

Spittin' & Drummin'

2019 MISSISSIPPI
WILD TURKEY REPORT



MISSISSIPPI DEPARTMENT OF WILDLIFE, FISHERIES, AND PARKS

ATTENTION TURKEY HUNTERS!

Photo by Steve Gulleger

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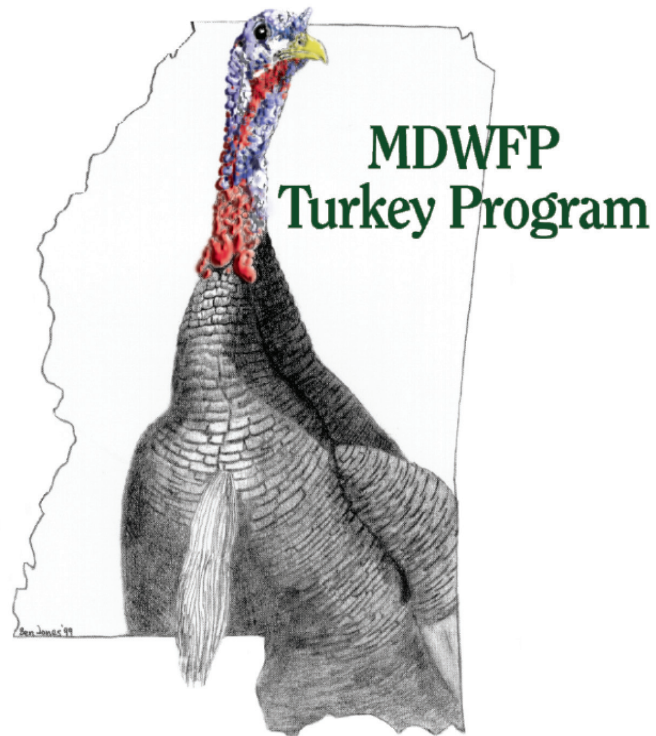
Beginning with the 2019 spring season, turkey hunters are required to report their gobble harvests to Mississippi Department of Wildlife, Fisheries, and Parks by 10 p.m. ON THE DAY OF HARVEST.

THERE ARE 3 WAYS TO REPORT:

1. MDWFP APP
2. Online at mdwfp.com/gamecheck
3. Call 1-800-BE-SMART

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2019 MISSISSIPPI WILD TURKEY REPORT



MISSISSIPPI DEPARTMENT OF WILDLIFE, FISHERIES, AND PARKS
1505 Eastover Drive | Jackson, MS 39211

Mississippi Wild Turkey Population Statistics

Based on Spring Gobbler Hunting and Brood Surveys

THE SPRING GOBBLER HUNTING SURVEY (SGHS) WAS INITIATED IN 1995 TO PROVIDE MISSISSIPPI Department of Wildlife, Fisheries, and Parks (MDWFP) biological information about the state's wild turkey resource. Each year, cooperating hunters record information about their spring gobbler hunts. The database obtained from this survey assists MDWFP in monitoring populations and making management decisions in the best interest of the turkey resource and turkey hunters. MDWFP appreciates the data collection efforts and comments from all hunters and hunting clubs who participate in the SGHS. All turkey hunters, regardless of their ability or experience, are encouraged to participate. This is an opportunity to be directly involved in the conservation and management of the wild turkey in Mississippi. An application for participation in the SGHS is provided at the end of this report.

Private land data from the 1995–2018 SGHSs are presented graphically in the following statewide and regional summaries. The remainder of this introduction describes how the data were collected and summarized, along with important points to consider during interpretation. Most parameters are expressed as an average number per every 10 or 100 hours of hunting. Standardizing values by a specific number of hours hunted allows the rates to be compared among regions and years, even though hunter effort varies.

Reproduction

During June, July, and August, the annual wild turkey brood survey (initiated in 1994) is conducted by personnel from MDWFP, Mississippi Forestry Commission, U.S. Forest Service, and other cooperators. Brood surveys provide indices to reproduction and are valuable in monitoring turkey population trends. Hens observed with at least one poult are considered successful. Hens without poults are considered unsuccessful and either did not attempt to nest, abandoned their nest, lost their nest to predation or human disturbance or had no poults survive. Average brood size is the total number of poults divided by number of successful hens and is an index to poult survival. "Poults per total hens" is defined as the number of poults observed divided by total number of hens seen. "Poults per total hens" is the most practical reproductive index because it considers successful hens, unsuccessful hens and poult survival. Poults observed during the brood survey were assigned to an estimated age class which allowed for back dating the estimated incubation and hatch dates.

Turkey Observations

Turkey observations are classified as gobblers, jakes, hens, or unknowns. Observation rates are reported as the average number of gobblers, jakes, or hens seen during 100 hours of hunting. Total observations combine all turkeys seen, including unknowns. Observation rates provide indices to sex ratios, gobbler age ratios, population size, and population trends. Jake observations reflect the recruitment of males into the population from the previous year's hatch and provide an index to the potential number of 2-year-old gobblers in the population during the next spring turkey season.

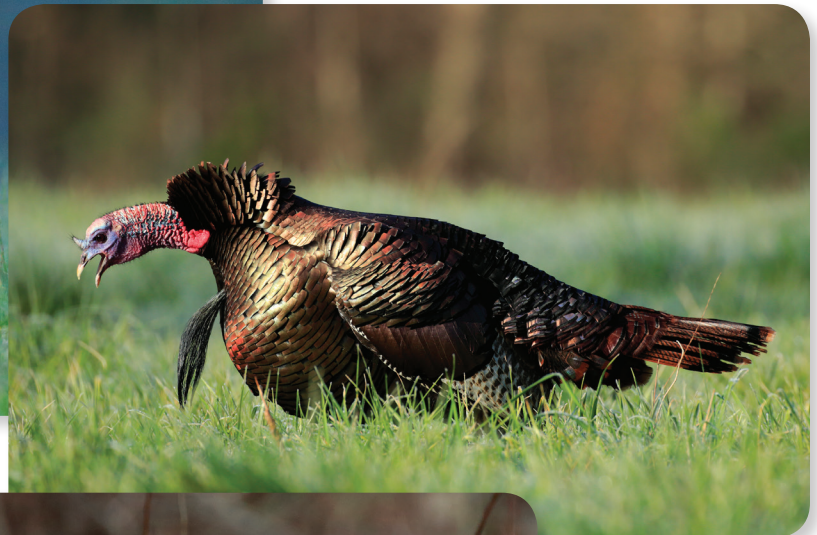
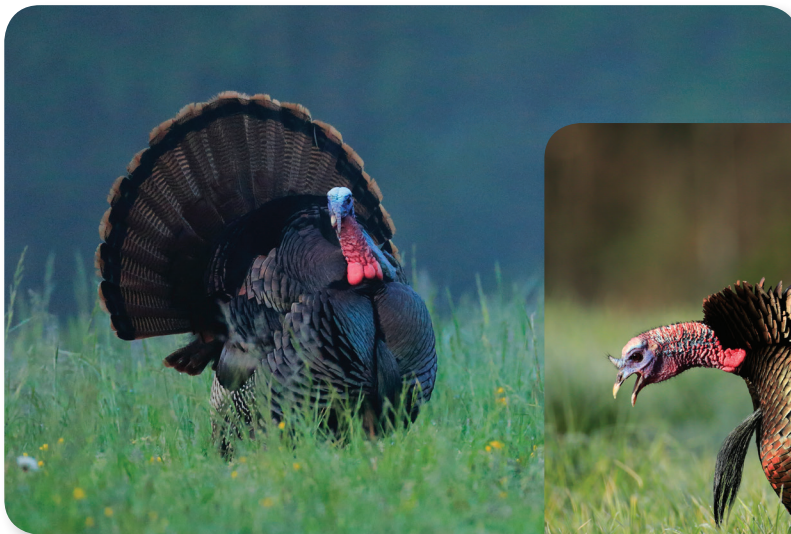


Gobbling Activity

The number of individual gobblers heard and the total number of gobbles heard are used as indices to gobbling activity. Gobbling activity is reported as the average number of gobblers and gobbles heard during 10 hours of hunting. Gobbling activity is considered an indicator of hunting quality and may show a trend reflecting the number of gobblers in the population.

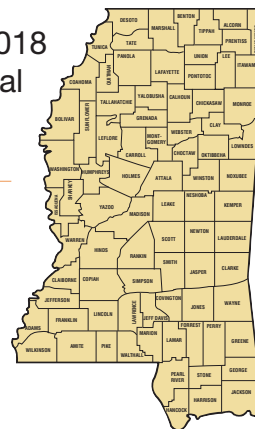
Harvest Rates and Age Structure

Harvest rates provide an index to hunter success and population size. Spur lengths generally increase with age and therefore provide an index to age structure of harvested gobblers. Spur lengths are classified into four length categories based on the longer of the two spur measurements for each harvested gobbler. Spurs less than half an inch long are classified as jakes or 1-year-old gobblers. Lengths between a half and one inch are generally 2-years-old. Gobblers with spurs one to one and a quarter inch are considered 3-years-old, while birds with spur lengths over inch and a quarter are considered 4-years-old or older. Monitoring spur length distribution should reflect changes in gobbler age structure over time. If age structure is increasing, a higher percentage of gobblers harvested should be in the larger spur length categories. Spur length distributions are used to monitor the impact of harvest on the gobbler population and to evaluate season lengths and bag limits.



Statewide

STATEWIDE PRIVATE LAND DATA WERE COLLECTED DURING THE 2018 season by more than 57 hunting clubs and approximately 563 individual hunters participating in the Spring Gobbler Hunting Survey.



Reproduction

Throughout June, July, and August of 2018, statewide participants the MDWFP wild turkey brood survey observed a total 1,807 hens. Of these, 40% (730) successfully raised at least one poult. This was nearly double the success rate of the previous year (24%). A total of 2,945 poults were observed across the state, yielding 1.63 Poults Per Hen (PPH). This value was nearly identical to the 10-year PPH average (1.58; Figure 1). Across the state, the average observed brood contained 4.03 poults. Broods accompanied by only one adult averaged 5.37 poults. The median estimated hatch date for all nests was 10 June, suggesting the median date on which most were laid was 2 May. In 2018, substantial regional differences in reproduction existed.

