ATTENTION TURKEY HUNTERS!

GAME CHECK IS NOW IN EFFECT
During the 2021 spring season, turkey hunters are required to report their gobbler 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

To learn more about Game Check, visit mdwfp.com or call (601) 432-2400

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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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For over two and a half decades, the annual Spittin’ and Drummin’ Wild Turkey Report has been a highly anticipated product of Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP). The report is a true citizen-science endeavor. It would not be possible without the hundreds of volunteer Spring Gobbler Hunting Survey (SGHS) participants whose observations and shared data form the backbone of the report. Their willingness to provide MDWFP with real-world data on the wild turkeys from their own backyard speaks volumes to their commitment to the bird and its conservation.

Numerous individuals within MDWFP assist the Wild Turkey Program each year to help make Spittin’ and Drummin’ possible. Michael McRae and his bright staff produce and service technologies which house the voluminous SGHS dataset. Ms. Linda Taylor is an instrumental part of the annual SGHS and Spittin’ and Drummin’ process. Her organization and attention to detail is crucial to ensuring success. For the last few years, Matt Goss’s creativity has helped make this publication much more inviting to readers. Mr. Steve Gulledge takes turkey pictures which are as fine as any wildlife photographer in the country. His longtime contributions to Spittin’ and Drummin’ make this publication so much more than just charts and data, and we are indebted to his willingness to provide his photos so generously.

Over the past decade, MDWFP has added biologists in many roles throughout the Wildlife Bureau who are turkey fanatics. It is fair to say that the Wild Turkey Program has never enjoyed as broad support amongst the staff as it does today. These individuals work each day to improve turkey habitat on public lands or engage private landowners and hunting clubs in management aimed toward the bird’s betterment throughout Mississippi. Likewise, MDWFP continues to have one of its strongest partners in the National Wild Turkey Federation. Their steadfast support allows MDWFP to accomplish more for the wild turkey than we could achieve on our own.

The leadership of the MDWFP Wildlife Bureau, Russ Walsh and Amy Blaylock, are always supportive of any wild turkey-related projects. Their steadfast support of the Wild Turkey Program does not go unnoticed. Likewise, MDWFP’s Executive Director, Dr. Sam Polles, has always shown a passion for the wild turkey. His vision and trust have helped achieve many recent big-picture wins for wild turkey management in Mississippi, not the least of which being the 2019 initiation of Game Check.

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Executive Summary

Spittin' & Drummin'

Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP) annually monitors wild turkey populations throughout the state using a combination of brood surveys, hunter observations, post-season questionnaires, and mandatorily reported harvest. These data allow the agency to provide the state’s sportsmen and women with a detailed picture of what to expect when they hit the woods each spring. This document summarizes these findings for those interested in the status of Mississippi’s turkey population.

The COVID-19 virus created an unusual situation during the 2020 spring season where-in many hunters found themselves with more time to spend afield. While this change did express itself in a modest increase in man-days and harvest on MDWFP Wildlife Management Areas (WMAs), both reported and estimated harvest for the entire state were similar to recent years. Despite this, hunters had to work harder for the toms they brought home. Harvest per unit of effort reported by participants in the Spring Gobbler Hunting Survey fell to 2.7 toms taken per 100 hours hunted; this constituted the third lowest this value has measured in the past 25 years. Brood data and observations of juvenile gobblers suggests hunters in the northern half of the state should expect a 2021 spring like last year, whereas hunters further south may likely notice their local flocks have grown.

Given the wild turkey’s popularity in Mississippi, MDWFP devotes considerable resources to the bird’s management. Thirty-seven WMAs offer hunting opportunities to all those who seek it. Considerable resources are devoted to managing these lands for turkeys and other wildlife. The National Wild Turkey Foundation has begun projects in conjunction with the U.S. Forest Service which will create better turkey habitat on popular public hunting areas. Research has begun to evaluate Mississippi’s current spring season framework and estimate how changes to the season structure and bag limit may impact turkey numbers and hunter satisfaction. Despite many challenges, much work continues to occur in the Magnolia State to ensure the wild turkey will remain a prominent fixture of the state’s outdoor culture.
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 your Wild Turkey

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!
Population Statistics

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 1995–2020 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 one 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.

Figure 1: Wild Turkey Management Regions of Mississippi Department of Wildlife, Fisheries, and Parks.
Population Statistics

Spittin’ & Drummin’

Statewide

STATEWIDE PRIVATE LAND DATA WERE COLLECTED DURING THE 2020 season by more than 61 hunting clubs and approximately 476 individual hunters participating in the Spring Gobbler Hunting Survey.

Reproduction

During the summer of 2020, the MDWFP and its partners observed 1,755 total hens during the annual turkey brood survey. Approximately 43% of these were seen with young, a nearly 10% increase in nest success over the previous summer. A total of 2,897 poults were observed, translating into 1.7 poults per total hens (PPH; Figure 2). This value was 13% above the 5-year average. The average brood contained approximately 4 poults. More so than most years, the 2020 hatch varied dramatically across the state, with east-central and southeast Mississippi, along with portions of the Delta, showing strong reproduction, while northern and southwestern regions faltered.

