# Spittin's Drummin's

2020 MISSISSIPPI WILD TURKEY REPORT



# ATTENTION TURKEY HUNTERS!



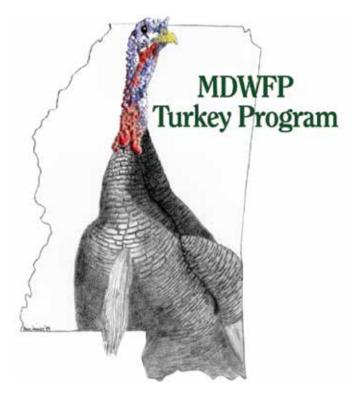
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2020 MISSISSIPPI WILD TURKEY REPORT





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# Did you know?

Hunting license sales support wild turkey management, population surveillance, and research that benefits all Mississippians.



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The 2019 spring season marked the 25<sup>th</sup> anniversary of the Spring Gobbler Hunting Survey. Nearly three million gobbles of the wild turkey have been recorded by volunteer survey participants since its inception. Ron Seiss, Mississippi Department of Wildlife, Fisheries, and Parks' (MDWFP) first Wild Turkey Program coordinator, had the vision to initiate the program which has logged this enormous dataset. Yet, it's everyday Mississippi turkey hunters who are the program's real heroes. It takes a lot of trust for turkey hunters to share what they've seen and heard. That so many are willing to do so with MDWFP speaks volumes to their dedication and passion for this iconic bird.

The 2019 spring season was a landmark year in another way. It was the first in which turkey hunters in Mississippi were mandatorily required to report their harvests. Enactment of this critical conservation measure took perseverance and patience by many individuals. Of these, foremost thanks should go to the members of the Commission on Wildlife, Fisheries, and Parks. These gentlemen realized the shortcomings faced without the information gathered through Game Check and took action to see it enacted. The Executive leadership of MDWFP likewise deserve credit for their prioritization and support which ensured Game Check's many facets were done right.

Over the past year, the partnership between MDWFP and the Mississippi Chapter of the National Wild Turkey Federation has continued to grow. Their support allows MDWFP to accomplish more for the wild turkey than it could do on its own.

The work of several individuals deserves special credit for making this report happen. Linda Taylor keeps the Spring Gobbler Hunting Survey on track. She spends countless hours entering the data summarized by this report. It is a thankless job, but she does it with enthusiasm. Matt Goss was responsible for the report's layout and design, which made the document so much more than just a collection of figures and tables. As always, the photography of Mr. Steve Gulledge brings the wild turkey to life in these pages. He has been a true asset to the Spittin' and Drummin' report for over a decade and surely ranks as one of the best wildlife photographers in our state!

# FEDERAL AID IN WILDLIFE RESTORATION



# A PITTMAN-ROBERTSON FUNDED PROJECT

This report is produced by the Technical Guidance Project, Statewide Wildlife Development Project and Statewide Wildlife Investigations Project and is primarily funded by Federal Aid in Wildlife Restoration.

Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP) utilizes several sources of data to monitor the state's wild turkey population. The agency conducts a summer brood survey to assess reproduction, an avid hunter survey (Spring Gobbler Hunting Survey) to track observation and harvest rates, a post-season questionnaire to estimate total statewide harvest, and beginning in 2019, a mandatory reporting program to provide county-specific harvest figures. This document summarizes information gathered across these to provide sportsmen and women with an up-to-date look at the status of Mississippi's turkey flock.

All available current data suggests that no matter where you hunt in the Magnolia State, the 2020 spring season should be one of the better of the past decade. Almost the entire southern half of the state, along with portions of the Mississippi River batture, posted one of the best hatches of the past 25 years in 2018. Last spring (2019), juvenile gobbler sightings were above average for almost every region of the state. Turkey hunters throughout Mississippi should set their expectations high for 2020.

Wild turkeys are one of Mississippi's most pursued game species; thus, MDWFP and its conservation partners spend considerable effort in the management and understanding of this premier gamebird. Thirty-seven wildlife management areas (WMAs) provide public turkey hunting opportunities, MDWFP partners with the Mississippi Chapter of the National Wild Turkey Federation to continuously improve turkey habitat, and our collective understanding of the species is deepened through cooperative research with the Forest and Wildlife Research Center at Mississippi State University. The future looks brighter than ever for those who relish the sights and sounds that the wild turkey brings to the forests and fields of Mississippi!



# KNOW YOUR WILD TURKEY



Considered among the grandest of game birds, the American wild turkey has many characteristics that distinguish it from other fowl. The unmistakable snood, caruncles, head coloring and beard truly set it apart.



### **KNOW THE DIFFERENCE BETWEEN HENS & GOBBLERS**

IT'S ERSY TO DISTINGUISH A GOBBLER FROM A HEN BY DIFFERENCES IN THEIR SIZE, COLOR, HEADS AND OTHER CHARACTERISTICS.



The American wild turkey now thrives in 49 states, Canada and Mexico thanks to the efforts of state wildlife agencies, the NWTF and its supporters!

#### 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 1995–2019 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.

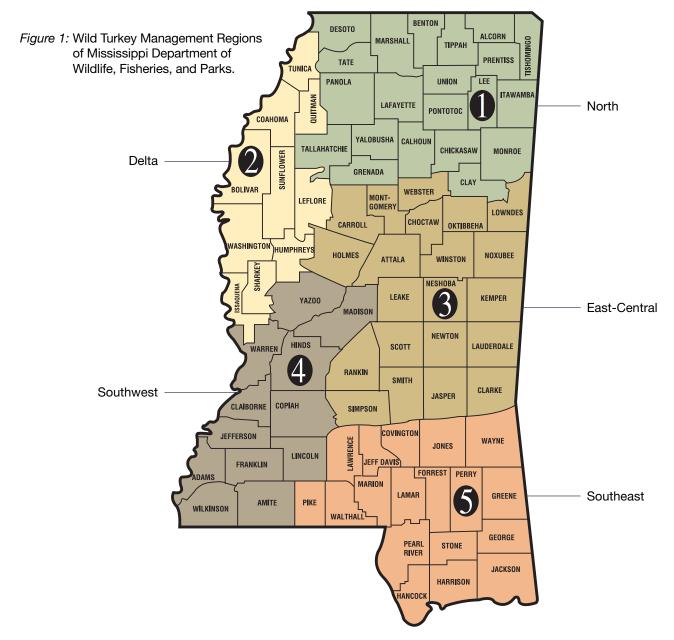


#### **Gobbling Activity**

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 2019 season by more than 50 hunting clubs and approximately 460 individual hunters participating in the Spring Gobbler Hunting Survey.

#### Reproduction

From June to August, 2019, the MDWFP and its partners observed 2,368 hens during the annual summer brood survey. Of those, approximately 39% were accompanied by a brood, which was essentially unmoved from the 40% success the year prior. A total of 3,237 poults were observed, translating to a 1.4 poult per total hen average (PPH; Figure 2). This value was below both the five and ten-year average. Nonetheless, regional variation was observed, with some good areas juxtaposed against poor hatches in others.

#### Harvest Rates & Age Structure

After rising steadily for three years, hunter success dipped in 2019. Participants in the Spring Gobbler Hunting Survey (SGHS) bagged approximately 2.9 gobblers per 100 hours hunted, which constituted a 12% decline from 2018 (Figure 3). Since its inception, hunters in the SGHS have averaged about 3.5 gobbler harvests per 100 hours hunted. Statewide, a total of 627 gobblers were harvested by SGHS participants. Fifty-seven percent appeared to be at least three years of age with spurs one inch or greater (Figure 4). The percentage of "limb-hanger" gobblers with spurs at least 1 ¼ inches was 12%, unchanged from recent years.