Harvest Rates & Age Structure

In 2018, participants in the Spring Gobbler Hunting Survey (SGHS) harvested 727 gobblers across Mississippi. This was a 104 bird increase over the previous year, and harvest per unit of effort increased slightly to just over three gobblers harvested per 100 hours hunted (Figure 2). This value was about 6% under the long-term average. The percentage of 2-year-old gobblers, or those having one-half to one-inch spurs, increased to 44% of the harvest. Older gobblers, with spurs equal or greater than one and one-quarter inches, comprised 13% of the harvest (Figure 3).

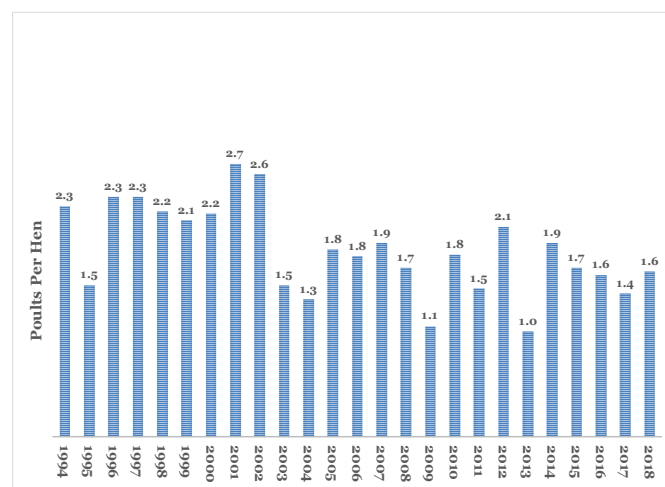


Figure 1: Statewide Poults Per Total Hens

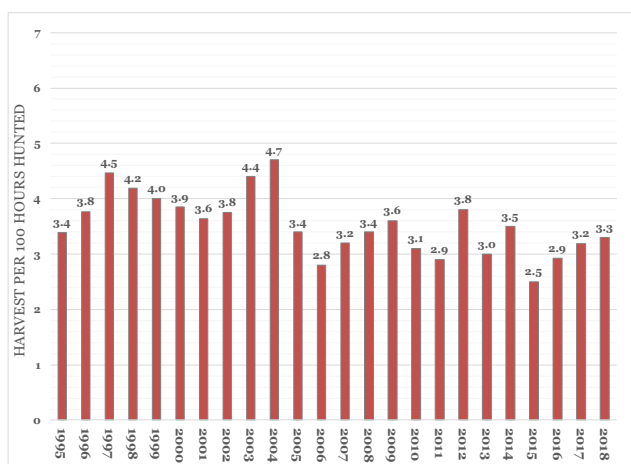


Figure 2: Statewide Harvest Per 100 Hours Hunted

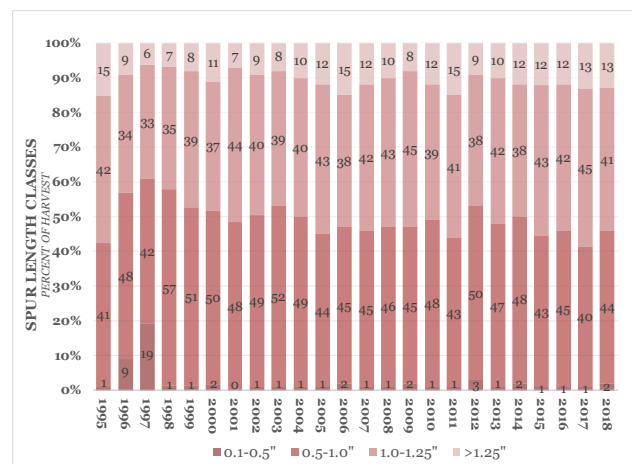


Figure 3: Spur Length Distributions From Gobblers Harvested Statewide

Gobbling Activity

Both the number of individual gobblers and total gobbles heard declined slightly during 2018. For every 10 hours of hunting effort, the average statewide participant in the SGHS heard just under 5 unique gobblers, and about 58 total gobbles (Figure 4). Both of these values were approximately 10% below their 10-year average. Gobbling activity appeared to peak during the third week of the regular season (29 March–4 April). During this week there were between 5 to 6 individual gobblers and 72 total gobbles heard per 10 hours hunted. The last week of the season (26 April–1 May) also produced intense gobbling activity (Figure 5).

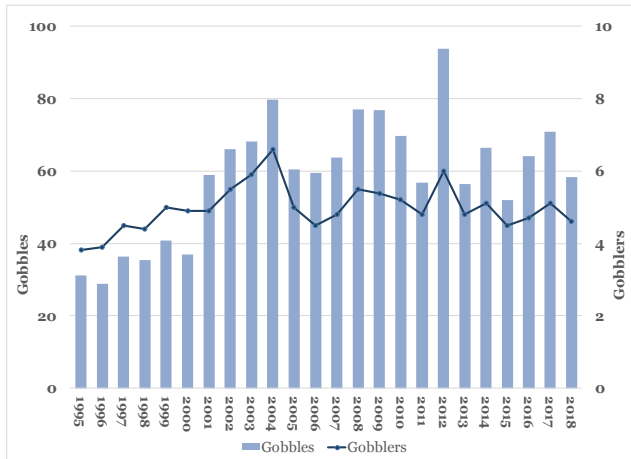


Figure 4: Statewide Gobblers & Gobbles Heard Per 10 Hours Hunted by Year

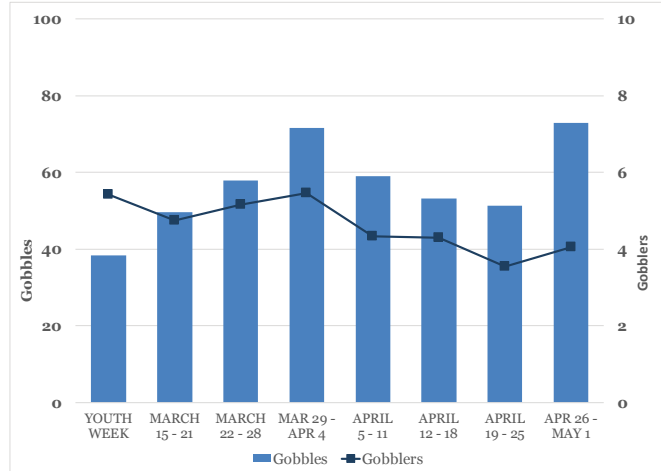


Figure 5: Statewide Gobblers & Gobbles Heard Per 10 Hours Hunted by Week

Turkey Observations

During 2018, turkey sightings across Mississippi were similar to the previous two years. Hunters observed an average of 77 turkeys, including 18 adult gobblers, 14 juvenile gobblers (jakes), and 39 hens per 100 hours watched. (Figures 6 & 7). The number of jakes observed was nearly identical to both the previous spring and the long-term statewide average (Figure 7).

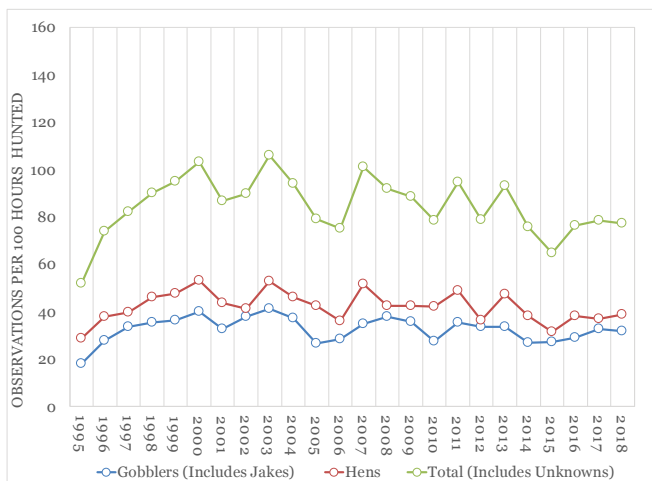


Figure 6: Statewide Turkey Observations Per 100 Hours Hunted

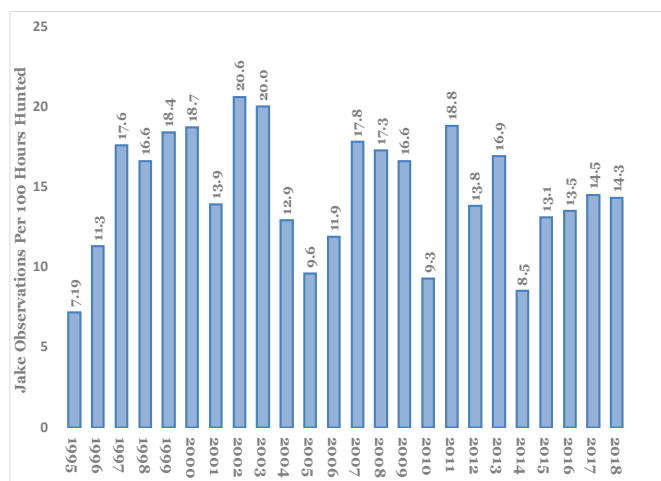


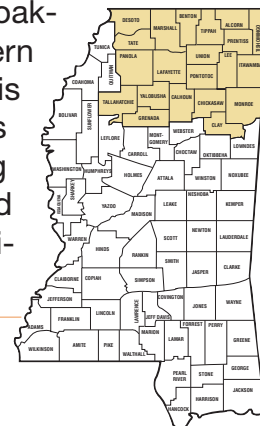
Figure 7: Statewide Jake Observations Per 100 Hours Hunted

2019 Season Forecast

Geographic variation will exist in turkey populations, but most turkey hunters in Mississippi should expect a 2019 spring season that is very similar to their experiences of the past two years. Poult per hen figures, total turkey observations, and jake sightings over the past several years have all remained relatively consistent at the statewide level. Average harvest rates will likely decline slightly in 2019, but the drop will probably not be noticeable to most. Spring weather and regional variability will play a large role in the timing of gobbling activity, but if prior years are any indication, gobbling should peak during the week straddling April 1st.