Harvest Rates & Age Structure

In 2020, statewide hunter success was the second lowest recorded in the 26-year history of the SGHS. For every 100 hours hunted, participants bagged 2.7 gobblers (Figure 3). This was 10% fewer than the 5-year average and 23% below the long-term average. Statewide, 711 gobblers were harvested by SGHS hunters. The percentage of older gobblers in the harvest declined from 57% of the total in 2019 to 53% in 2020 (Figure 4).

Figure 2: Statewide poults per total hens.

Figure 3: Statewide harvest per 100 hours hunted.

Figure 4: Spur length distributions from gobblers harvested statewide.
Gobbling Activity
The average number of individual gobblers heard per 10 hours hunted fell to its lowest statewide value since 1996 (4.3; Figure 5). This was about 10% below the 5-year average. Conversely, the total number of gobbles heard changed little, with hunters hearing about 60 total gobbles per 10 hours hunted. Gobbling activity peaked relatively early in the season. The total number of individual gobblers heard was highest (7.1 per 10 hours hunted) during the youth week (7–14 March). During the regular season, both the number of gobblers and gobbles heard peaked at 4.8 and 68.5 per 10 hours hunted, respectively, during the week of March 29th to April 4th (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
After holding relatively steady for the prior four seasons, total turkey sightings dropped nearly 20% in 2020. Hunters saw about 63 total turkeys, including 25 gobblers (including jakes) and 32 hens, per 10 hours hunted (Figure 7). Jake observations also declined. Hunters only saw 10.5 jakes per 10 hours hunted as compared to an average of 14 with the same amount of effort during the preceding five years (Figure 8).

Figure 7: Statewide turkey observations per 100 hours hunted.

Figure 8: Statewide jake observations per 100 hours hunted.

2021 Season Forecast
In most years, the incoming 2-year-old gobbler cohort is the key determinant for what kind of turkey season may be at hand. Available data suggests for most of the state this incoming gobbler group will be smaller in 2021. Coming on the heels of a lackluster 2019 hatch, all regions of Mississippi saw jake observations drop in 2020. In most areas, jakes observations were in the bottom fifth of rates recorded since the SGHS’s inception. Based on these numbers, most Mississippi hunters should prepare themselves for fewer gobblers in 2021. The exception may be southeast Mississippi, where data suggests turkey populations are rallying thanks to two very good hatches in the last three years.
Reproduction

Last summer, turkey reproduction improved slightly in northern Mississippi. Eight-hundred forty-seven hens were observed with 1,149 poults. Approximately 41% of the hens were accompanied by a brood. Nonetheless, at 1.4 PPH (Figure 9), overall reproduction still lagged the region’s long-term average (1.8 PPH) and was probably insufficient for population growth.

Harvest Rates & Age Structure

Harvest rates in 2020 were the second lowest on record for Region 1. Spring Gobbler Hunting Survey participants took 2.6 toms per 100 hours hunted (Figure 10). This was roughly 20% under the 5-year average. Following several years of suppressed reproduction, 2-year-old gobblers, or those with ½ to 1-inch spurs, declined from slightly over half the harvest to only 44%. “Limb hanger” gobblers ≥1¼ inch spurs accounted for 1 in every 10 (Figure 11).
Gobbling Activity
As with many other indices from northern Mississippi, gobbling activity dropped considerably in 2020. Hunters heard an average of 3.5 individual gobblers and 47.5 total gobbles per 100 hours hunted (Figure 12). This was the fewest individual gobblers heard since 1996. Within the 2020 season, gobbling activity had a pronounced midseason peak. During the week of April 5 – 11, hunters heard 4.3 individual gobblers and 62.4 total gobbles per 10 hours hunted (Figure 13).

Turkey Observations
Turkey observations in Region 1 were similar to recent years. For every 100 hours hunted, SGHS participants observed 94 turkeys, of which 31 were gobblers and 56 were hens (Figure 14). Jake sightings, while still 20% below the 5-year average, increased slightly to 15 seen per 10 hours hunted (Figure 15).

2021 Season Forecast
Mississippi’s north-central counties are home to some of its most abundant turkey populations and this trend is not likely to change anytime soon. Nonetheless, brood surveys have suggested poor reproduction in three of the last five years. Jake observations from 2019 and 2020 were the lowest combined two-year stretch in the region’s history. Last season’s Spittin’ and Drummin’ forecast predicted hunters in northeast Mississippi should anticipate a challenging spring. The 2021 forecast suggests more of the same. The 2021 harvest should be below what hunters in the region have come to expect, although it may offer a slight improvement over 2020.
Turkey Region 2

TURKEY REGION 2 COMPRISSES 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

Only 32 hens were observed in the Delta as part of the 2020 brood survey. This constituted a very low sample size from which to draw any conclusions about the region’s hatch, nonetheless, over half the observed hens had broods, yielding a 3.2 PPH ratio (Figure 16).

Harvest Rates & Age Structure

Only 3% of all statewide SGHS hunts occurred in the Delta, yielding a limited sample which may bias indices derived from this region’s data. Nonetheless, hunters who recorded data had a good year. Delta hunters tallied 3.8 harvests per 100 hours hunted (Figure 17). This figure is the highest since 2014 and is over 30% above the 5-year average. Of the 36 harvests logged for the region, half (50%) had spurs between ½ and 1-inch (Figure 18).
Gobbling Activity

Despite the marked increase in harvest rate, Delta gobbling activity plummeted in 2020. The average number of gobblers heard was cut in half from 5.6 gobblers per 10 hours hunted in 2019 to only 3.3 in 2020. The total number of gobbles heard also declined nearly 30% to 53 per 10 hours hunted (Figure 19). Gobbling activity peaked during the third week of the regular season (29 March – 04 April). The number of individual gobblers heard also rose sharply at this time and remained relatively stable through mid-April (Figure 20).