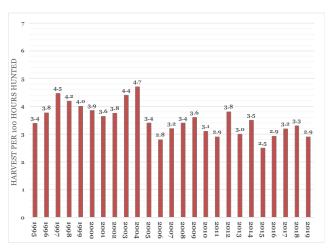


Figure 3: Statewide Harvest Per 100 Hours Hunted



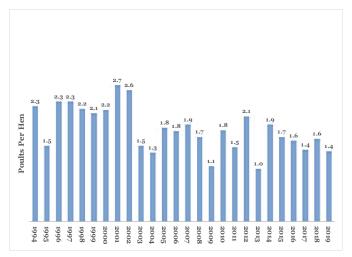


Figure 2: Statewide Poults Per Total Hens

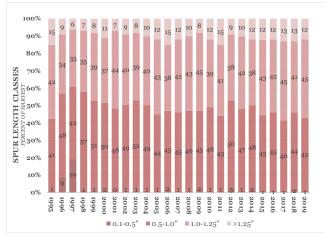


Figure 4: Spur Length Distributions From Gobblers
Harvested Statewide

#### **Gobbling Activity**

During 2019, gobbling activity mirrored the prior year and was under the ten-year average. Spring Gobbler Hunting Survey hunters heard just under five individual gobblers and about 61 total gobbles per 10 hours afield (Figure 5). Across the season, statewide gobbling activity had two distinct peaks. The first occurred during the season's second week (22–28 March) when hunters heard 6.3 gobblers and 73.2 total gobbles per 10 hours hunted. A second peak occurred during the final week (26 April–1 May), when total gobbles rallied back to just below 70 per 10 hours hunted (Figure 6).

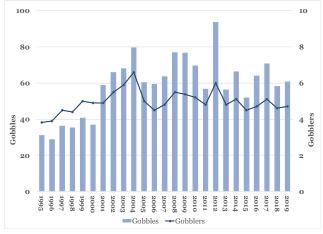


Figure 5: Statewide Gobblers & Gobbles Heard Per 10 Hours Hunted by Year

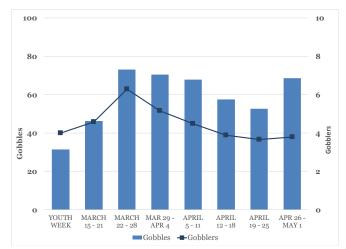


Figure 6: Statewide Gobblers & Gobbles Heard Per 10 Hours Hunted by Week

#### **Turkey Observations**

For the previous four springs, total turkey observations have hovered just under 80 turkey observations per 10 hours afield and 2019 was no different. Survey participants encountered 78.8 total turkeys, 40.7 hens, and 29.9 gobblers per 10 hours of hunting (Figure 7). Statewide jake observations were similar too. Hunters observed 14.3 jakes per 10 hours of hunting, which was on par with the statewide average since 1995 (Figure 8).

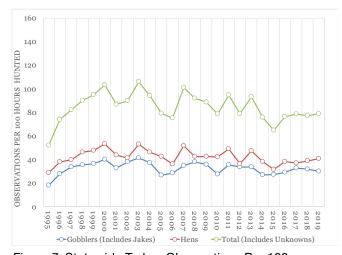


Figure 7: Statewide Turkey Observations Per 100 Hours Hunted

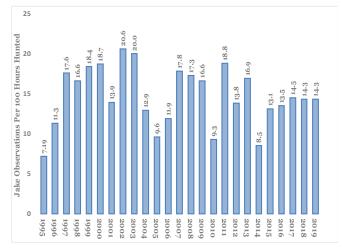


Figure 8: Statewide Jake Observations Per 100
Hours Hunted

#### 2020 Season Forecast

Last spring, most statewide averages were mostly unchanged from recent years, suggesting the 2020 season should be like the last few. However, the devil is in the details, and statewide calculations may mask considerable local variation. Individual perception of the 2020 season will probably depend on where you hunt; some regions are poised to have one of their best springs in years, whereas others may see a fall-off from what hunters have come to expect.

#### **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 oakhickory 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 was below-average for the third time in the last four years in northeast Mississippi. In 2019, 1,042 hens were observed with 1,186 poults, yielding a 1.14 PPH regional average (Figure 9). This was substantially below the long-term regional average (1.8 PPH). Overall, 38% of hens observed were with a brood, which was near the figure's statewide mean. The average brood was three poults.

#### Harvest Rates & Age Structure

Harvest rates dropped slightly in Region 1 during 2019. Spring Gobbler Hunting Survey participants brought home 3.4 gobblers per 100 hours hunted (Figure 10), which led the state and was above the five and ten-year averages for this figure. Two-year old gobblers with spurs between one-half and one inch accounted for 51% of the harvest. Older-aged gobblers with spurs 1 ¼ inches or greater proportionally decreased to 5% of the harvest (Figure 11).

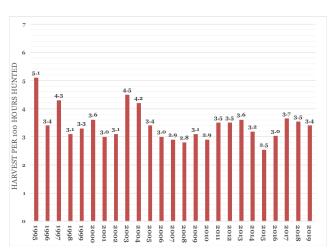


Figure 10: Region 1 Harvest Per 100 Hours Hunted

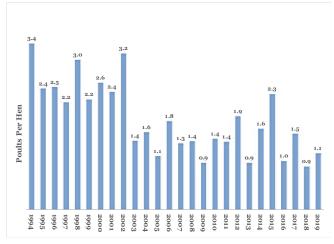


Figure 9: Region 1 Poults Per Total Hens

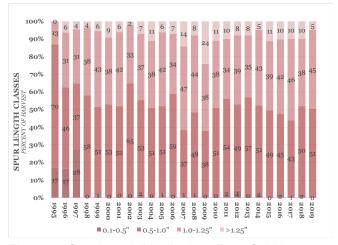


Figure 11: Spur Length Distributions From Gobblers Harvested in Region 1

#### **Gobbling Activity**

In 2019, gobbling activity in northeast Mississippi was comparable to the prior year. Hunters heard 4.2 gobblers and 44 total gobbles per 10 hours hunted (Figure 12). As with harvest rates, this was near the five and ten-year averages for both figures. Within the season, gobbling activity was best during the second week (22 – 28 March). Both total gobbles and individual gobblers heard peaked then at 55.2 and 5.5 per 10 hours hunted, respectively (Figure 13). Gobbling activity generally trended downward after late March.

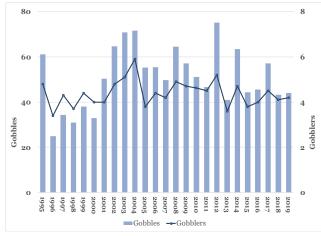


Figure 12: Region 1 Gobblers & Gobbles Heard Per 10 Hours Hunted by Year

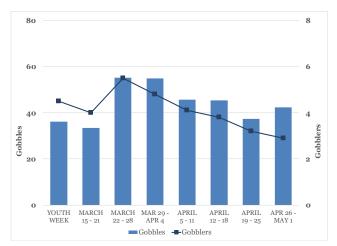


Figure 13: Region 1 Gobblers & Gobbles Heard Per 10 Hours Hunted by Week

#### **Turkey Observations**

After remaining relatively stable for nearly a decade, total turkey observations in northern Mississippi dropped in 2019. For every 100 hours hunted, Region 1 SGHS participants observed 86 turkeys, of which 30 were gobblers and 52 were hens (Figure 14). Jake observations were significantly reduced, falling from 21 young gobbler sightings per 10 hours afield in 2018 to only a dozen in 2019 (Figure 15).

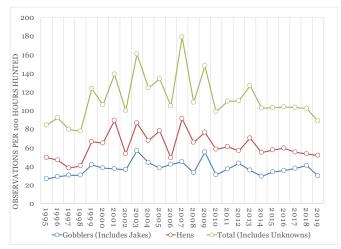


Figure 14: Region 1 Turkey Observations Per 100 Hours Hunted

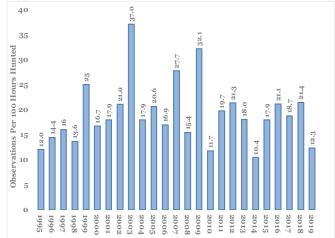


Figure 15: Region 1 Jake Observations Per 100 Hours Hunted

#### 2020 Season Forecast

Since the SGHS's inception, Northeast Mississippi has provided some of the state's best turkey hunting, remaining consistently good even through other regions' volatility. Unfortunately, the upcoming season could prove to be a noticeable deviation. Brood data from 2018 and jake sightings from 2019 suggests a meager two-year old gobbler crop for 2020. Although there should still be plenty of gobblers around, many of these will be older aged, which should translate into a challenging spring.

#### **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

Wild turkey reproduction in the Delta is tied to the Mississippi River and its tributaries. When these waterways remain at normal levels, a good hatch usually ensues. When they flood, reproduction suffers. Unfortunately for Region 2, a record-setting flood which persisted throughout the spring and summer of 2019 washed away any chance for a decent turkey hatch. Unsurprisingly, brood numbers in the Delta were abysmal. During the survey, only one hen out of 54 tallied was observed with poults (Figure 16).