Turkey Region 1

TURKEY REGION 1 CONSISTS OF 21 COUNTIES IN NORTH-CENTRAL and northeast Mississippi. The two primary forest types in Region 1 are oak-hickory and oak-pine. The oak-hickory forest type is located on the western side of the region and in association with the Blackland Prairie. While this forest type is dominated by various oaks and hickories, it also includes beech, black cherry, and yellow poplar. The oak-pine forest type runs along the Alabama state line and in the central portion of the region. Here, upland oaks comprise about 50% of the forest community and are mixed with minor amounts of loblolly and shortleaf pines.



Reproduction

Turkey reproduction in northeast Mississippi was relatively poor during the summer of 2018. The PPH average dropped by nearly 57% as compared to the summer of 2017, to 0.87 poult seen per adult hen (Figure 8). Of the 183 hens observed during the brood survey period, approximately 26% were successful in raising young. This was a slight decline from the previous year, and was below the statewide average success rate. Brood sizes were also diminished; on average broods in Region 1 were comprised of just over three poults (3.35). The median hatch date in Region 1 was 11 June, suggesting only half of nests were laid by 3 May.

Harvest Rates & Age Structure

During 2018, Region 1 had the second highest regional average harvest per unit of effort by SGHS participants. For every 100 hours hunted, hunters in northeast Mississippi brought home three and a half gobblers (Figure 9). This marked the second straight year in which this region's hunters were among the most successful in Mississippi. There were 206 gobblers harvested by SGHS participants in Region 1 during 2018. Most came from the 2-year-old cohort with spurs between one-half to one inch in length (Figure 10). This was a significant increase in this age group over the previous two springs.



Figure 9: Region 1 Harvest Per 100 Hours Hunted

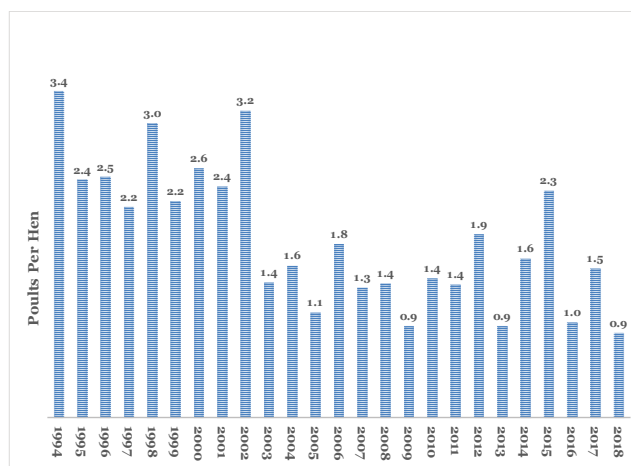


Figure 8: Region 1 Poults Per Total Hens

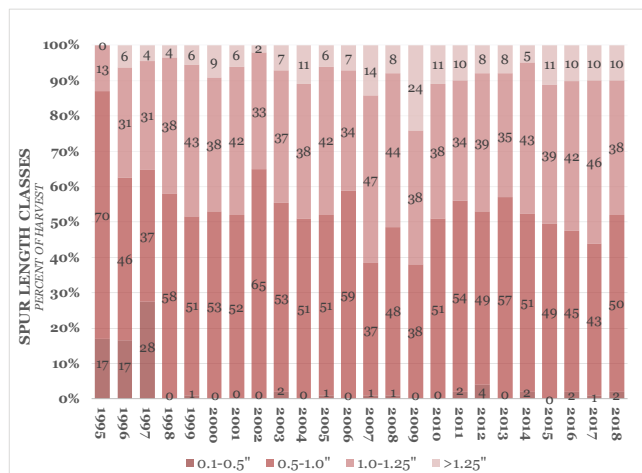


Figure 10: Spur Length Distributions From Gobblers Harvested in Region 1

Gobbling Activity

Gobbling activity in northeast Mississippi dropped in 2018 as compared to the previous spring. On average, SGHS participants heard just over four individual gobblers and slightly more than 40 total gobbles per 10 hours hunted (Figure 11). Each of these figures were below the region's long-term average. Overall gobbling activity showed two distinct peaks across the season. The first came during the third week of the regular season (29 March–4 April), in which hunters heard just over 5 gobblers and 60 total gobbles per 10 hours hunted. The second peak coincided with the final week of the season (26 April–1 May), wherein gobbling per individual gobbler heard was greatest (Figure 12).

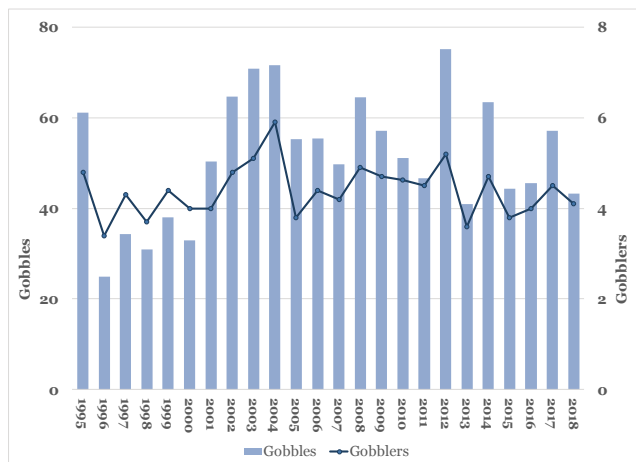


Figure 11: Region 1 Gobblers & Gobbles Heard Per 10 Hours Hunted by Year

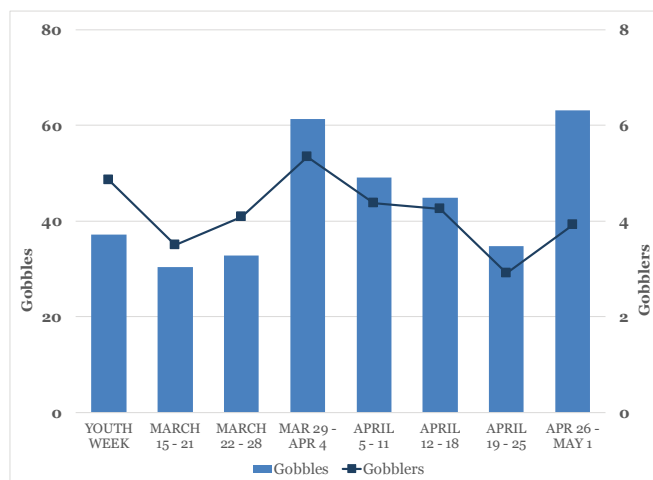


Figure 12: Region 1 Gobblers & Gobbles Heard Per 10 Hours Hunted by Week

Turkey Observations

Overall turkey observations in northeast Mississippi remained relatively unchanged for the fifth straight spring. Hunters observed slightly more than 100 total turkeys for every 100 hours hunted. Hens comprised nearly half of all sightings, with jakes and adult gobblers combining for almost 40% of all observations, and unknown sightings filling the remainder (Figure 13). Jake sightings increased in the northeast region during 2018 to 21.4 jakes observed per 100 hours hunted (Figure 14). This was the second highest jake observation total across all regions.

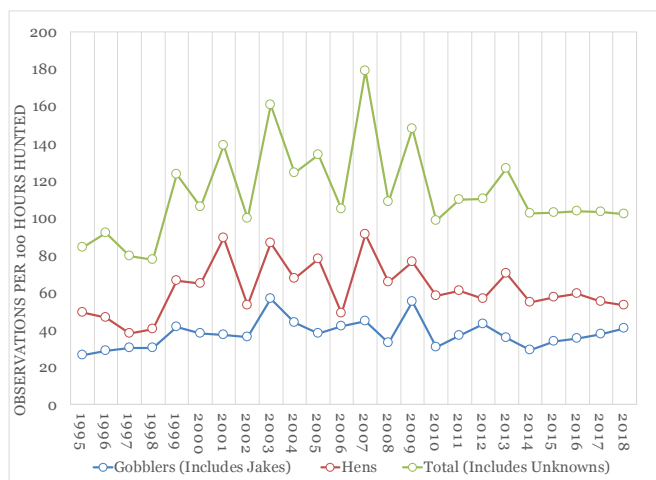


Figure 13: Region 1 Turkey Observations Per 100 Hours Hunted

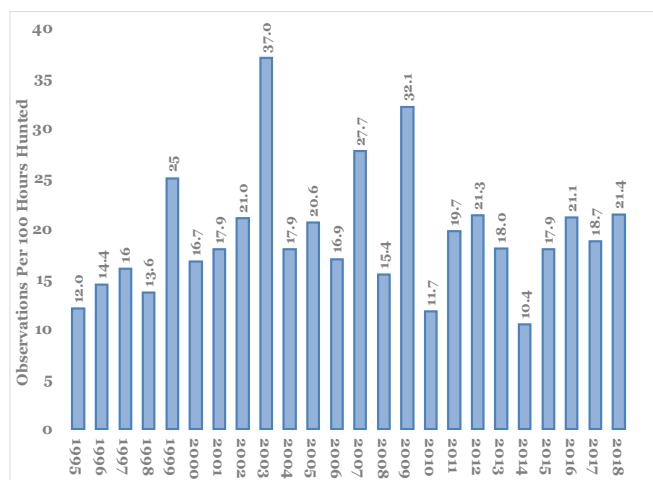


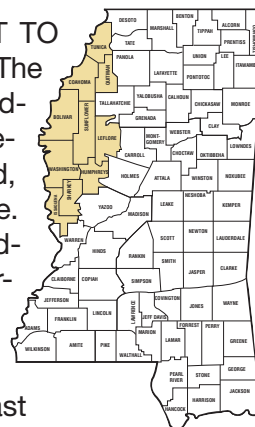
Figure 14: Region 1 Jake Observations Per 100 Hours Hunted

2019 Season Forecast

Northeast Mississippi has produced some of the best turkey hunting in the Magnolia State over the last few years, and available data suggests this trend should continue for 2019. Overall turkey observations in 2018 were similar to recent seasons, and jake sightings increased slightly. On a less positive note, summer reproduction in 2018 declined substantially. The combination of these two factors suggests that hunters in this region should expect to see fewer turkeys overall during 2019, but the availability of adult gobblers should still remain near levels enjoyed over the previous few years.