Turkey Observations

Following the heels of 2019’s record flood, total turkey sightings crashed in 2020. Delta hunters averaged 48 turkey sightings per 100 hours hunted (Figure 21). This was only 44% of the 5-year average (108 per 100 hours hunted) and the second lowest value on record. Jake sightings were also very low. Hunters only saw 4.5 per 100 hours hunted (Figure 22). This was an 80% decline from the previous year.

2021 Season Forecast

A great unknown coming into last spring was the effect the record-setting 2019 flood would have on the standing turkey flock. Floodwaters obviously impact nesting and reproduction, but generally do not influence survival of adult birds. However, the 2019 flood was unique and kept large swaths of the Batture and the south Delta inundated for over eight months. Based on data collected from SGHS participants in 2020, it appears the 2019 flood wreaked havoc on the population. The 51% drop in total turkey sightings from 2019 to 2020 is a strong indicator that Delta populations were decimated by the flood. This, in combination with a near complete reproductive failure, spells trouble for Delta hunters in 2021. One silver lining is that last summer’s hatch seems better, which may provide some boost, however, brood survey sample size was limited, and results should be viewed appropriately.
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 posted a very solid hatch during 2020. A total of 488 hens were observed in the region as a part of MDWFP’s brood survey. Of these, 47% were accompanied by poults, yielding 1.9 PPH (Figure 23), which is above the 5-year average. Observed broods were composed of roughly 4 poults.

Harvest Rates & Age Structure

Spring Gobbler Hunting Survey participants spent over 9,500 hours afield in East-central Mississippi during 2020. They took 227 gobblers, yielding 2.5 gobblers per 100 hours (Figure 24). While like the previous year, this was 10% below the 5-year average. Gobblers with characteristics indicative 2-year-olds (spurs between ½ and 1-inch) jumped from 39% of the harvest in 2019 to 47% in 2020. The proportion of gobblers with spurs ≥1¼ inch was like recent years (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
During 2020, hunters in Region 3 heard roughly 4 gobblers and 53 total gobbles per 10 hours hunted (Figure 26). Both these values were equivalent to recent years. The number of individual gobblers heard was greatest during the youth week (7 – 14 March), although overall gobbling activity appeared to have two mid-season peaks from March 29th to April 4th and again from the 12th to the 18th of April (Figure 27).

Turkey Observations
Overall turkey observations in East-central Mississippi fell during 2020. Hunters saw 54 total turkeys, including 27 hens and 23 gobblers for every 100 hours afield (Figure 28). These values were 20-30% below the averages of the prior decade. Observations of young gobblers were also down in 2020. Just under 9 jakes were seen per 100 hours hunted (Figure 29). This was the least number of jakes seen since 2014.

2021 Season Forecast
Following a good 2020 hatch, hunters should encounter more birds across central Mississippi this spring. While this news is the upside of 2021, the downside is that carryover from last season was poor with a greatly reduced class of incoming 2-year-olds. The combination of these two datapoints suggest the number of mature, legal gobblers will probably decline and most birds hunters encounter will be older toms. With an abundance of young hens and fewer subordinate gobblers around, central Mississippi’s turkey hunters should expect frustrations.
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 2020 brood survey, 197 hens were observed in southwest Mississippi. Approximately 34% of these had a brood. A total of 273 poults were seen, yielding 1.4 PPH (Figure 30). This value was nearly 30% under the 5-year average.

Harvest Rates & Age Structure

In 2020, harvest rates for Region 4 increased over the previous year. Hunters brought home 3.1 gobblers per 100 hours hunted (Figure 31). This value was near average for recent years. Most gobblers taken in the region were from older age classes. Sixty-one percent had spurs at least 1-inch (Figure 32).

Figure 30: Region 4 poults per total hens.

Figure 31: Region 4 harvest per 100 hours hunted.

Figure 32: Spur length distributions from gobblers harvested in Region 4.
Gobbling Activity

Although the average number of gobblers heard (5.9 per 10 hours hunted) was like recent years, the number of total gobbles heard increased to just under 90 per 10 hours hunted (Figure 33). The youth week (7 – 14 March) exhibited substantially greater gobbling activity than at any other point within the season. During that week, hunters in southwest Mississippi heard roughly 11 individual gobblers gobble 117 times (Figure 34). Beyond the youth week, the third week of the regular season (29 March – 4 April) offered a secondary peak of gobbling.

Turkey Observations

Turkey observations in Region 4 have been generally declining for the past seven years. Correspondingly, total turkey sightings dipped in 2020 to 48 turkeys observed per 100 hours hunted (Figure 35). This was the lowest observation rate since 1996. Jake sightings were also dramatically reduced to 8.4 per 100 hours hunted (Figure 36). This was more than 30% below the average of the prior decade.