#### Harvest Rates & Age Structure

Due to flooding, the 2019 spring season was truncated on many Delta properties, yet, harvest rates were respectable when hunters could go afield. Spring Gobbler Hunting Survey participants harvested 3.0 gobblers per 100 hours hunted, which was equivalent to the previous year, and considerably above the five-year average (Figure 17). Two-year old gobblers with spurs between one-half and one inch accounted for approximately half the harvest, whereas 17% was comprised of gobblers with at least 1 ¼ inch spurs (Figure 18).

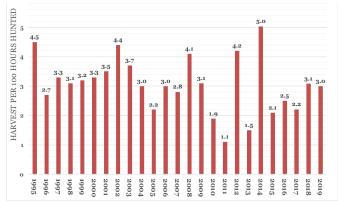


Figure 17: Region 2 Harvest Per 100 Hours Hunted

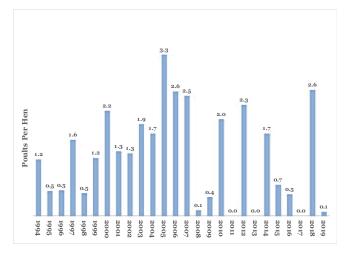


Figure 16: Region 2 Poults Per Total Hens

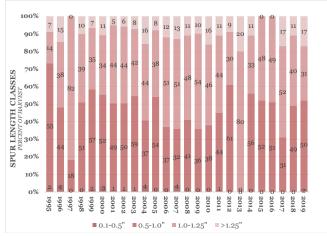
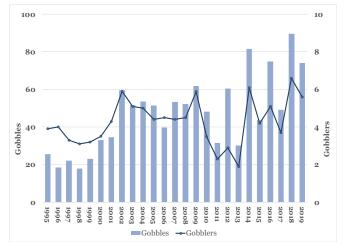


Figure 18: Spur Length Distributions From Gobblers Harvested in Region 2

#### **Gobbling Activity**

Gobbling activity in the Delta has been on an increasing trend since 2013. In 2019, SGHS participants heard 5.6 gobblers and 74.1 total gobbles per 10 hours hunted in the region (Figure 19). These figures were both nearly 30% above the region's ten-year averages. The number of individual gobblers heard had two distinctive peaks. The first came during the season's second week (22 – 28 March) while the second was mid-season (12 – 18 April). Total gobbles heard was relatively steady from the second week (22 – 28 March) until a slight peak during the fifth week (12 – 18 April; Figure 20).



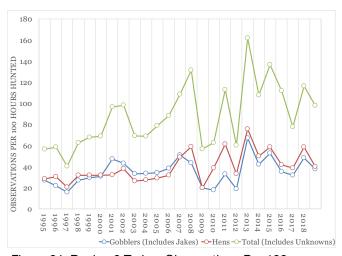
160 14 120 12 100 8 Gobbles Gobble 60 40 o MARCH MAR 29 -22 - 28 APR 4 APR 26 MAY 1 MARCH APRIL APRIL Gobbles -Gobblers

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

Figure 20: Region 2 Gobblers & Gobbles Heard Per 10 Hours Hunted by Week

#### **Turkey Observations**

Total turkey observations dipped from the prior year but were still well above their long-term average. Delta hunters averaged seeing just under 100 total turkeys per 100 hours hunted. Of these, approximately 38 were gobblers while 40 were hens; the remainder were unidentified (Figure 21). Hunters observed 22.4 juvenile gobblers per 100 hours hunted; this was above the region's long-term average (Figure 22).



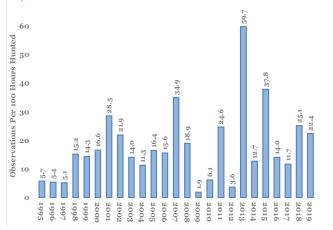


Figure 21: Region 2 Turkey Observations Per 100 Hours Hunted

Figure 22: Region 2 Jake Observations Per 100 Hours Hunted

#### 2020 Season Forecast

The 2020 Delta season is tough to gauge. Based solely on existing data, expectations should be high. Brood survey numbers were strong two years ago and jake observations since have been solid. Under normal circumstances, this combination would point to good tidings. However, a great unknown is the impact of last year's record-setting flood. Adult turkeys typically survive short-duration flooding with ease; however, the extent and duration of flooding along the Mississippi River, Steele Bayou, and other tributaries in 2019 was unprecedented. Early assessments suggest most populations fared well and flood-induced mortalities were limited; nonetheless, the degree to which the good hatch of 2018 will translate into a quality spring for 2020 will be determined by how well standing flocks survived the 2019 floodwaters.

#### **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

East-central Mississippi's 2019 hatch should have maintained the region's status quo. The observed 1.8 PPH was on par with the region's average (Figure 23). During the survey period, 621 hens were seen; 288 (46%) were accompanied by broods, which was the highest regional success rate. The average brood size was 3.8 poults.

#### Harvest Rates & Age Structure

In 2019, east-central SGHS hunters harvested 2.6 gobblers per 100 hours hunted (Figure 24). This was a 16% decline over the previous year and 25% below the region's long-term average. Participants in the SGHS logged 154 turkey kills in Region 3. Most of those (60%) had spurs at least one inch or greater. Only 40% of gobblers sported spurs under one inch (Figure 25).

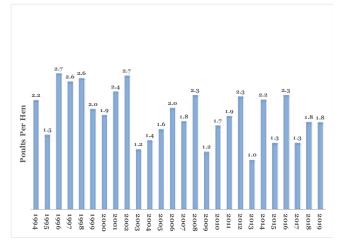


Figure 23: Region 3 Poults Per Total Hens

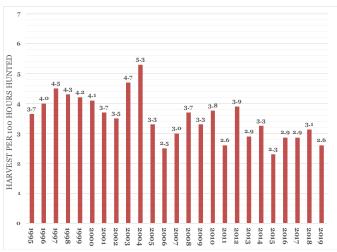


Figure 24: Region 3 Harvest Per 100 Hours Hunted

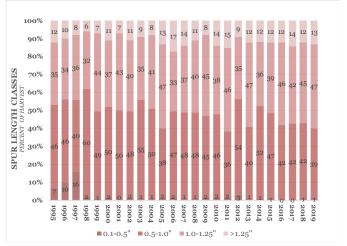


Figure 25: Spur Length Distributions From Gobblers Harvested in Region 3

#### **Gobbling Activity**

As with harvest rates, gobbling activity was depressed during 2019. The total number of individual gobblers heard dropped from 4.2 per 10 hours hunted in 2018 to 3.7. Likewise, total gobbles heard dipped to 47.1 per 10 hours hunted (Figure 26). Gobbling activity did not seem to have an in-season peak. The total number of individual gobblers heard was greatest during the second week of the season (22 -28 March). The overall total number of gobbles heard seemed to be greatest during two distinct portions of the regular season: week four (5 – 11 April) and week seven (26 April – 1 May; Figure 27).

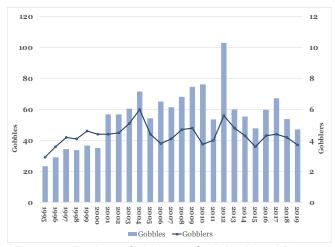


Figure 26: Region 3 Gobblers & Gobbles Heard Per 10 Hours Hunted by Year

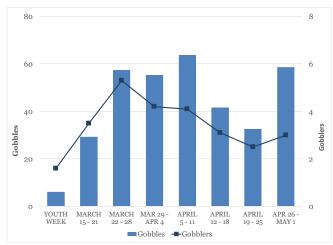


Figure 27: Region 3 Gobblers & Gobbles Heard Per 10 Hours Hunted by Week

#### **Turkey Observations**

Overall turkey observations increased in east-central Mississippi in 2019. Hunters in the region saw 27.6 gobblers including 12.7 jakes (Figure 28), 43 hens, and approximately 6 unidentifiable birds, for a total of 76.1 turkey sightings per 100 hours hunted (Figure 29). These values were near their average for the decade prior.

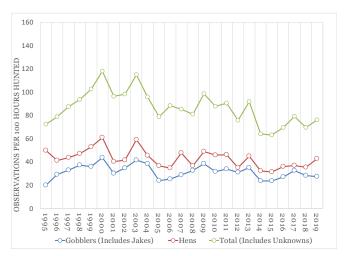


Figure 28: Region 3 Turkey Observations Per 100 Hours Hunted

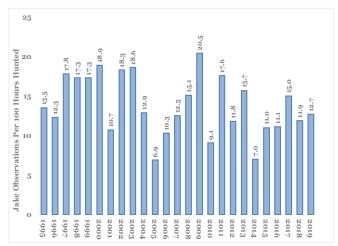


Figure 29: Region 3 Jake Observations Per 100 Hours Hunted

#### 2020 Season Forecast

Hunters in east-central Mississippi should expect a very similar season to the last few. Available data suggests steady reproduction followed by unchanged jake observation rates over the last few springs. Turkey populations in the region have neither grown nor shrank measurably since 2016. If history is any guide, the best days to be afield will likely be the two-week period straddling April 1st.