Turkey Region 2

TURKEY REGION 2 COMPRISES THE TEN DELTA COUNTIES AND IS SUBJECT TO extensive, annual spring flooding that has a major impact on turkey reproduction. The dominant forest type in the Delta is oak-gum-cypress. This region can be subdivided into the batture lands (west of the mainline Mississippi River levee) and the interior floodplain. The batture area is dominated by sugarberry, sycamore, cottonwood, sweetgum, elm, and cypress. Pecan is the only hard mast producer of any significance. The interior Delta consists of extensive agricultural areas containing fragmented hardwood forests interspersed with cypress swamps. The major tree species include overcup oak, nuttall oak, water oak, green ash, sweetgum and cottonwood.



Region 2 is unique in that most of the turkey habitat in the interior Delta is on public lands (national forest, wildlife management areas, and wildlife refuges), and the vast majority of the private land habitat is located in the batture lands west of the Mississippi River levee. Therefore, data from the annual brood survey is biased by the majority of turkey observations coming from public lands in the interior Delta, while all the other information in this section is almost exclusively from private lands between the levees.

Reproduction

Turkey reproduction soared in the Delta during 2018. The 2.6 PPH average was the highest in over a decade (Figure 15) and should result in substantially increased populations up and down the Mississippi River. Seven out of every 10 hens observed in Region 2 during the summer brood survey were accompanied by poults, which is one of the highest regional success rates recorded since the brood survey's inception. Although regional nest success appeared extraordinarily high, poult survival appeared more ordinary. The average brood included 3.7 poults. The median hatch date in the Delta was 8 June.

Harvest Rates & Age Structure

Harvest per unit of effort increased in Region 2 during 2018. Spring Gobbler Hunting Survey participants bagged 3.1 gobblers per 100 hours hunted (Figure 16). This was nearly one gobbler more than was harvested with the same amount of effort in the previous year, and 10% above the 10-year regional average. Older-age-class gobblers comprised the bulk of the Delta's 2018 harvest. Fifty-one percent of all harvested gobblers had one-inch or greater spurs (Figure 17).

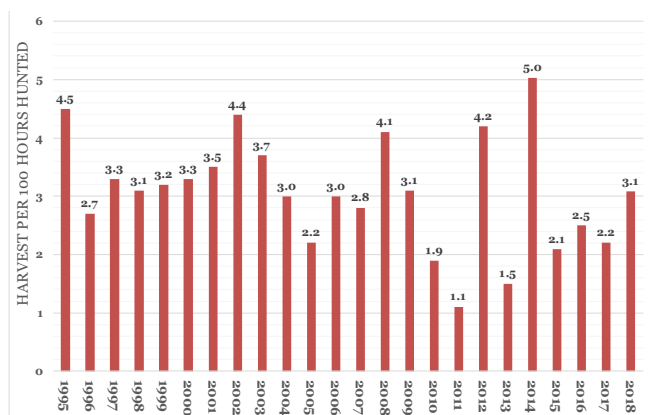


Figure 16: Region 2 Harvest Per 100 Hours Hunted

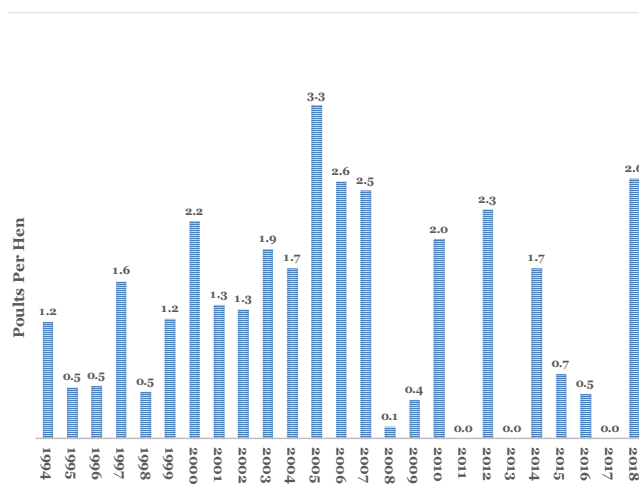


Figure 15: Region 2 Poults Per Total Hens

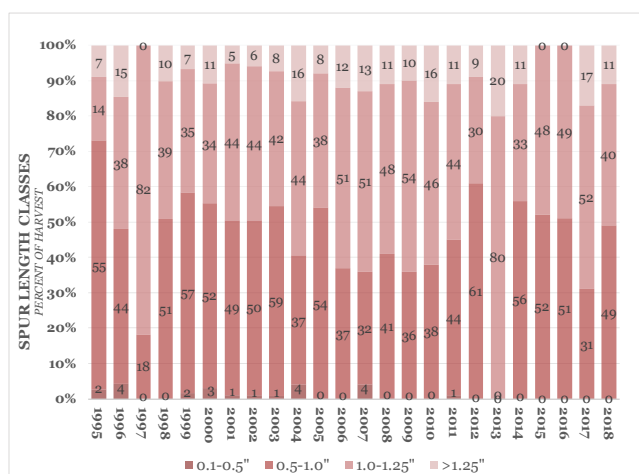


Figure 17: Spur Length Distributions From Gobblers Harvested in Region 2

Gobbling Activity

Gobbling activity increased substantially in the Delta during 2018, and was the highest year on record for both the average number of gobblers and gobbles heard in the region. Hunters participating in the SGHS heard nearly 7 individual gobblers and 90 total gobbles per 10 hours hunted (Figure 18). Each of these figures were nearly double the long-term regional average. Delta hunters heard more gobbling during mid-season than at any other time. The average number of gobbles heard peaked during the fourth week of the season (5 April–11 April), during which hunters heard approximately 150 gobbles per 10 hours hunted. Both the fourth and fifth weeks of the season (5 April–18 April) were equally best in terms of individual gobblers heard. During this period hunters heard approximately 9 unique gobblers per 10 hours hunted (Figure 19).

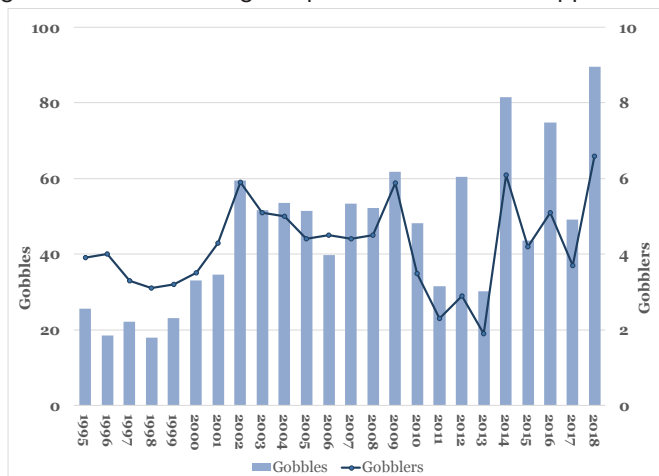


Figure 18: Region 2 Gobblers & Gobbles Heard Per 10 Hours Hunted by Year

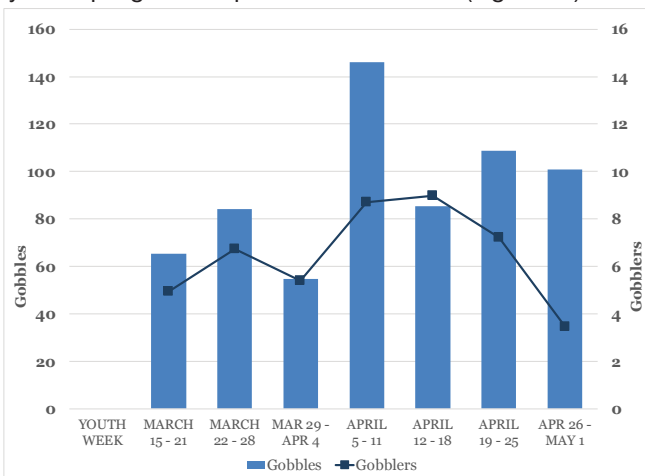


Figure 19: Region 2 Gobblers & Gobbles Heard Per 10 Hours Hunted by Week

Turkey Observations

Observations of turkeys made a significant uptick across Region 2 during 2018. Hunters averaged seeing 48.4 gobblers (including jakes and adults), 58.7 hens, and 9.5 unidentifiable birds, for a total of 116.6 turkeys seen per 100 hours hunted (Figure 20). This was the fourth highest rate of turkey observations on record for Region 2. Jake sightings in 2018 doubled that of the previous spring. The 25.1 jakes observed per 100 hours hunted (Figure 21) was the highest juvenile gobbler observation rate across all regions in 2018.