2021 Season Forecast

Three summers ago, southwest Mississippi posted one of its best hatches in years. This cohort of gobblers from the 2018 hatch translated into higher harvest rates last year. Despite this, overall turkey numbers sank and jake sightings were below average. These conditions suggest the fate of the 2021 season in Region 4 will likely depend heavily upon carryover of 3-year-old gobblers. Sightings from summer surveys suggest Region 4 fared well in gobbler carryover, nevertheless, chances are good that 2021 will be an average season at best for hunters in the southwestern corner of the Magnolia State.
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
Results from MDWFP’s brood survey suggest southeast Mississippi produced its second bumper hatch in the past three years during the summer of 2020. Over half of the 164 hens observed during the survey period were accompanied by a brood. Three hundred eighty-eight total poults were seen, yield 2.4 PPH (Figure 37). This was above the 5-year average and well beyond the rate considered necessary to fuel population growth. On average, most broods contained approximately 5 poults.

Harvest Rates & Age Structure
During 2020, hunters in southeast Mississippi harvested 2.3 gobblers per 100 hours hunted (Figure 38). This was a full gobbler below the 2019 average for the same amount of effort and was a lower harvest rate than any other region in 2020. Ninety-two total gobblers were taken by SGHS participants. Of these, 54% were likely 2-year-olds with between ½ and 1-inch spurs. The percentage of “limb hanger” gobblers with ≥1¼ spurs shrank to less than 10% of the harvest (Figure 39).
The number of individual gobblers heard in Region 5 has held relatively stable since 2006. Hunters heard 3.8 gobblers and 51.0 total gobbles per 100 hours hunted in 2020, which were both down slightly from 2019, but in line with the recent average (Figure 40). The number of individual gobblers hunters heard exhibited a declining trend throughout the 2020 season. Hunters heard the most individual gobblers (3.9 per 100 hours hunted) during the youth week (7 – 14 March) and the fewest (3.0 per 100 hours hunted) during the final week (26 April – 1 May; Figure 41). Overall gobbling peaked midseason (29 March – 4 April) with 55.3 gobbles heard per 100 hours hunted.

Gobbling Activity

Turkey Observations

After a 2-year spike in 2018 and 2019, total turkey observations in Region 5 dropped nearly 25% in 2020. Hunters saw 62 total turkeys, including 31 hens and 27 gobblers per 100 hours hunted (Figure 42). Jake observations also declined from the previous year to 12.5 observed per 100 hours hunted (Figure 43), however, this value was still better than 6 of the past 10 years.

2021 Season Forecast

Following last summer’s bumper hatch, the piney woods of southeast Mississippi should be filled with more turkeys this spring then they have been in many years. Although brood data and jake observations from last season indicate 2021’s 2-year-old crop may not be overly abundant, gobbler carryover in last summer’s survey appeared good. The overall increase in birds should give the region’s hunters much to crow about, even if luring a legal bird into range may be a bit more difficult than normal.
The 2020 spring turkey season in Mississippi represented the second year of Game Check, a mandatory harvest reporting system created to log harvests by all resident and nonresident turkey hunters. Following on Game Check’s inaugural mobile-app-focused success in 2019, MDWFP launched a Wildlife Management Area check-in app for 2020. Statewide harvest reported through Game Check in 2020 was similar to the previous year, whereas harvest on WMAs increased 10%. Based on harvest data, turkey populations appear most abundant throughout portions of north-central Mississippi, however, areas of southern Mississippi and counties along the Mississippi River showed substantial year-over-year gains from 2019.

Reporting Methodology

Through Game Check, hunters had three options to report their harvest: smartphone app, website, or by calling 1-800-BE-SMART. Hunters on WMAs had two options: smartphone app or physical check station. Both user groups overwhelmingly chose reporting via smartphone app (Figure 44).

Individual Users and Harvest

Game Check

A total of 8,069 users reported 12,005 turkey harvests to Game Check during the 2020 spring season (Table 1, page 30). This represented declines of 8% and 5%, respectively, for unique users and harvests. Several different post hoc estimates suggest Game Check is capturing just below 50% of all harvests, which would indicate the true total statewide harvest is near 25,000 turkeys.

Like 2019, the average Game Check user in 2020 was 39 years of age. Nine percent of harvests reported to Game Check were by nonresidents (Figure 45). The percentage of successful Game Check users who reported the 3-bird state bag limit increased approximately twenty percent to 11.5% of all hunters in 2020 (Figure 46).

Figure 44: Distribution frequency of reporting methods by Game Check and Wildlife Management Areas users in Mississippi’s 2020 spring turkey season.

Figure 45: Residency status of successful Game Check users, 2020.
Wildlife Management Areas
A total of 457 turkeys and 12,977 man-days were reported on MDWFP WMAs. These respectively represented increases of 9.6% and 3.9% over 2019 (Table 2, page 33). The 2020 harvest was nearly identical to the average total WMA harvest of the past decade (462), whereas total man days were 12.0% below their 10-year average. Most successful WMA turkey hunters only harvested one turkey (Figure 46).

Geographic Distribution of Harvest
One of the most important functions of mandatory harvest reporting is to provide the MDWFP with localized data. With two years of Game Check information available, interesting patterns have begun to emerge. The top five counties for total harvest in 2020 were nearly identical to those in 2019. They were Attala (333), Lafayette (324), Copiah (310), Marshall (302), and Adams (273; Figure 47, Table 1). Eighty-six percent of Game Check harvests were from private land (Figure 48). Estimated relative turkey abundance was created by correcting raw harvest totals for county size. Counties in north-central Mississippi, along with a few southwestern counties, have the highest estimated turkey abundance (Figure 49). By comparing harvest totals from 2020 to the previous year, MDWFP can determine the relative increase or decrease in turkey populations. Generally, turkey numbers in the southern half of the state appeared to increase in 2020, with large relative increases in extreme southeastern counties. On the other hand, numbers across most of the northern Mississippi declined (Figure 50). These trends corroborated brood survey data from previous years (see Population Statistics section, pages 12-25).