#### **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

During the summer brood survey, 208 hens were accompanied by 369 poults, yielding a 1.8 PPH average for Region 4 (Figure 30). While this was a decline from the extraordinary hatch of 2018, it was on par with the region's long-term averages. Approximately 45% of observed hens were accompanied by broods. The average brood was approximately four poults.

#### Harvest Rates & Age Structure

Harvest per 100 hours dropped to tie its lowest recorded value in 2019. Southwestern Mississippi hunters averaged 2.6 gobbler harvests per 100 hours hunted (Figure 31). This was roughly 30% below the region's long-term mean. Spring Gobbler Hunting Survey participants reported 109 birds bagged in the region. Thirty-six percent of the harvest were likely two-years old with one-half to one-inch spurs. The proportion of the harvest with spurs greater than 1 ¼ inch remained steady at 17% of the total (Figure 32).

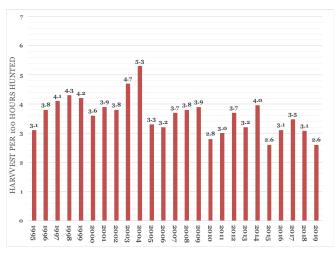


Figure 31: Region 4 Harvest Per 100 Hours Hunted

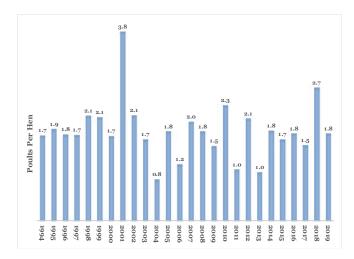


Figure 30: Region 4 Poults Per Total Hens

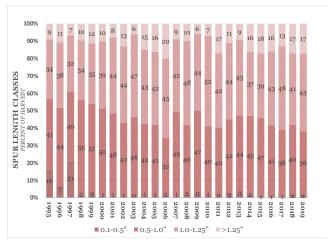
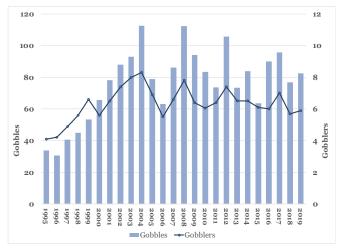


Figure 32: Spur Length Distributions From Gobblers Harvested in Region 4

#### **Gobbling Activity**

Gobbling activity was similar to the previous year in southwest Mississippi. Spring Gobbler Hunting Survey participants heard 5.9 individual gobblers and 82.5 total gobbles per 10 hours hunted (Figure 33). This was slightly below the previous decade average. Both total gobbles and individual gobblers heard peaked during the regular season's second week (22 – 28 March) when hunters heard 8.3 and 100.9 of each, respectively (Figure 34).



120 10 100 8 80 6 60 Gobbles Gobblers 4 40 20 o YOUTH MARCH MARCH MAR 29 -APRIL APRIL APRIL APR 26 APR 4 Gobbles Gobblers

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

Figure 34: Region 4 Gobblers & Gobbles Heard Per 10 Hours Hunted by Week

#### **Turkey Observations**

Overall turkey observations increased in Region 4 during 2019. Turkey hunters observed 67.1 total turkeys per 100 hours hunted (Figure 35). The sex ratio of observations was nearly even; there were roughly 28 gobblers and 28 hens observed per 100 hours. Jake sightings increased 54% over the previous year to 13.9 per 100 hours hunted (Figure 36).



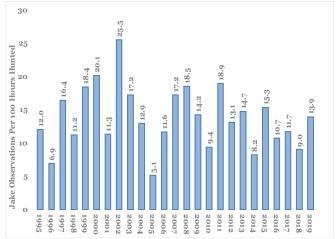


Figure 35: Region 4 Turkey Observations Per 100 Hours Hunted

Figure 36: Region 4 Jake Observations Per 100 Hours Hunted

#### 2020 Season Forecast

The 2018 hatch was the second highest since the MDWFP began its summer brood survey in 1995. Such stellar reproduction alone would suggest 2020 should yield a bumper crop of two-year old gobblers. Although last season's jake observations did not equal the spike forecasted by the prior year's brood survey, observations were up considerably. Regardless of which data point is used – the phenomenal brood numbers from 2018 or the >50% increase in 2019 jake sightings – things should be setup for a very good 2020 turkey season in southwest Mississippi. Hunters in this region should expect one of their best springs in quite some time.

#### **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

During the summer of 2019, MDWFP's annual brood survey observed 344 hens and 533 poults across the southeastern piney woods. The 1.6 PPH (Figure 37) yielded was well below the region's record-setting 2018 hatch, but near the regional average of the past decade. Roughly 39% of hens were accompanied by a brood and the average brood size was four poults.

#### Harvest Rates & Age Structure

Hunters in Region 5 were second only to those in northeast Mississippi in terms of harvest frequency. The 3.3 gobblers harvested per 100 hours by SGHS hunters in southeast Mississippi was down slightly from the previous year (Figure 38), but still added up to one of the better seasons in a decade. Nearly two-thirds (65%) of birds bagged by SGHS hunters in Region 5 were older-aged with at least one-inch spurs. Thirty-five percent had under one-inch spurs, which was proportionally the lowest by that population segment in the SGHS's history (Figure 39).

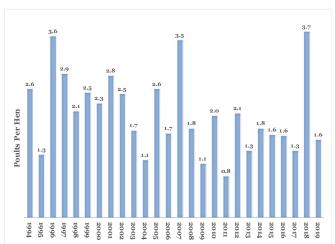


Figure 37: Region 5 Poults Per Total Hens

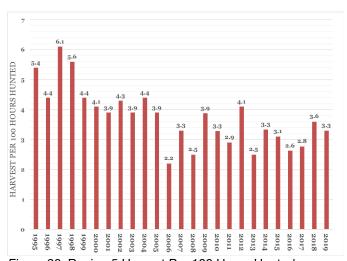


Figure 38: Region 5 Harvest Per 100 Hours Hunted

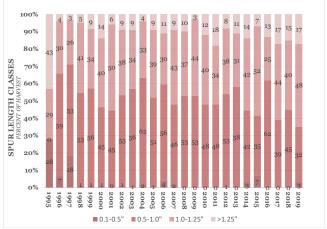
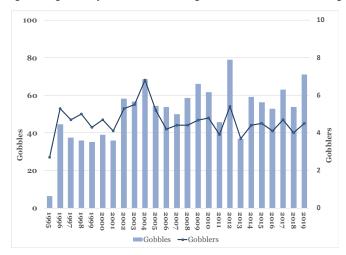


Figure 39: Spur Length Distributions From Gobblers Harvested in Region 5

#### **Gobbling Activity**

The number of individual gobblers heard in Region 5 was similar to recent years, however, overall gobbling activity increased dramatically. Hunters heard 4.5 gobblers and 71.1 total gobbles per 10 hours hunted (Figure 40). The latter represented the second-highest value on record for the region. The last two weeks of the season (19 April – 1 May) produced the most intense gobbling activity. More individual gobblers were heard during the final week of the season than any other week (Figure 41).



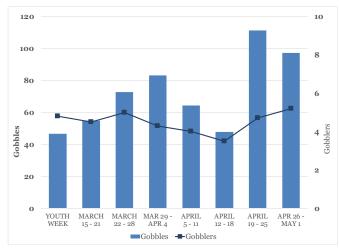
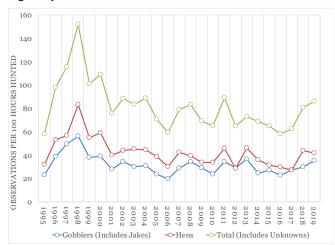


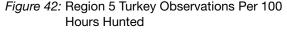
Figure 40: Region 5 Gobblers & Gobbles Heard Per 10 Hours Hunted by Year

Figure 41: Region 5 Gobblers & Gobbles Heard Per 10 Hours Hunted by Week

#### **Turkey Observations**

Total turkey observations jumped markedly in southeast Mississippi over the past two springs. Hunters saw 86.2 turkeys per 100 hours hunted, which was 23% above the prior ten-year average. Gobbler observations per 100 hours afield increased, whereas hen observations remained relatively unchanged from the previous year (Figure 42). Jake observations exhibited a considerable spike. Hunters observed 18.1 juvenile gobblers per 100 hours hunted (Figure 43). This was the highest jake observation rate since 2011 and was 57% above the average of the previous decade.