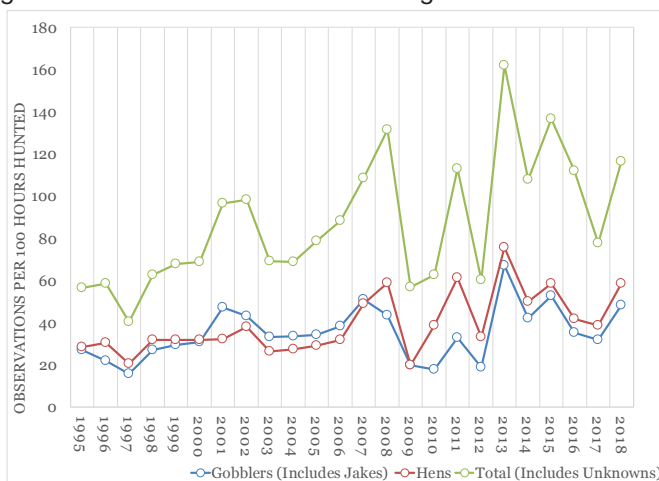


Figure 20: Region 2 Turkey Observations Per 100 Hours Hunted

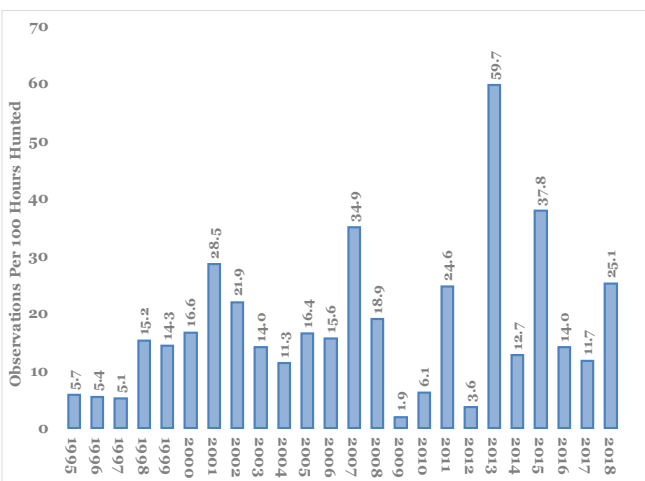


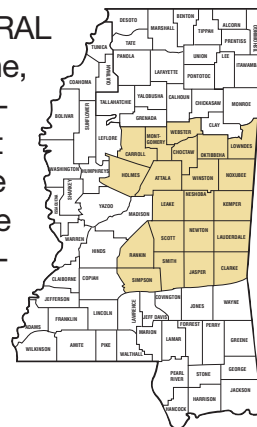
Figure 21: Region 2 Jake Observations Per 100 Hours Hunted

2019 Season Forecast

Turkey populations across the Delta landscape have struggled over the last decade due to poor hatches as a result of flooding. However, available data suggests they may have significantly rebounded, especially along the margins of the Mississippi River. The 2019 spring season should prove to be one of the best of the last decade in this region. Readers are cautioned however, that samples sizes for both the brood and Spring Gobbler Hunting Survey are lower in the Delta than elsewhere in the state and therefore may not accurately reflect the average regional situation. Nonetheless, areas that have produced abundant turkey populations in the past should see significant rebounds in 2019, with a strong juvenile gobbler cohort that may provide quality hunting opportunities for several years to come.

Turkey Region 3

TURKEY REGION 3 IS THE 21 COUNTY AREA LOCATED IN EAST-CENTRAL Mississippi. The two major forest types in this region are loblolly-shortleaf pine, which occurs on the drier, more sandy soils, and oak-pine. Loblolly and shortleaf pines constitute more than 50% of the commercial trees in this forest type. Upland hardwoods, primarily various oaks and hickories, make up the rest of the forest community. In the oak-pine type, upland oaks make up more than 50% of the trees with the remaining species including hickories, sweetgum, black gum, loblolly, and shortleaf pines.



Reproduction

During the 2018 summer brood survey, observers documented 500 adult hens and 880 poults throughout the east-central region of the state, yielding a 1.8 PPH average (Figure 22). This value was 38% above the 2017 hatch, and on par with both the region's 10-year and long-term average. Forty-three percent of the hens observed successfully raised at least one poult, and the average brood size was slightly above four poults per brood. Based on brood survey observations, nest initiation did not reach the half-way mark in Region 3 until 7 May; the median hatch date was 14 June.

Harvest Rates & Age Structure

Spring Gobbler Hunting Survey participants spent 7,656 hours hunting in Region 3 and bagged 225 gobblers, yielding a standardized 3.1 gobblers harvested per 100 hours hunted (Figure 23). This value was above the rate of the previous three springs and equivalent to the region's 10-year average. Nearly 60% of the gobblers harvested were at least 3-years-old, with greater than 1-inch spurs (Figure 24).

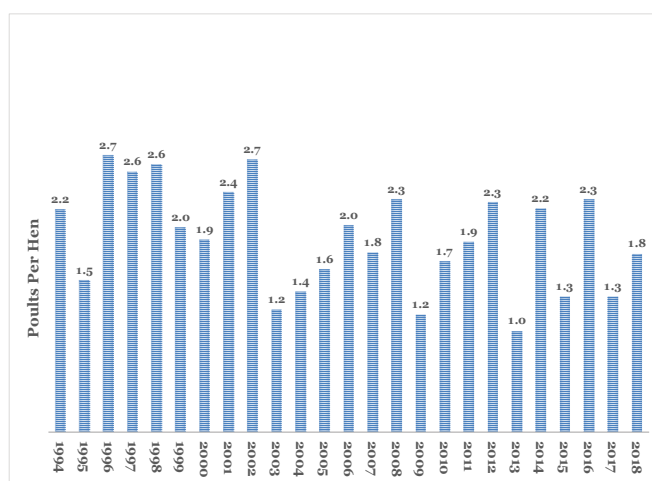


Figure 22: Region 3 Poults Per Total Hens



Figure 23: Region 3 Harvest Per 100 Hours Hunted

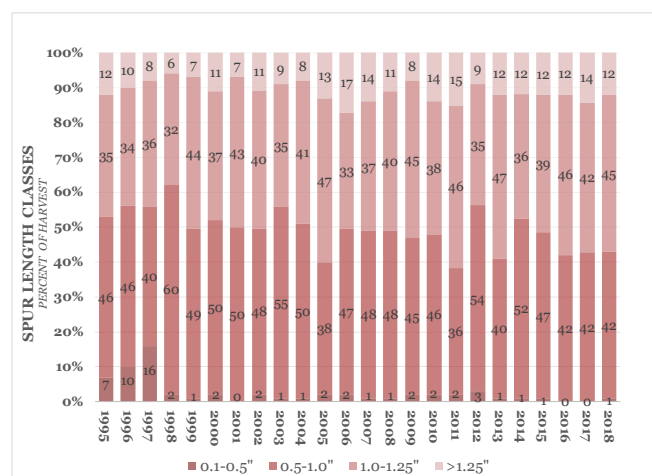


Figure 24: Spur Length Distributions From Gobblers Harvested in Region 3

Gobbling Activity

The number of individual gobblers heard in Region 3 during 2018 was similar to the previous few years, whereas the total amount of gobbles heard declined slightly. Hunters heard an average of 4.2 gobblers and 53.7 gobbles per 10 hours hunted (Figure 25). The number of individual gobblers heard was greatest during the youth week (8 March–14 March), and remained relatively constant throughout the regular season at an average of four gobblers heard per 10 hours hunted. Overall gobbling activity was greatest during the last week of the regular season (26 April–1 May) at nearly 75 gobbles heard per 10 hours hunted (Figure 26).

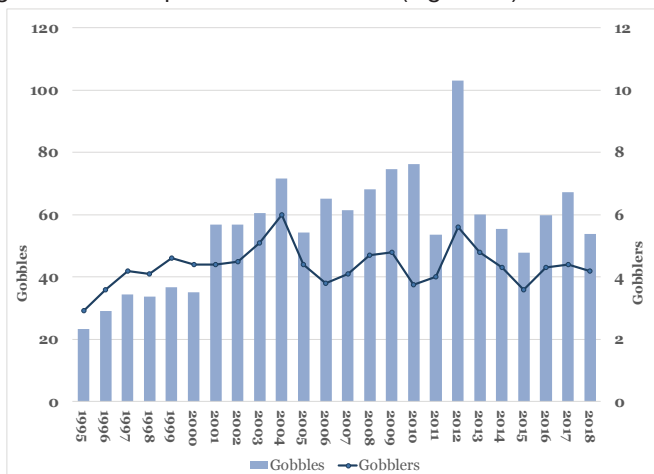


Figure 25: Region 3 Gobblers & Gobbles Heard Per 10 Hours Hunted by Year

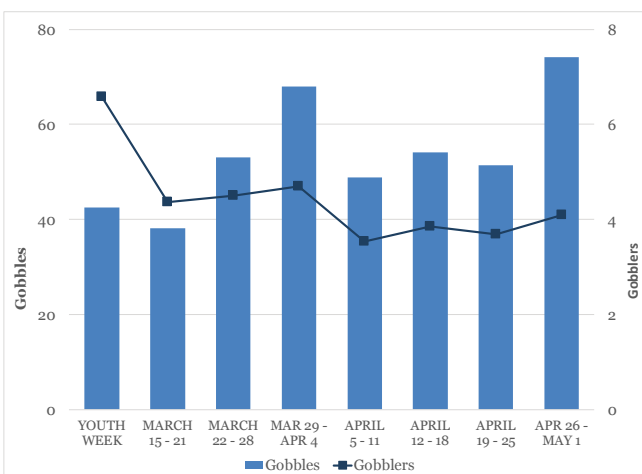


Figure 26: Region 3 Gobblers & Gobbles Heard Per 10 Hours Hunted by Week

Turkey Observations

Overall turkey sightings declined slightly in east-central Mississippi during 2018. Hunters observed 28 gobblers (jakes and adults), 35 hens, and 6 unidentifiable birds per 100 hours hunted (Figure 27). All three of these values were somewhat below the region's 10-year average. The number of jakes observed across the region also dipped from the previous year by nearly 20% to 11.9 juvenile gobblers observed per 100 hours of hunting (Figure 28).