Figure 46: Breakdown of successful Game Check and WMA users (by percentage) who reported one, two, and three gobblers in 2020.

Figure 47: Total spring gobbler harvest numbers, by county, reported to the Game Check system in 2020.
Figure 48: Statewide landownership breakdown for turkeys reported to Game Check, 2020.

Figure 49: Wild turkey abundance in Mississippi based on average Game Check harvest, standardized by county size, 2019-2020.

Figure 50: Relative change in turkey abundance from 2019 to 2020 based upon reported harvest to Game Check.
Timing of Turkey Harvest

Game Check data is useful for evaluating the timing of harvest throughout Mississippi’s spring season. For the second year, the opening day of the regular season (March 14th) received more reported harvest than any other day (921). In fact, the opening day accounted for twice as many harvested turkeys as the next closest day (March 15th). Statewide, approximately 50% of the total harvest occurred before March 28th (Figure 51). Interestingly, the distribution of harvest on WMAs differed. More turkeys were reported from WMAs on April 1st than any other date. The WMA system reached the 50th percentile in harvest six days later than the statewide average. Differences between harvest distributions on WMA vs. statewide averages is likely due to regulatory restrictions on WMAs which include early season draw hunts and delayed opening dates (Figure 51).

Game Check vs. Long-term Harvest Estimates

For over 40 years, MDWFP has annually estimated harvest and hunter participation through a post-season survey in which a random sample of licensed hunters were questioned about their harvests. These findings were then extrapolated based on the entirety of licensed hunters. Total estimated harvest for the 2020 spring season was 24,716, which was in line with recent years. There were 12,005 gobblers reported to Game Check, suggesting mandatory reporting achieved an approximate 50% compliance rate (Figure 52).
Table 1. Turkey harvest totals reported by county to Game Check in Mississippi during the 2020 Mississippi spring season.

<table>
<thead>
<tr>
<th>County</th>
<th>Reported Harvest</th>
<th>County</th>
<th>Reported Harvest</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
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<tr>
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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 1**

**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 2**

**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 3**

**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**

Name: ___________________________ 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.*
Turkey Hunting on Wildlife Management Areas

Mississippi has tremendous turkey hunting opportunities on public lands scattered throughout the Magnolia State. MDWFP allows spring turkey hunting on 37 Wildlife Management Areas (WMAs) scattered from the north Mississippi to the Gulf Coast. Season frameworks on these areas vary. Some mirror the statewide framework, whereas hunting on others may be by permit draw-only throughout part, or all, of the season (Figure 53).

During the 2020 spring season, 470 gobblers were harvested during 13,389 man-days on MDWFP WMAs. These values represent 3.9% and 9.6% respective increases over 2019, although both figures lagged their 10-year averages. Across all WMAs, there were approximately 33 man-days per gobbler harvested, which represented a slight increase from the previous year. Wildlife Management Areas in Northeast Mississippi produced the highest hunting success at 22 man-days per harvest and yielded the greatest harvest density at a bird per 1,237 acres (Table 2).
## WMA Summaries

### Northeast

<table>
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<tr>
<th>WMA</th>
<th>Acres</th>
<th>Total ManDays</th>
<th>Total Harvest</th>
<th>ManDays/Harvest</th>
<th>Acres/Harvest</th>
<th>Avg Total ManDays</th>
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<td>23</td>
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<td>545</td>
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**Northeast Total** 146,058

**Northeast Average**

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**Delta Total** 65,700

**Delta Average**

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**East-Central Total** 147,482

**East-Central Average**

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<th>Total Harvest</th>
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<td>6,583</td>
<td>494</td>
<td>16</td>
<td>31</td>
<td>411</td>
<td>550</td>
<td>11</td>
<td>57</td>
<td>686</td>
</tr>
<tr>
<td>Natchez State Park</td>
<td>3,425</td>
<td>30</td>
<td>1</td>
<td>30</td>
<td>3,425</td>
<td>36</td>
<td>2</td>
<td>23</td>
<td>2,226</td>
</tr>
<tr>
<td>Pearl River</td>
<td>6,925</td>
<td>193</td>
<td>3</td>
<td>64</td>
<td>2,308</td>
<td>155</td>
<td>2</td>
<td>87</td>
<td>3,911</td>
</tr>
<tr>
<td>Sandy Creek</td>
<td>16,407</td>
<td>540</td>
<td>20</td>
<td>27</td>
<td>820</td>
<td>654</td>
<td>22</td>
<td>32</td>
<td>852</td>
</tr>
</tbody>
</table>