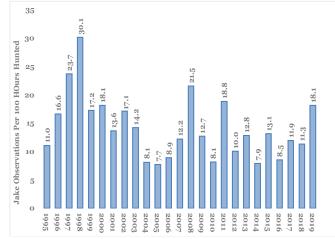


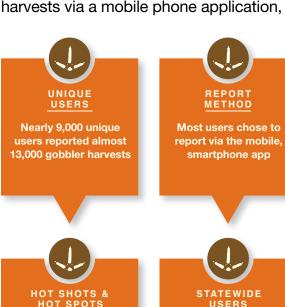
Figure 43: Region 5 Jake Observations Per 100 Hours Hunted

#### 2020 Season Forecast

Turkey hunters in southeast Mississippi have struggled more than they've celebrated since Hurricane Katrina devastated the region's best turkey habitat, but the data indicates 2020 may be the year in which the region returns to old form. The 2018 hatch was a record-setter and jake observations in 2019 made a corresponding large jump. Though the 2019 hatch was more lackluster, it should have been just enough to uphold recent population gains. Piney Woods hunters should go into the 2020 season with their expectations set high. All indications are they're in store for one of their best springs in quite some time.



The 2019 spring turkey season marked a new beginning for wild turkey management in Mississippi. Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP) instituted Game Check, a mandatory harvest reporting system designed to document gobbler harvests by all resident and nonresident turkey hunters. Hunters were required to report their harvests by 10 PM on the day which it occurred. Flexibility was a hallmark of Game Check; hunters were allowed to report harvests via a mobile phone application, website portal, or by calling 1-800-BE-SMART.







Counties in north-central

Mississippi had the

highest density of

gobbler harvests



#### Individual Users and Harvest

A total of 8.780 unique users reported 12.627 turkey harvests to Game Check during the 2019 spring turkey season. On average, hunters who reported were 39 years of age. Approximately 7% of reports were submitted on behalf of youth hunters under the age of 16. Nonresidents accounted for 9.5% of all reported turkey harvests.

The majority of reports were submitted via the mobile app (76%; Figures 44 and 45). Approximately 15% of reports were called in via the 1-800 hotline, whereas only 9% of reports were logged via the online website (Figure 45).

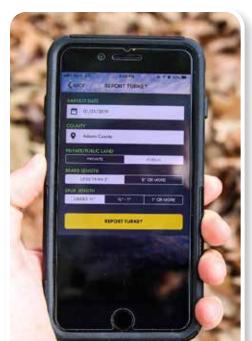


Figure 44: The primary method used by Mississippi turkey hunters in Game Check's first year was the mobile app.

Most of the hunters who utilized the Game Check system only reported one bird. Approximately 9.7% of users attained Mississippi's seasonal bag limit of 3 gobblers (*Figure 46*).

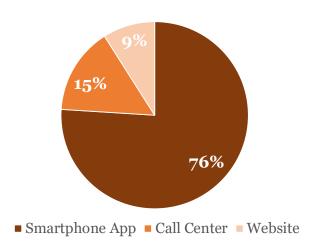


Figure 45: Distribution frequency of reporting methods by Game Check users in Mississippi's 2019 spring turkey season.

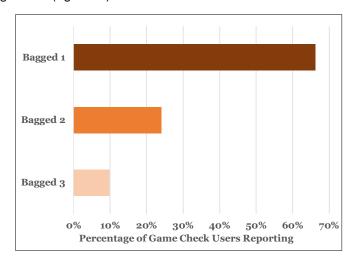


Figure 46: Breakdown of Game Check users (by percentage) who reported one, two, and three gobblers to the Game Check system in 2019.

#### Geographic Distribution of Harvest

One of the most important functions of Game Check was to provide MDWFP with county-level harvest numbers. Lafayette County was the top county for turkey harvests with a reported 407 gobblers taken. Attala, Carroll, Copiah, Marshall, and Panola counties all reported harvests in excess of 300 birds. Slightly over half of Mississippi counties reported more than 150 gobblers. Only Sunflower County failed to register any turkeys (*Figure 47 and Table 1*).

The top and bottom 10 counties for reported harvest are shown in Figure 48. Harvest numbers were adjusted for land area within a county to obtain an assessment of relative turkey abundance across the state (*Figure 48*).

Approximately 12% of harvests came from public land.

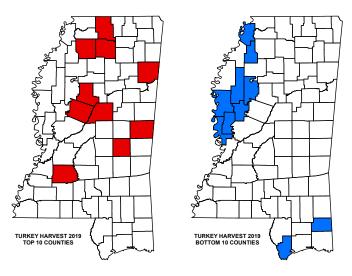


Figure 48: Top 10 (red, left) and bottom 10 (blue, right) counties for reported gobbler harvest via Game Check in 2019.

Figure 47: Total spring gobbler harvest numbers, by county, reported to the Game Check system in 2019.



#### **Timing of Gobbler Harvest**

In addition to geographic distribution of harvests, Game Check data is also useful for evaluating the timing of harvest throughout Mississippi's spring season. The opening day of the regular season (March 15<sup>th</sup>) received more reported harvest than any other day (773 birds). Approximately 50% of the total harvest occurred by March 30<sup>th</sup> (*Figure 49*).

#### Gobbler Characteristics

The vast majority of gobblers reported to Game Check in 2019 were adult birds. Only 3% of all reported gobblers had less than a 6-inch beard. Similarly, only 5% of gobblers had less than one-half inch spurs. Most gobblers had between one-half to one-inch spurs. Slightly more than one-third of those reported had greater than one-inch spurs (*Figure 50*).

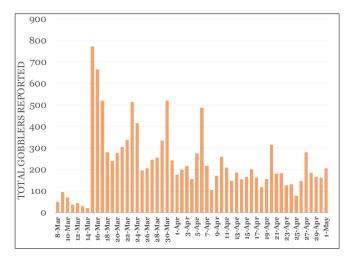


Figure 49: Number of gobbler harvests reported, by date, throughout Mississippi's 2019 spring season.

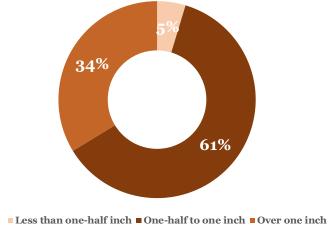


Figure 50: Distribution of spur lengths for gobblers reported to Game Check in Mississippi during the 2019 spring season.

# Game Check vs. Long-term Harvest Estimates

Prior to Game Check, MDWFP's only means of estimating harvest and hunter participation in turkey hunting was post-season survey in which a random sample of licensed hunters were questioned about their harvests. These findings were then extrapolated to the entirety of all licensed hunters. Total estimated harvest for the spring 2019 season was 25,513, suggesting Game Check achieved an approximate 50% compliance rate on reporting.

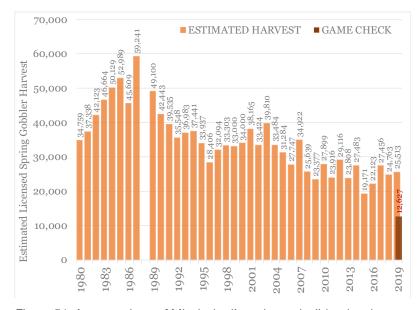


Figure 51: A comparison of Mississippi's estimated wild turkey harvest since 1980 with the 2019 reported Game Check harvest.

Table 1. Gobbler harvest totals reported by county to Game Check in Mississippi during the 2019 spring season.