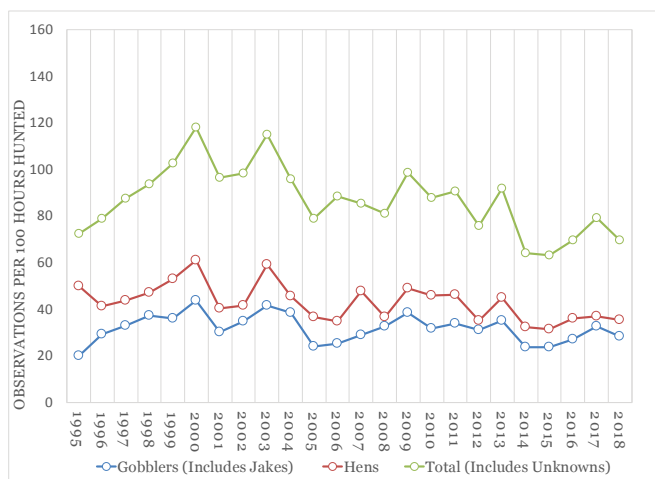


Figure 27: Region 3 Turkey Observations Per 100 Hours Hunted

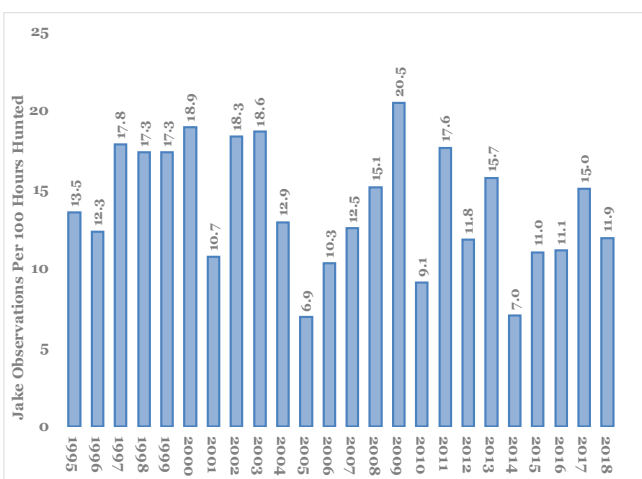


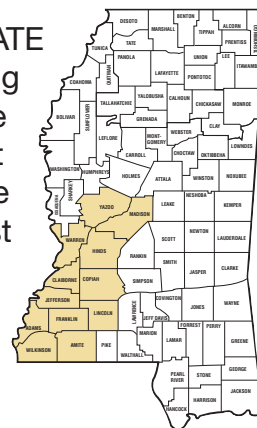
Figure 28: Region 3 Jake Observations Per 100 Hours Hunted

2019 Season Forecast

Available data suggests turkey numbers in east-central Mississippi should be similar to slightly below what hunters have experienced over the last few years. Gobbler carry-over across the region appeared good based on the summer survey, suggesting that the birds hunters do encounter will likely be older-age-class. The spring of 2018 proved unusual in that some of the best gobbling activity across the region was withheld until near the season's closure, however, historical data suggests the third week of the season (29 March–4 April) should likely prove to be the best week to be in the woods.

Turkey Region 4

TWELVE COUNTIES IN THE SOUTHWEST PORTION OF THE STATE comprise Turkey Region 4. The oak-hickory forest type is located along the loess hills bordering the Mississippi River floodplain. Adjacent to the loess hills is a narrow transition zone consisting of the oak-pine forest type. The eastern and southern section of the region is made up of the loblolly-shortleaf pine forest community. Descriptions for these forest types are provided in previous regions.



Reproduction

Southwest Mississippi experienced well-above average reproduction during the summer of 2018. The MDWFP brood survey documented 251 hens and 677 poults yielding a 2.7 PPH average (Figure 29). This value was the second-highest on record for the region, and nearly 60% above the average of the previous decade. The robust reproduction was driven by high nesting success; 61% of hens observed were accompanied by at least one poult. Brood sizes were also above the norm; on average, each observed brood was comprised of 4.45 poults. The nesting season began earlier in southwest Mississippi than elsewhere; the median estimated nest initiation date was 28 April. The median hatch date was 4 June.

Harvest Rates & Age Structure

Harvest per unit of effort was a modest 3.1 gobblers harvested per 100 hours hunted in Region 4 during 2018 (Figure 30). This value was near the region's average over the previous five years, but below its long-term trend. There were 167 gobblers harvested by SGHS participants in Region 4 during 2017. Of these, 40% were likely 2-year-olds with 0.5" to 1.0" spurs. Gobblers with greater than one inch spurs comprised 58% of the harvest (Figure 31).

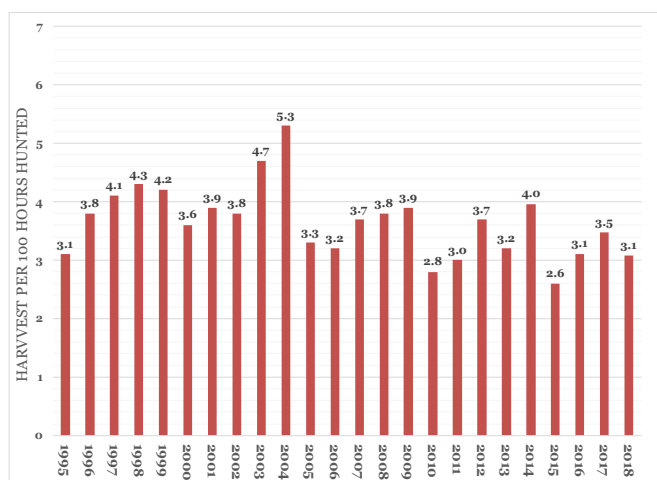


Figure 30: Region 4 Harvest Per 100 Hours Hunted

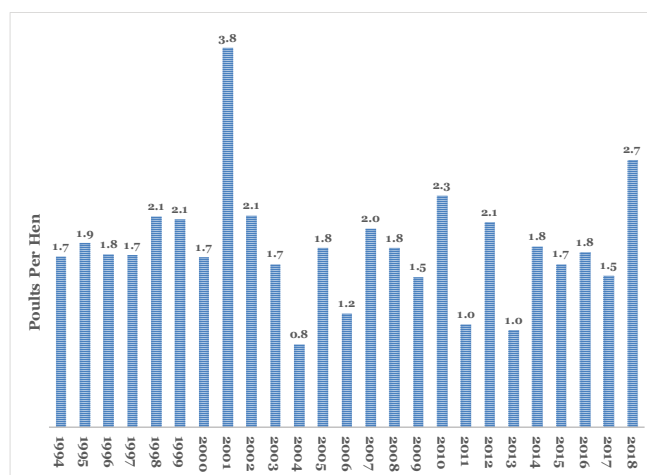


Figure 29: Region 4 Poults Per Total Hens

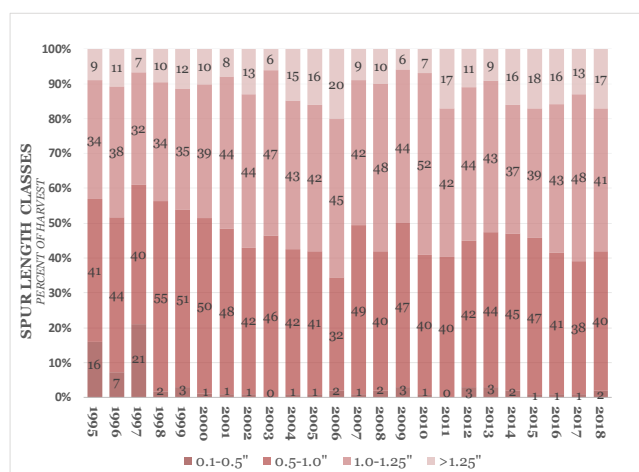


Figure 31: Spur Length Distributions From Gobblers Harvested in Region 4

Gobbling Activity

The 2018 spring season exhibited a decline in gobbling activity across Region 4. The total number of individual gobblers heard per 10 hours of hunting (5.7) dropped nearly 20% from the spring of 2017. Overall gobbling activity also fell. Hunters heard approximately 77 gobbles per 10 hours hunted, which was nearly 20 to 25 fewer gobbles heard during the same amount of effort in the prior two seasons (Figure 32). Across the season, gobbling activity rose during the first three weeks of the regular season, peaking in Week 3 (29 March–4 April) at 7.3 individual gobblers and 98.1 total gobbles heard per 10 hours hunted. The final week of the season exhibited a marked increase in gobbles per individual gobbler heard; hunters heard almost 90 gobbles per 10 hours hunted (Figure 33).

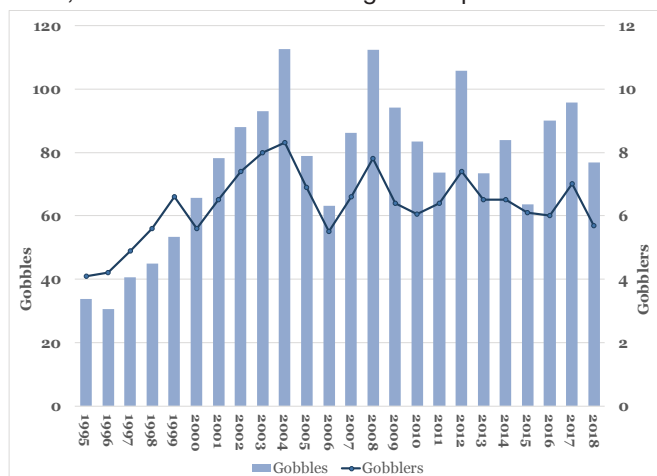


Figure 32: Region 4 Gobblers & Gobbles Heard Per 10 Hours Hunted by Year

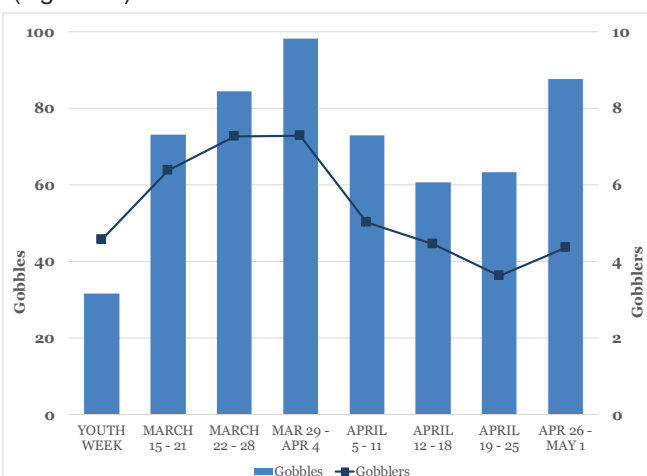


Figure 33: Region 4 Gobblers & Gobbles Heard Per 10 Hours Hunted by Week

Turkey Observations

Overall turkey observations fell slightly in 2018, continuing a declining trend experienced in southwest Mississippi since 2013. Hunters observed 24 gobblers (including jakes and adults), 21 hens, and 51 total turkeys per 100 hours hunted. This total observation figure was one of the lowest for the region since the inception of the SGHS in 1995 (Figure 34). Jake sightings were also down during 2018. Hunters observed 9 juvenile gobblers per 100 hours hunted (Figure 35). This value was 34% below the region's long-term average.