**Southwest Total** 64,625

**Southwest Average**

<table>
<thead>
<tr>
<th>WMA</th>
<th>Acres</th>
<th>Total ManDays</th>
<th>Total Harvest</th>
<th>ManDays/Harvest</th>
<th>Acres/Harvest</th>
<th>Avg Total ManDays</th>
<th>Avg Total Harvest</th>
<th>Avg ManDays/Harvest</th>
<th>Avg Acres/Harvest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chickasawhay</td>
<td>35,000</td>
<td>598</td>
<td>22</td>
<td>27</td>
<td>1,591</td>
<td>662</td>
<td>17</td>
<td>44</td>
<td>2,279</td>
</tr>
<tr>
<td>Leaf River</td>
<td>41,411</td>
<td>640</td>
<td>26</td>
<td>25</td>
<td>1,593</td>
<td>1,008</td>
<td>21</td>
<td>54</td>
<td>2,498</td>
</tr>
<tr>
<td>Little Biloxi</td>
<td>15,622</td>
<td>349</td>
<td>6</td>
<td>58</td>
<td>2,604</td>
<td>416</td>
<td>6</td>
<td>129</td>
<td>4,989</td>
</tr>
<tr>
<td>Marion County</td>
<td>7,200</td>
<td>466</td>
<td>11</td>
<td>42</td>
<td>655</td>
<td>409</td>
<td>9</td>
<td>53</td>
<td>1,007</td>
</tr>
<tr>
<td>Mason Creek</td>
<td>27,272</td>
<td>191</td>
<td>11</td>
<td>17</td>
<td>2,479</td>
<td>360</td>
<td>10</td>
<td>66</td>
<td>5,378</td>
</tr>
<tr>
<td>Old River</td>
<td>15,000</td>
<td>69</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>144</td>
<td>5</td>
<td>35</td>
<td>4,354</td>
</tr>
<tr>
<td>Pascagoula River</td>
<td>37,000</td>
<td>302</td>
<td>11</td>
<td>27</td>
<td>3,364</td>
<td>484</td>
<td>8</td>
<td>74</td>
<td>6,964</td>
</tr>
<tr>
<td>Red Creek</td>
<td>23,000</td>
<td>256</td>
<td>7</td>
<td>37</td>
<td>3,286</td>
<td>295</td>
<td>5</td>
<td>76</td>
<td>6,330</td>
</tr>
<tr>
<td>Ward Bayou</td>
<td>13,234</td>
<td>41</td>
<td>2</td>
<td>21</td>
<td>6,617</td>
<td>52</td>
<td>2</td>
<td>26</td>
<td>6,564</td>
</tr>
<tr>
<td>Wolf River</td>
<td>10,801</td>
<td>497</td>
<td>5</td>
<td>99</td>
<td>2,160</td>
<td>441</td>
<td>8</td>
<td>76</td>
<td>2,143</td>
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</table>

**Southeast Total** 225,540

**Southeast Average**

<table>
<thead>
<tr>
<th>WMA</th>
<th>Acres</th>
<th>Total ManDays</th>
<th>Total Harvest</th>
<th>ManDays/Harvest</th>
<th>Acres/Harvest</th>
<th>Avg Total ManDays</th>
<th>Avg Total Harvest</th>
<th>Avg ManDays/Harvest</th>
<th>Avg Acres/Harvest</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020 Spring Season</td>
<td></td>
<td>4,432</td>
<td>164</td>
<td>22</td>
<td>1,237</td>
<td>4,808</td>
<td>173</td>
<td>26</td>
<td>1,203</td>
</tr>
<tr>
<td>10-Year Averages</td>
<td></td>
<td>534</td>
<td>19</td>
<td>26</td>
<td>1,203</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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 gobbler 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.
**Table 4. All-time top 10 non-typical scoring turkeys harvested in Mississippi, by total score.**