County	Reported Harvest	County	Reported Harvest
Adams	232	Leflore	12
Alcorn	160	Lincoln	173
Amite	194	Lowndes	126
Attala	358	Madison	192
Benton	178	Marion	157
Bolivar	20	Marshall	388
Calhoun	229	Monroe	264
Carroll	342	Montgomery	205
Chickasaw	196	Neshoba	185
Choctaw	201	Newton	241
Claiborne	177	Noxubee	227
Clarke	159	Oktibbeha	184
Clay	123	Panola	357
Coahoma	17	Pearl River	81
Copiah	304	Perry	89
Covington	119	Pike	81
DeSoto	98	Pontotoc	214
Forrest	51	Prentiss	180
Franklin	213	Quitman	4
George	12	Rankin	175
Greene	64	Scott	207
Grenada	204	Sharkey	3
Hancock	9	Simpson	171
Harrison	14	Smith	212
Hinds	202	Stone	43
Holmes	282	Sunflower	0
Humphreys	2	Tallahatchie	94
Issaquena	3	Tate	194
Itawamba	220	Tippah	198
Jackson	22	Tishomingo	154
Jasper	228	Tunica	14
Jefferson	213	Union	150
Jeff Davis	159	Walthall	65
Jones	154	Warren	120
Kemper	240	Washington	2
Lafayette	407	Wayne	93
Lamar	83	Webster	123
Lauderdale	170	Wilkinson	153
Lawrence	135	Winston	233
Leake	211	Yalobusha	233
Lee	95	Yazoo	130

#### HARVEST-REPORTING MANDATORY FOR ALL TURKEY HUNTERS



By reporting your turkey harvests, you will aid the future of wild turkey conservation in Mississippi. Reporting through the MDWFP Game Check system is quick and easy, and it is **MANDATORY** for **ALL TURKEY HUNTERS**.

The basics of Game Check are outlined below.

#### STEP

#### **BEFORE YOU GO HUNTING**



Obtain a hunting license (unless exempt) and harvest record. Two types of harvest records are acceptable, a digital record or a printed form. Digital record keeping may be done through the Game Check feature found within the free MDWFP app. Register in the app and it will be your official harvest record. If you prefer a printed form, the form below will suffice.

#### STEP WHEN YOU HARVEST A TURKEY



The reporting process must begin **BEFORE** you move the turkey from its harvest location. Using the Game Check feature, click the REPORT TURKEY button and complete and submit an entry. If there is no cellular coverage where you hunt, the app will automatically upload your harvest when coverage resumes. Using the printed form method, notch the corresponding month bubbles.

#### STEP AFTER YOUR HUNT



Using the Game Check feature, you have no additional requirements. Using the printed form, you must report the harvest through the MDWFP website or by calling 1-800-BE-SMART before 10 p.m. on the day of harvest.

#### THERE ARE THREE WAYS TO REPORT:

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

Once you complete the harvest-reporting process, you will receive a confirmation number. This number must be documented on the harvest record.

#### **SPRING TURKEY HARVEST RECORD**

lame:	License No:				
Address:					
	Phone:				

Instructions: All hunters must have a current harvest record in their possession while turkey hunting. If you are using the MDWFP app to report your harvest you do not need this form. Before moving a turkey from the point of harvest, hunters should document the harvest using the MDWFP app or on their harvest record. To document a harvest on this form, punch out the appropriate bubbles for month and date. Hunters must report their harvest by 10 p.m. on the day of harvest. Harvests can be reported via the MDWFP app, MDWFP website, or by calling 1-800-BE-SMART. Once the harvest has been reported, record the corresponding confirmation number on the appropriate line of the harvest record.

	MAR			APR			MAY		MAR			APR			MAY		MAR			APR			MAY	
	1	2	3	4	5	6	7		1	2	3	4	5	6	7		1	2	3	4	5	6	7	
TURKEY	8	9	10	11	12	13	14	TURKEY	8	9	10	11	12	13	14	TURKEY	8	9	10	11	12	13	14	
	15	16	17	18	19	20	21					18				3	15	16	17	18	19	20	21	
U	22	23	24	25	26	27	28	•	22	23	24	25	26	27	28	Ð	22	23	24	25	26	27	28	
	29	30	31						29	30	31						29	30	31					
Confirma	tion N	o: _						Confirma	ıtion N	o: _						Confirm	ation N	lo: _						

HOW TO GET YOUR CONFIRMATION NO: MDWFP app · MDWFP.com/gamecheck · 1-800-BE-SMART

#### **Turkey Hunting on Wildlife Management Areas**

For those willing to seek it, Mississippi is blessed with an abundance of quality turkey hunting on public land. Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP) offers spring turkey hunting on 37 of the Wildlife Management Areas (WMAs) it manages. Season frameworks on these areas vary. Some mirror the statewide framework, whereas hunting on others may be by permit draw-only throughout the duration of the season (*Figure 52*).

During the 2019 spring season, 416 gobblers were harvested in 12,535 man-days, for a rate of about one harvest per 30 man-days, across all MDWFP WMAs. This was an increase from 2018 in which 366 gobblers were harvested in 13,486 man-days (37MD/harvest). Hunting success, viewed in terms of man-days and acres per harvest, was best in the Northeast Region (*Table 2*).

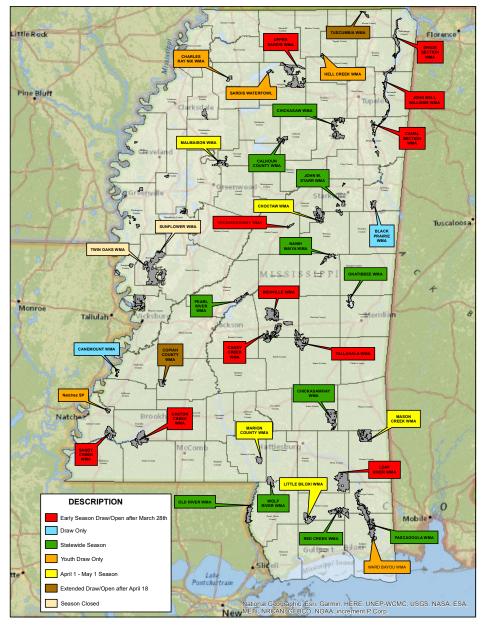


Figure 52:

MDWFP offers spring turkey hunting on 37 WMAs throughout the state. Season frameworks vary by WMA.

Table 2: (p.28)

Spring 2019 and decade-long average turkey harvest and manday figures for 37 MDWFP WMAs offering spring turkey hunting.

			2019 Spring Season				10-Year Averages			
	WMA	Acres	Total ManDays	Total Harvest	ManDays/ Harvest	Acres/ Harvest	Avg Total ManDays	Avg Total Harvest	Avg ManDays/ Harvest	Avg Acres/ Harvest
	Calhoun County	7,545	156	5	31	1,509	202	7	26	1,243
NORTHEAST	Canal Section - John Bell Williams	35,300	1,146	45	25	784	1,147	35	36	1,106
$\mathbb{H}$	Charles Ray Nix	3,812	26	7	4	545	24	4	6	851
	Chickasaw	28,000	1,075	59	18	475	999	37	30	818
	Divide Section	15,300	588	28	21	546	696	22	39	782
) R	Hell Creek Sardis Waterfowl	2,336	12 12	0	6	1.500	10	0	4	1 106
$\mathcal{L}$	Tuscumbia	3,016 2,600	57	2	29	1,508 1,300	10 125	3	4 39	1,106 984
$\sim$	Upper Sardis						_		28	
	= = =	50,485	1,022	43	24	1,174	1,340	47	20	1,094
	Northeast Total		4,082	191		202	4,544	157	26	220
	Northeast Average	18,257	510	<b>2</b> 4	20	980	568	20	26	998
N. P.	Sunflower	60,000	0	0			220	11	31	7,879
DELTA	Twin Oaks	5,700	О	O			43	1	28	3,325
田	Delta Total	65,700	0	0			264	12		
	Delta Average	32,850	0	0			132	6	30	5,602
	Bienville	26,136	474	8	59	3,267	704	20	38	1,657
. 1	Black Prairie	5,673	20	7	3	810	15	3	7	2,632
A	Caney Creek	28,000	516	22	23	1,273	808	25	34	1,242
CENTRAL	Choctaw	24,500	470	24	20	1,021	815	24	35	1,090
	John Starr	8,244	226	9	25	916	211	7	44	1,957
	Malmaison	9,483	272	6	45	1,581	434	16	30	905
	Nanih Waiya	8,064	166	6	28	1,344	124	3	40	2,479
三上	Okatibbee	6,883	27	0			72	1	51	5,449
S	Tallahala	28,120	856	36	24	781	1,158	40	30	779
EAST-	Yockanookany	2,379	45	1	45	2,379	35	2	22	1,596
щ	East-Central Total	147,482	3,072	119			4,376	141		
	East-Central Avg	14,748	307	12	30	1,486	438	14	33	1,979
	Canemount	3,500	78	2	39	1,750	52	3	18	1,375
Š	Caston Creek	27,785	854	9	95	3,087	931	22	40	1,445
VEST	Copiah County	6,583	519	20	26	329	564	11	62	713
	Natchez State Park	3,425	50	3	17	1,142	37	2	21	2,030
	Pearl River	6,925	172	3	57	2,308	168	3	82	3,188
5	Sandy Creek	16,407	721	22	33	746	684	21	34	923
SOUTH	Southwest Total	64,625	2,394	59			4,376	61		
S	Southwest Avg	10,771	399	10	44	1,560	438	10	43	1,612
	Chickasawhay	35,000	481	9	53	3,889	728	17	43	2,253
	Leaf River	41,411	526	7	75	5,916	1,195	20	57	2,528
	Little Biloxi	15,622	339	5	68	3,124	413	5	131	5,159
OUTHEAST	Marion County	7,200	480	11	44	655	427	8	66	1,193
Į.	Mason Creek	27,272	132	5	26	5,454	419	10	70	6,112
	Old River	15,000	135	3	45	5,000	168	6	31	4,063
	Pascagoula River	37,000	269	2	135	18,500	616	13	63	6,361
i b	Red Creek	23,000	258	2	129	11,500	299	4	74	6,634
0	Ward Bayou	13,234	65	О	•		65	3	25	5,076
S	Wolf River	10,801	290	3	97	3,600	477	9	67	2,042
	Southeast Total	225,540	2,928	44			4,807	96		
	Southeast Avg	22,554	293	4	<b>76</b>	7,313	481	10	63	4,142