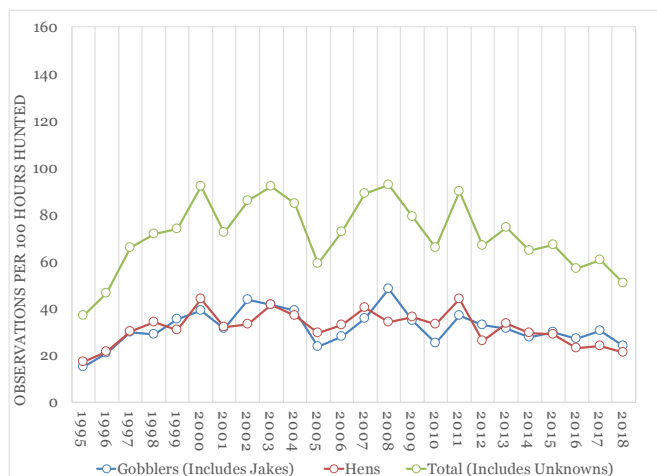


Figure 34: Region 4 Turkey Observations Per 100 Hours Hunted

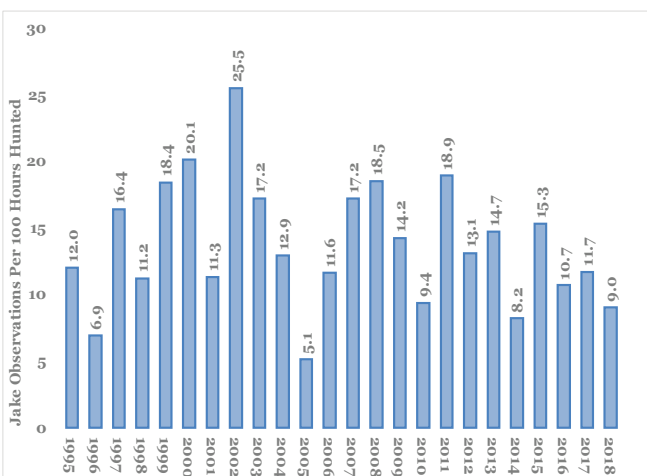


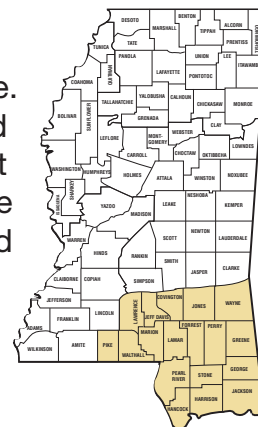
Figure 35: Region 4 Jake Observations Per 100 Hours Hunted

2019 Season Forecast

Turkey hunters in southwest Mississippi will likely experience a 2019 spring season that will be difficult to gauge. On one hand, the region's great hatch from last summer should swell turkey numbers across the landscape. While this will provide hope for the future, data suggests a more paltry immediate forecast. Turkey populations in the region have declined for most of the last five years, and jake observation rates in 2018 were low. The combination of these two factors – a great hatch, but poor carry-over from prior years – likely means that hunters in Region 4 will encounter substantially more turkeys this spring, but will still experience fewer opportunities to harvest legal gobblers.

Turkey Region 5

TURKEY REGION 5 CONSISTS OF 18 COUNTIES IN SOUTHEAST Mississippi. Forests in Region 5 are dominated by longleaf and slash pine. This habitat type includes the pine flatwoods of the coastal counties and the adjoining, rolling, pine hills. Longleaf pine and slash pine compose at least 50% of the forest community. Other common tree species include dogwood, beech, magnolia, and sweet bay along creek bottoms and blackjack oak, post oak, and southern red oak on drier sites.



Reproduction

In terms of per capita reproduction, the 2018 turkey hatch in southeast Mississippi was unrivaled. Sixty-six percent of the hens observed across the Piney Woods region were accompanied by poults during the summer brood survey. The 3.7 PPH average (Figure 36) was the second highest value tallied in any region since 1995, and the best on record for Region 5. Poult survival was also strong, and Region 5 led the state in average brood size. Brood groups averaged 5.6 poults per adult hen. Broods which were accompanied by only a single hen contained an average of 6.9 poults. The median dates for nest initiation and hatching were 29 April and 5 June, respectively.

Harvest Rates & Age Structure

Harvest per unit of effort increased significantly in southeast Mississippi during 2018 to 3.6 gobblers harvested per 100 hours hunted (Figure 37). This figure was 24% above the average of the prior five years, and near the long-term average for the region. Of the gobblers taken by SGHS participants in Region 5, most were older age-class gobblers. Only 45% of the harvest were 2-year-old birds with spurs between 0.5" and 1.0" (Figure 38). The proportion of "limb hanger" gobblers with spurs ≥ 1.25 " was 15% of the harvest, which was above average for the region.

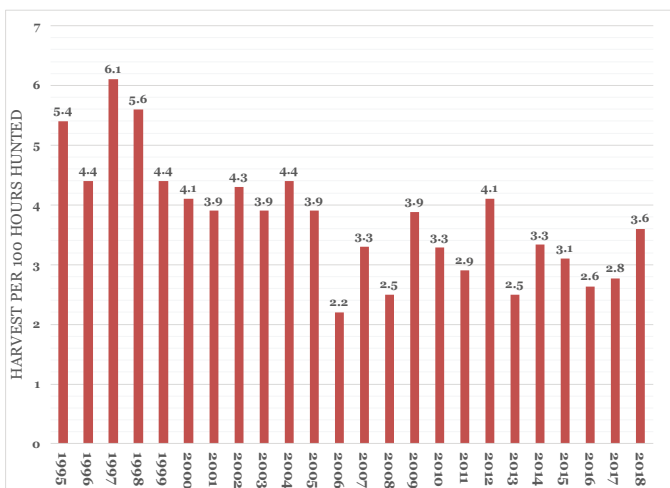


Figure 37: Region 5 Harvest Per 100 Hours Hunted

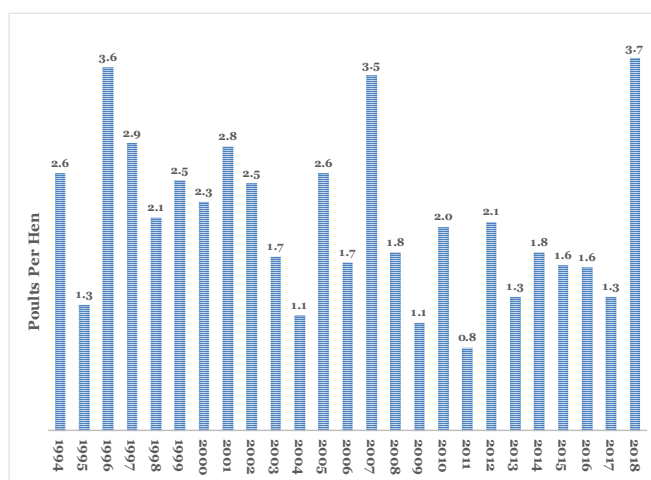


Figure 36: Region 5 Poults Per Total Hens

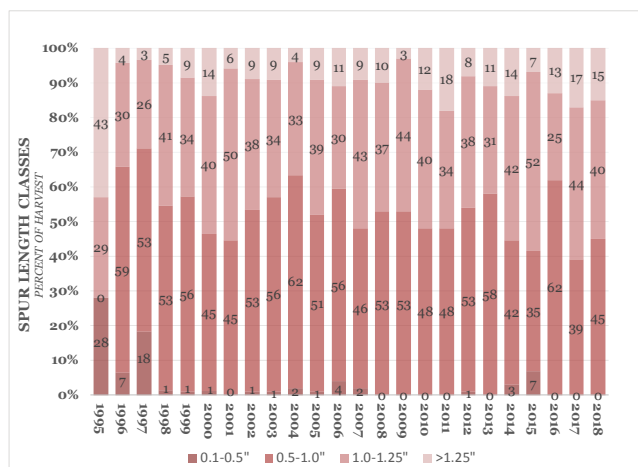


Figure 38: Spur Length Distributions From Gobblers Harvested in Region 5

Gobbling Activity

Gobbling activity in Region 5 declined slightly during 2018. Spring Gobbler Hunting Survey participants heard 4 gobblers and 53.7 total gobbles per 10 hours hunted (Figure 39). Both of these figures were approximately 10% below their 10-year average. Gobbling activity in the Piney Woods peaked very early in the 2018 season. The number of individual gobblers heard was highest in the Youth week (8 March–14 March) followed by the first week of the regular season (15 March–21 March; Figure 40).