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

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

<table>
<thead>
<tr>
<th>Rank</th>
<th>Beard Length (inches)</th>
<th>Date Harvested</th>
<th>County Harvested</th>
<th>Hunter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>17.94</td>
<td>April 29, 2019</td>
<td>WARREN</td>
<td>R. Shane Knighton</td>
</tr>
<tr>
<td>2</td>
<td>17.25</td>
<td>April 30, 2001</td>
<td>MONROE</td>
<td>Monty Roberts</td>
</tr>
<tr>
<td>3</td>
<td>16.25</td>
<td>April 8, 2001</td>
<td>SMITH</td>
<td>Amp Frith</td>
</tr>
<tr>
<td>4</td>
<td>16.0</td>
<td>April 6, 2002</td>
<td>MONROE</td>
<td>Monty Roberts</td>
</tr>
<tr>
<td>5</td>
<td>15.5</td>
<td>April 19, 2012</td>
<td>TIPPAH</td>
<td>Dan Glover</td>
</tr>
<tr>
<td>6</td>
<td>15.0</td>
<td>March 28, 2003</td>
<td>MARSHALL</td>
<td>Carlton Gibson</td>
</tr>
<tr>
<td>7</td>
<td>14.75</td>
<td>April 4, 2007</td>
<td>CLAIBORNE</td>
<td>Dale Collins</td>
</tr>
<tr>
<td>8</td>
<td>14.63</td>
<td>March 23, 2019</td>
<td>RANKIN</td>
<td>Daniel Blake Sassar</td>
</tr>
<tr>
<td>9</td>
<td>14.19</td>
<td>April 10, 2003</td>
<td>MONROE</td>
<td>Charles Langley</td>
</tr>
<tr>
<td>10</td>
<td>14.13</td>
<td>March 19, 1989</td>
<td>WILKINSON</td>
<td>Todd D’Aquin</td>
</tr>
</tbody>
</table>
### Table 6. Top turkeys harvested in Mississippi, ranked by longest spur.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Longest Spur (inches)</th>
<th>Date Harvested</th>
<th>County Harvested</th>
<th>Hunter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.88</td>
<td>April 16, 2007</td>
<td>LAUDERDALE</td>
<td>Don Marascalo</td>
</tr>
<tr>
<td>2</td>
<td>1.875</td>
<td>April 18, 2015</td>
<td>LEAKE</td>
<td>James Ellis</td>
</tr>
<tr>
<td>3</td>
<td>1.875</td>
<td>April 15, 2016</td>
<td>KEMPER</td>
<td>Billy Joe Hedgepeth</td>
</tr>
<tr>
<td>4</td>
<td>1.813</td>
<td>March 31, 2009</td>
<td>LAFAYETTE</td>
<td>Greg Vaughan</td>
</tr>
<tr>
<td>5</td>
<td>1.81</td>
<td>April 30, 1990</td>
<td>CLAIBORNE</td>
<td>Marvin Muirhead</td>
</tr>
<tr>
<td>6</td>
<td>1.75</td>
<td>April 24, 2019</td>
<td>LINCOLN</td>
<td>Connor Douglas</td>
</tr>
<tr>
<td>7</td>
<td>1.75</td>
<td>April 13, 2005</td>
<td>PEARL RIVER</td>
<td>Kris Collins</td>
</tr>
<tr>
<td>8</td>
<td>1.75</td>
<td>March 24, 2007</td>
<td>CLAIBORNE</td>
<td>James Greer</td>
</tr>
<tr>
<td>9</td>
<td>1.75</td>
<td>April 8, 2000</td>
<td>LEAKE</td>
<td>Ronald Coleman</td>
</tr>
<tr>
<td>10</td>
<td>1.75</td>
<td>April 2, 2003</td>
<td>JEFFERSON</td>
<td>Thomas McAlpin, Jr.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Rank</th>
<th>Weight (pounds)</th>
<th>Date Harvested</th>
<th>County Harvested</th>
<th>Hunter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>26.25</td>
<td>March 19, 2015</td>
<td>RANKIN</td>
<td>David Evans</td>
</tr>
<tr>
<td>2</td>
<td>25.61</td>
<td>April 2, 2015</td>
<td>MARSHALL</td>
<td>Daniel Favazza</td>
</tr>
<tr>
<td>3</td>
<td>25.27</td>
<td>April 11, 2009</td>
<td>PANOLA</td>
<td>Lauren Kaye Russell</td>
</tr>
<tr>
<td>4</td>
<td>25.25</td>
<td>March 30, 2004</td>
<td>NEWTON</td>
<td>Hunter Hayes</td>
</tr>
<tr>
<td>5</td>
<td>25.19</td>
<td>March 26, 2004</td>
<td>NESHOBIA</td>
<td>John Robb</td>
</tr>
<tr>
<td>6</td>
<td>24.87</td>
<td>March 26, 2019</td>
<td>TIPPAH</td>
<td>Ben Cox</td>
</tr>
<tr>
<td>7</td>
<td>24.68</td>
<td>April 18, 2003</td>
<td>COPIAH</td>
<td>Doug Borries</td>
</tr>
<tr>
<td>8</td>
<td>24.44</td>
<td>April 2, 2005</td>
<td>NESHOBIA</td>
<td>Chad Young</td>
</tr>
<tr>
<td>9</td>
<td>24.00</td>
<td>March 16, 2009</td>
<td>FORREST</td>
<td>Matthew Saucier</td>
</tr>
<tr>
<td>10</td>
<td>24.00</td>
<td>March 18, 2008</td>
<td>ADAMS</td>
<td>Chasen Gann</td>
</tr>
</tbody>
</table>
Mississippi Wild Turkey Records Registration Form

Hunter’s Name: _______________________________________________________________________________________
Address: ___________________________________________________________________________________________
___________________________________________________________________________________________________
City: _________________________________________State: ____________________Zip: ________________________
Phone Number: _____________________________(Work) _____________________________(Home)
Hunting License Number: ____________________________________________________________________________

How to measure your turkey: Weight should be measured to the nearest ounce on certified scales. Beards are measured in \( \frac{1}{16} \) inch increments from the center point of the beard’s base where it attaches to the skin to the end of the longest bristle that is fully attached to the skin. Spurs are measured in \( \frac{1}{16} \) 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.

**Weight of Turkey (in pounds and ounces): ________________________________
Total Beard Length (measure in \( \frac{1}{16} \) inch increments):
For multiple beards: Beard 1: ______________ Beard 2: ______________ Beard 3: ______________
Beard 4: ______________ Beard 5: ______________ Beard 6: ______________
Spur Length (measure in \( \frac{1}{16} \) inch increments): Left: __________________ Right: __________________
Date of Harvest: __________________________ County of Harvest: __________________

Certification by Hunter: I hereby certify that the above information is correct and that I harvested this wild turkey in the spirit of fair chase and in compliance with all applicable wildlife laws. I further certify that this turkey was a wild and free-ranging bird, was not confined by any artificial barrier, and was not released for the purpose of commercial hunting.