#### The Magnolia Turkey Records Program

ALL WILD TURKEYS SHOULD BE CONSIDERED TROPHIES, BUT SOME ARE MORE IMPRESSIVE THAN OTHERS. Hunters annually contact Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP) to find out how their bird compares to those harvested by others. Due to the interest from turkey hunters, MDWFP has a database for gobblers harvested in Mississippi. The purpose for maintaining turkey records is to allow sportsmen to recognize and fully appreciate the quality of individual turkeys.

Turkey records are presented for the following categories:

Top Scoring Typical, Top Scoring Non-typical, Longest Beard, Longest Spurs, and Heaviest. Non-typical turkeys have multiple beards. Total score is obtained by adding the turkey's weight plus 10 times the combined length of both spurs plus 2 times beard length. Weight should be measured to the nearest ounce on certified scales. Beards are measured in 1/16 inch increments from the center point of the beard's base where it attaches to the skin to the end of the longest bristle. Spurs are measured in 1/16 inch increments along the outside center of the spur from the point at which the spur protrudes from the scaled leg skin to the tip of the spur. All weights and measurements should be converted to decimals. A registration form is provided in this report for those who wish to have their harvested gobbler included in the Mississippi Wild Turkey Records. For a complete listing of records, visit the Agency's website at *mdwfp.com/turkey*.



Table 3. All-time top 10 typical-scoring turkeys harvested in Mississippi, by total score.

	TOP SCORING TYPICAL									
Rank	Total Score	Date Harvested	County Harvested	Hunter						
1	80.64	April 8, 2005	SMITH	Amp Frith						
2	80.40	April 11, 2009	PANOLA	Lauren Kaye Russell						
3	79.20	April 18, 2003	COPIAH	Doug Borries						
4	78.69	March 22, 2014	PEARL RIVER	Terry Burge						
5	78.50	March 31, 2009	LAFAYETTE	Greg Vaughan						
6	77.75	March 29, 2007	ALCORN	Mike Suitor						
7	77.00	March 28, 1987	KEMPER	Robby Ellis						
8	76.93	April 24, 2019	LINCOLN	Connor Douglas						
9	76.88	March 23, 2019	RANKIN	Daniel Blake Sassar						
10	76.70	April 13, 2005	PEARL RIVER	Kris Collins						



# New Record Longest Beard! This tom, harvested by Shane Knighton

This tom, harvested by Shane Knighton on April 29, 2019, took the top spot as the Mississippi record-holder for beard length. The bird sported a beard 17.94 inches in length.

Photo by Shane Knighton

Table 4. All-time top 10 non-typical scoring turkeys harvested in Mississippi, by total score.

	TOP SCORING NON-TYPICAL										
Rank	Total Score	Total Beards	Beard Length (inches)	Date Harvested	County Harvested	Hunter					
1	157.06	9	60.25	April 8, 2010	PONTOTOC	Don Shumaker					
2	151.06	7	57.25	March 17, 2008	TISHOMINGO	Jerrell Keele					
3	148.30	7	52.69	March 28, 2002 AMITE		James Scheer					
4	143.17	9	53.26	March 20, 2000	MARION	Andy Stringer					
5	141.63	6	48.99	April 12, 2011	CLAIBORNE	J.R. Robinson					
6	139.50	5	46.50	April 29, 2008	SIMPSON	Bobby Tebo					
7	139.25	5	52.70	March 23, 1998	SCOTT	Richard Latham					
8	138.65	8	48.63	April 13, 2013	TIPPAH	Thomas Wood					
9	137.13	6	51.69	March 24, 2009	TISHOMINGO	Lee Oaks					
10	135.72	9	52.86	April 14, 2005	TISHOMINGO	Jerry Smith					

Table 5. All-time top 10 turkeys harvested in Mississippi, ranked by total beard length.

	LONGEST BEARD									
Rank	Beard Length (inches)	Date Harvested	County Harvested	Hunter						
1	17.94	April 29, 2019	WARREN	R. Shane Knighton						
2	17.25	April 30, 2001	MONROE	Monty Roberts						
3	16.25	April 8, 2001	SMITH	Amp Frith						
4	16.0	April 6, 2002	MONROE	Monty Roberts						
5	15.5	April 19, 2012	TIPPAH	Dan Glover						
6	15.0	March 28, 2003	MARSHALL	Carlton Gibson						
7	14.75	April 4, 2007	CLAIBORNE	Dale Collins						
8	14.63	March 23, 2019	RANKIN	Daniel Blake Sassar						
9	14.19	April 10, 2003	MONROE	Charles Langley						
10	14.13	March 19, 1989	WILKINSON	Todd D'Aquin						

Table 6. Top turkeys harvested in Mississippi, ranked by longest spur.

LONGEST SPURS							
Rank	Longest Spur (inches)	Date Harvested	County Harvested	Hunter			
1	1.88	April 16, 2007	LAUDERDALE	Don Marascalo			
2	1.875	April 18, 2015	LEAKE	James Ellis			
	1.875	April 15, 2016	KEMPER	Billy Joe Hedgepeth			
4	1.813	March 31, 2009	LAFAYETTE	Greg Vaughan			
5	1.81	April 30, 1990	CLAIBORNE	Marvin Muirhead			
6	1.75	April 24, 2019	LINCOLN	Connor Douglas			
	1.75	April 13, 2005	PEARL RIVER	Kris Collins			
	1.75	March 24, 2007	CLAIBORNE	James Greer			
	1.75	April 8, 2000	LEAKE	Ronald Coleman			
	1.75	April 2, 2003	JEFFERSON	Thomas McAlpin, Jr.			
	1.75	March 18, 2012	CLAIBORNE	Paul Davis			
	1.75	April 5, 2000	СОРІАН	Rickey Thompson			
	1.75	April 17, 2004	CHICKASAW	Mike Soper			

Table 7. All-time top 10 turkeys harvested in Mississippi, ranked by total weight.

	. ,		,				
HEAVIEST							
Rank	Weight (pounds)	Date Harvested	County Harvested	Hunter			
1	26.25	March 19, 2015	RANKIN	David Evans			
2	25.61	April 2, 2015	MARSHALL	Daniel Favazza			
3	25.27	April 11, 2009	PANOLA	Lauren Kaye Russell			
4	25.25	March 30, 2004	NEWTON	Hunter Hayes			
5	25.19	March 26, 2004	NESHOBA	John Robb			
6	24.87	March 26, 2019	TIPPAH	Ben Cox			
7	24.68	April 18, 2003	СОРІАН	Doug Borries			
8	24.44	April 2, 2005	NESHOBA	Chad Young			
9	24.00	March 16, 2009	FORREST	Matthew Saucier			
	24.00	March 18, 2008	ADAMS	Chasen Gann			



# Fine-Scale Movements and Habitat Selection of Eastern Wild Turkeys in Mississippi

Since 2016, the Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP) has cooperated with the Forest and Wildlife Research Center within Mississippi State University's College of Forest Resources to investigate aspects of habitat selection by wild turkeys. A total of 61 turkeys were caught at study sites in Attala, Copiah, Lamar, and Marshall counties (Figure 53). Each turkey was

fitted with a GPS transmitter allowing researchers to assess their locations at up to 15-minute intervals. Utilization of such cuttingedge technology has allowed for a never-before-seen glance into the intricacies of wild turkey behavior and movement.

