable: 4187
Stiffer penalties for violators: 2959
Good mushroom hunting: 0573

YOUTH DAY

Took a youth hunting: 4679, 8084
Youth/ apprentice season should be one week: 1504
Youth day to hunt on Sunday: 9237
Youth day in March: 1158
Adults shooting youths birds: 3771

NESTING

Hen killed on nest by predator: 7246
Two nest destroyed by predators: 1548