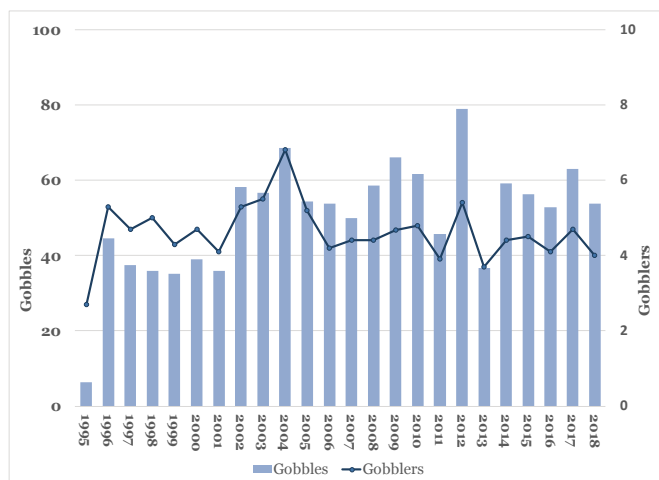


Figure 39: Region 5 Gobblers & Gobbles Heard Per 10 Hours Hunted by Year

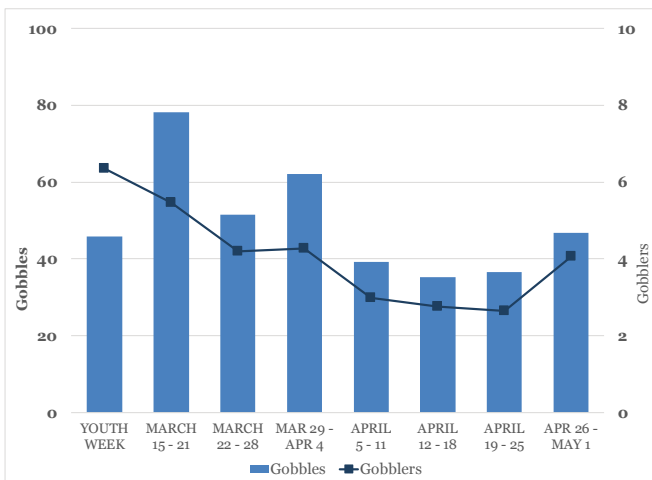


Figure 40: Region 5 Gobblers & Gobbles Heard Per 10 Hours Hunted by Week

Turkey Observations

Total turkey observations in southeast Mississippi showed a noticeable uptick during 2018. Observations of all turkeys increased 23% to 80.9 turkeys observed per 100 hours hunted (Figure 41). This increase was driven primarily by a surge in hen numbers; hen sightings increased more than 50% as compared to 2017. Jake observations were similar to the previous year. Hunters observed 11.3 jakes per 100 hours hunted, which was near the average value over the previous 10 years (Figure 42).

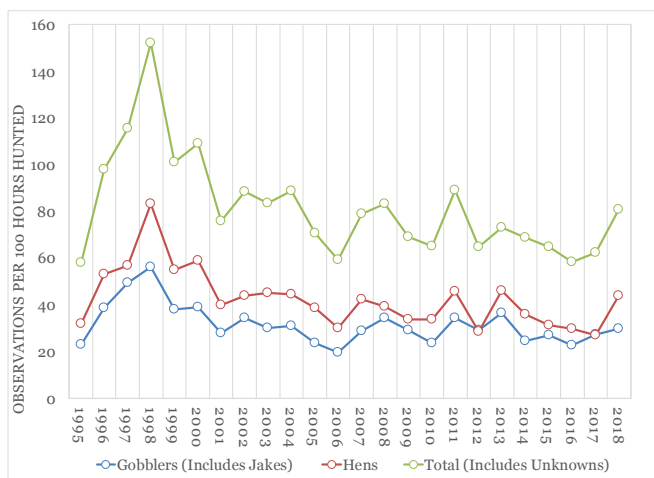


Figure 41: Region 5 Turkey Observations Per 100 Hours Hunted

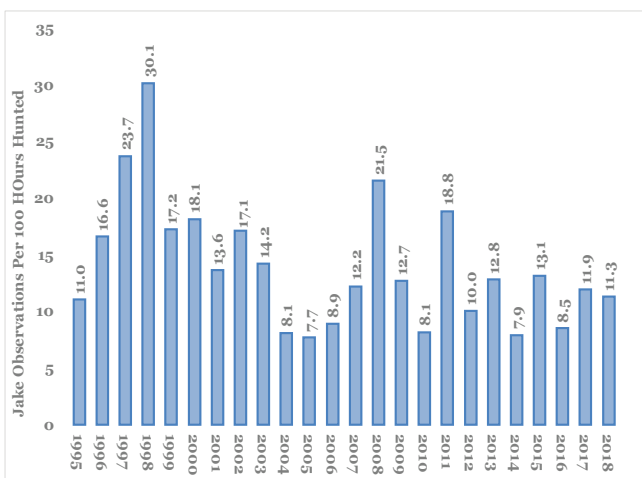


Figure 42: Region 5 Jake Observations Per 100 Hours Hunted

2019 Season Forecast

In 2005, Hurricane Katrina devastated much of southeast Mississippi, including some of the region's best turkey habitat. This suppressed turkey populations in the region for much of the last 15 years. Current data suggests south Mississippi hunters may have finally reached the light at the end of that tunnel. Last spring's jake sightings suggest harvest opportunities in Region 5 should be similar or slightly better than they were in 2018. Meanwhile, a once-in-a-generation hatch during 2018 should significantly boost turkey numbers throughout the region, and set the Piney Woods in good standing for several years to come.

Join Our Spring Gobbler Hunting Survey Team

Help MDWFP with the conservation & management of turkeys in Mississippi.



THE SPRING GOBBLER HUNTING SURVEY (SGHS) WAS INITIATED IN 1995 by Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP) to fill the need for a long-term dataset that would aid in monitoring and managing the state's turkey population. It is one of the sources of data that makes this report possible every year.

The driving force behind the SGHS is Mississippi's turkey hunters. Every day of the season, hundreds of turkey hunters throughout the state take to the woods and record information about the amount of turkey activity they saw and heard while hunting. MDWFP then gathers this information from its hunting cooperators at the end of each season and analyzes it to gain insight into gobbling activity, hunter effort, harvest rates, age structure, sex ratios, and characteristics of harvested birds. This dataset allows MDWFP to learn about trends in the Mississippi turkey population on a local, regional, and statewide basis. Ultimately, this knowledge helps MDWFP make management decisions that link the interests of sportsmen with the wise use of the state's turkey resource. Participation in this process allows Mississippi hunters a unique opportunity to directly contribute to the conservation and management of turkeys in Mississippi. All sportsmen who hunt turkey anywhere in Mississippi, on public or private lands, are eligible and encouraged to participate.

In appreciation for the collection efforts of the dedicated hunters that participate in our survey, MDWFP shares the results with the state's sportsmen in our annual Turkey Program Report, entitled *Spittin' & Drummin'*. There are also other ways that hunters can benefit:

Benefits of Participating in the SGHS

- The information you collect will be made available to you within the MDWFP Turkey Program's annual report, *Spittin' and Drummin'* which is available online at www.mdwfp.com/turkey. This report discusses turkey population trends in each region.
- You'll receive an individualized report that summarizes the data you sent us. These reports will allow you to see trends in activity from the time you, or your hunting club, spent turkey hunting. This information can be used to tailor management decisions for your specific property.
- Your name will be entered into a special shotgun raffle aimed at increasing participation in the SGHS.
- You can improve your turkey hunting knowledge and skills by keeping track of your own hunting experiences and habits throughout the season. MDWFP will provide you with analysis of various topics that will be highlighted for you in special reports and articles.
- Management decisions of MDWFP that directly affect your recreational opportunities as a sportsman and conservationists will be made using the best available data.
- You will become a part of our natural resource's history by gathering evidence that stands for or against questions such as should season dates be set earlier, later, or left the same? Should we allow a controlled fall season in areas with high turkey densities? Will certain regulations improve hunting quality, carry-over more gobblers, or increase gobbling activity?



How can I Participate?

If you turkey hunt anywhere in Mississippi, you are eligible and encouraged to participate. There will be absolutely no cost to you to take part in the program. The only thing that we will ask of you is to take approximately a minute or two of your time following every hunt to record information on what you observed. Before turkey season starts, we will send you a data collection booklet that will make it easy for you to document your hunting experience. If you have never participated in the SGHS, but would like to become involved, please fill out and return the application provided in this report, or contact a MDWFP biologist. You can also apply at www.mdwfp.com/turkey. Your efforts will assist MDWFP in monitoring Mississippi's turkeys and making decisions in the best interest of the resource and hunters.

New SGHS Participants can enroll online at www.mdwfp.com/turkey

Spring Gobbler Hunting Survey Application

THE MISSISSIPPI DEPARTMENT OF WILDLIFE, FISHERIES, AND PARKS IS LOOKING FOR INDIVIDUAL hunters and hunting clubs interested in participating in the annual Spring Gobbler Hunting Survey. Cooperators are asked to record various information about their spring gobbler hunts. Harvest and population data provided by cooperators will be used to monitor and manage Mississippi's wild turkey resource. Results will be summarized in the annual Mississippi Wild Turkey Report. A copy of this report will be sent to all cooperators. Hunting clubs also will receive a summary report for their individual property.

If your hunting club or any individual members are interested, please complete and return the application below. If you participated in the survey last year, you will automatically receive data collection materials and do not have to complete this application. This is an opportunity to be directly involved with conservation and management of the wild turkey in Mississippi. Please encourage other turkey hunters to participate. This application may be copied. Data collection instructions and materials, along with the turkey program report will be sent to you prior to spring gobbler season.

Name: _____

Address: _____

Phone: (Home) _____ (Office) _____

Please complete the following information only if your hunting club wants to participate.

Club Name: _____

County: _____

Forested Acres: (including food plots) _____

Estimate Total Number of Hunts Anticipated on this Property During the Turkey Season: _____

■ Mail application to: Spring Gobbler Hunting Survey / 1505 Eastover Dr. / Jackson, MS 39211-6322



Spittin' and Drummin'

2019 MISSISSIPPI WILD TURKEY REPORT

**The 2019 Mississippi Wild Turkey Report is
a cooperative effort between the MDWFP Turkey
Program and the Mississippi Chapter of the NWTf.**



Photography by: Steve Gulledge

MDWFP is an equal opportunity employer and provider of programs and services. If anyone believes they have been subjected to discrimination on the basis of political affiliation, race, color, national origin, marital status, sex, religion, creed, age, or disability, they may file a complaint alleging discrimination with either the Mississippi Department of Wildlife, Fisheries, and Parks, Office of Administrative Services, P.O. Box 451, Jackson, MS 39205-0451, or the U.S. Equal Employment Opportunity Commission, 1801 L. Street, N.W. Washington, D.C. 20507.