Results of this work suggest that the needs of wild turkeys may differ depending upon both the season of the year and the areas in which they reside. Turkeys have shown researchers that the degree to which certain habitats are utilized may be dictated by the availability of similar habitats in the broader landscape. For example, the importance of hardwood timber was greater, and these stands were selected by turkeys more strongly, in landscapes where this timber





Figure 53: Turkey habitat use was studied on four sites representing a variety of the different habitat types found across Mississippi.

Photo: A biologist from MDWFP prepares to release a hen which has been fitted with a special GPS transmitter at her capture site in Copiah County.

Photos in this section by MDWFP staff

type was more limited. Likewise, turkey use of grassy openings shifts throughout the year and is most intense in heavily forested areas where openings are limited.

The implications of this project suggest management recommendations should differ depending upon landscape context and composition. For land managers, who which to attract and retain turkeys on their property, the findings of this study suggest promoting diversity of different types of habitat is key. Future use of the information gained from this project will allow for the development of tools to help landowners gauge how different management actions might influence turkey utilization of their property.

sippi Chapter of the National Wild Turkey Federation.



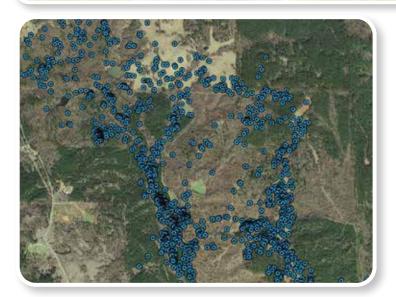


Photo (top right): Mississippi State University graduate student Conner Almond prepares capture equipment in Lamar County. For research, turkeys are caught with a large net deployed by rockets.

Photo (middle): The movements of gobblers and hens were followed to better understand their habitat use across Mississippi.

Photo (bottom): By reviewing data recorded every 15-minutes, like the movements of this hen in Marshall County, researchers can get an incredible glimpse into the habitat features which are critical for turkeys.



#### The Mississippi Chapter of the National Wild Turkey Federation

The National Wild Turkey Federation's (NWTF) mission is the conservation of the wild turkey and the preservation of our hunting heritage. Since the organization's founding in 1973, it has been one of Mississippi Department of Wildlife, Fisheries, and Parks' (MDWFP) most steadfast conservation partners.

Each year, the NWTF raises money to support the conservation and management of wild turkeys at fund raising banquets held around the state. These funds are then applied on-the-ground in association with partner organizations like MDWFP. Since 1985, the Mississippi Chapter of the NWTF has provided the MDWFP with over \$1.9 million dollars in assistance with managing Mississippi's wild turkey population.

The following are projects MDWFP accomplished in 2019 with funding support from the Mississippi Chapter of the NWTF:



**Yockanookany WMA:** Project utilized forestry mulchers and other heavy equipment to create linear openings along interior roadways to enhance availability of brooding habitat.



**Canal Section WMA:** Project utilized heavy equipment to clear brush and reclaim habitat along 22-miles of the Tenn-Tom waterway. Project yielded considerable increase in the availability of brooding habitat.

Photos in this section by MDWFP staff



**Divide Section WMA:** Old field habitat was reclaimed using heavy equipment, herbicides, and prescribed fire. The results enhanced habitat for nesting and brooding wild turkeys and associated wildlife.



Marion County WMA: NWTF dollars were used to help eradicate invasive cogon grass to improve fields and forests for wildlife.



Charles Ray Nix WMA: Chinese privet is an invasive brush species which can make forests too thick for turkeys. NWTF dollars paid the way for forestry mulching in hardwood stands to reduce coverage by privet.



Malmaison WMA: Wildlife openings were reclaimed with a combination of heavy equipment and herbicide application to make way for additional food plots and brood habitat.



Chickasawhay and Mason Creek WMAs: Through partnership with the U.S. Forest Service, NWTF dollars helped provide seed and fertilizer to manage wildlife openings and food plots.



**Spring Gobbler Hunting Survey:** NWTF helps promote the MDWFP Spring Gobbler Hunting Survey by paying for a shotgun to be raffled among participants.



**Game Check:** The Mississippi Chapter of the NWTF assisted MDWFP with support to market the inaugural year of mandatory harvest reporting for turkeys.



**Gobbler Banding and Population Monitoring on WMAs:** Super Fund dollars assisted MDWFP with the purchase of equipment to monitor regulation changes on WMAs through gobbler banding and trail camera surveys.



Southeast Wild Turkey Working Group Meeting: Each summer, the Wild Turkey Working Group of the Southeast Association of Fish and Wildlife Agencies gathers biologists and researchers from around the southeastern United States to meet for two days to discuss issues and challenges facing wild turkey populations. Mississippi was the host state for this important meeting in 2019, and contributions from the Mississippi Chapter of the NWTF helped underwrite meeting costs.



**Fire on the Forty:** The Fire on the Forty program is an endeavor to promote the use of prescribed fire across Mississippi through educational outreach and cost-sharing with private landowners. The Mississippi Chapter of the NWTF has been a steadfast partner in supporting this program.

# Sightings of Sick Turkeys in Mississippi

MDWFP documents cases of wild turkeys found to be sick, diseased, or otherwise ill. Monitoring reported cases provides information to assess the impacts of disease and better manage the wild turkey resource. Sportsmen can play an important role by reporting sick or dead turkeys and assisting MDW-FP with obtaining birds for examination. If you find any sick or dead wild turkey, please follow the procedures listed below. If you are unable to collect the carcass, reporting details about the dead birds will provide valuable information. Also, please contact MDWFP if you observe or have previously observed a sharp decline in a local turkey population.

**Contacting MDWFP:** Contact Turkey Program Coordinator Adam Butler at 601.695.6795 as soon as possible. If are unable to contact Adam, please call the Jackson Office at 601.432.2199 or contact your local MDWFP District Office.

Obviously sick turkeys may be humanely dispatched only after communication with MDWFP. The proper authorities will provide guidance on how to proceed given the context of the situation.

**Handling Turkeys:** Carcasses should be cooled as soon as possible by refrigeration or by putting the bird on ice in a cooler. It is best not to freeze the turkey and to submit the bird as soon as possible. If the turkey cannot be obtained by MDWFP within 48 hours, it can be frozen if necessary.

Supplemental feeding is not a recommended practice for wild turkey management. If a diseased turkey is found, it is highly encouraged that supplemental feeding for all wildlife be discontinued immediately in the vicinity.

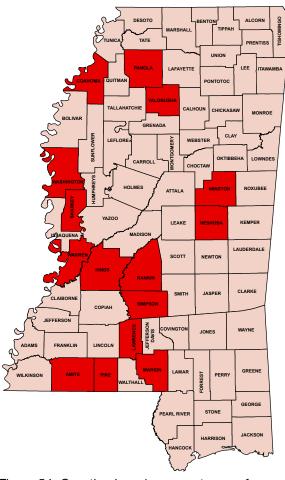


Figure 54: Counties in red represent areas from which MDWFP received diseased turkey reports during 2019.



#### Join Our Spring Gobbler Hunting Survey Team

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

The driving force behind the Spring Gobbler Hunting Survey (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 what they see and hear while hunting. 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.

#### 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 *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.

 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 help gather 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?

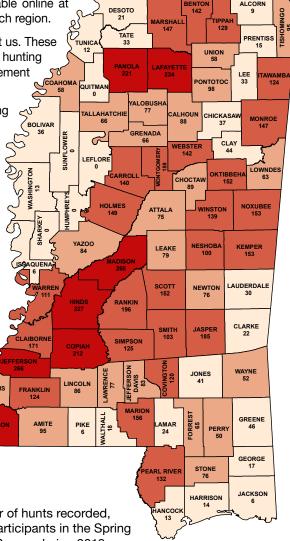
#### How can I Participate?

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.

New SGHS Participants can enroll online at mdwfp.com/turkey or by calling MDWFP at (601) 432-2199.

Figure 55: Number of hunts recorded, by county, from participants in the Spring Gobbler Hunting Survey during 2019.





### Spring Gobbler Hunting Survey Application

HE 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:		
Phone: (Home)	(Office)	
Please complete the following infor-	nation only if your hunting club wants to participate.	
Club Name:		
Club Name:		

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







#### 2020 MISSISSIPPI WILD TURKEY REPORT

The 2020 Mississippi Wild Turkey Report is a cooperative effort between the MDWFP Turkey Program and the Mississippi Chapter of the NWTF.



Photography by: Steve Gulledge