Hunter’s Signature: ___________________________________________  Date: _______________________________

Turkeys weighing over 21 pounds must be weighed to the nearest ounce on certified scales. Turkeys with a weight of over 21 pounds, spurs greater than 1.25 inches or beard length greater than 12 inches must be witnessed by a current employee of the Mississippi Department of Wildlife, Fisheries, and Parks.

Signature of MDWFP Employee: ______________________________________  Date: _______________________
Printed Name: _____________________________________  Phone Number: _______________________________

Mail to: Wild Turkey Records / 1505 Eastover Dr. / Jackson, MS 39211
EVALUATING CHANGES TO MISSISSIPPI’S SPRING TURKEY SEASON: A Population Analysis and Structured Decision Approach

Project Collaborators:
Zoe Nhleko¹, Adam Butler², Dana Morin¹, and Mark McConnell¹
¹Department of Wildlife, Fisheries, and Aquaculture, Mississippi State University
²Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP)

One of the primary functions of a state wildlife agency like MDWFP is establishing and evaluating hunting seasons and bag limits for game species like wild turkeys. As more and more hunters have expressed concerns over turkey populations, calls to address Mississippi’s turkey season have increased. Despite this, wise management depends upon data-driven decisions where all available information is used to forecast the likely implications of policy decisions before they are made. MDWFP has collected numerous long-term indices on turkeys across the state. These datasets, along with published results from previous field-based wild turkey studies, are being used to evaluate two underlying sets of questions needed to make informed decisions if changes to Mississippi’s wild turkey hunting season are to be made. First, what, if any, effect does the timing of spring turkey season have on the bird’s reproduction and recruitment? Secondly, how would various changes to the season be expected to influence the number of future turkeys available to hunters? Some of the various alternatives being evaluated include: delayed opening dates, variations in season length, changes to the bag limit, bag limit splits, mid-day closures, etc.

Results from this project will have direct application to the management of Mississippi’s turkey population by assessing whether a change to the spring season will be in the best interest of the state’s turkey hunters, and if so, will provide guidance on which alterations will yield the greatest benefit. This project is being conducted as a partnership between MDWFP and researchers from the Department of Wildlife, Fisheries, and Aquaculture at Mississippi State University. This study will continue through 2023. Initial project results are not currently available.

Photos (Top): Researchers from Mississippi State University and MDWFP are evaluating how spring hunting frameworks may determine the number of turkeys available in subsequent years. (Left): Only a smart, data-driven approach to hunting season management can be ensured to produce the greatest benefits for future generations of hunters.
AN INVESTIGATION OF THE CAUSE OF WILD TURKEY MORTALITY IN MISSISSIPPI

Project Collaborators:
Rachel Thiemann¹, Adam Butler², and Natalie Armour¹
¹Poultry Research and Diagnostic Laboratory, Department of Pathobiology and Population Medicine, College of Veterinary Medicine, Mississippi State University
²Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP)

In response to reports of disease mortality in Mississippi wild turkey flocks, Mississippi Department of Wildlife, Fisheries, and Parks partnered with Mississippi State University’s Poultry Research and Diagnostic Laboratory to perform a mortality survey on turkeys which had died naturally in the wild or had been euthanized because they were sick. Necropsy examinations and diagnostic testing were performed on 13 fresh dead or frozen turkeys that had been collected between 2016 to 2021.

The most common diagnosis made was Avian pox in 9 out of 13 cases. Avian pox, a viral disease commonly transmitted by mosquitoes, has two disease presentations: nodular lesions that affect the skin of the head and neck or plaque-like lesions in the oral cavity and upper gastrointestinal and respiratory tracts. Typically, Avian pox alone is not associated with significant mortality. However, when lesions are as severe as those observed in the turkeys in this study, there is concern for co-infections with other viral agents, particularly those capable of producing immune suppression, and potentially leading to an increased susceptibility and disease course in affected birds. Interestingly, all birds positive for poxvirus had a dual infection with Reticuloendotheliosis Virus (REV), which has been demonstrated to suppress immunity in turkeys. Additionally, there was a large portion of the sample population (8/13) with triple infection with poxvirus, REV, and Lymphoproliferative Disease Virus (LPDV). Little is currently understood about LPDV at this time; however, it is suspected to also cause immune suppression.

Adult female turkeys were most commonly affected. Interestingly, there were two predominant geographic clusters of birds in the northern and southern regions of the state of Mississippi. In conclusion, our mortality survey demonstrated a high incidence of viral infections associated with mortality in wild turkeys in Mississippi. Continued monitoring of wild turkey populations for these and other diseases is important to better understand the true incidence of these diseases and their effect on wild turkey populations in the state.

Photos (A and B): Turkeys affected with the cutaneous or dry form of avian pox. Proliferative, wart-like skin nodules cover the head and obscure the eyes, ears, and nares. (C): An example of the diphtheritic or wet form of avian pox that produces lesions in the oral cavity and upper gastrointestinal and respiratory tracts. Lesions were so severe in several cases, it prevented birds from eating, leading to emaciation and death. (D): Diagnosis of avian pox relies on evaluation of affected tissues under the microscope for identification of viral inclusion bodies within the cytoplasm of infected cells (denoted by yellow circles). Photo courtesy of Dr. Heidi Rose.
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 MDWFP with over $1.9 million dollars in assistance with managing Mississippi’s wild turkey population.

Recently, the NWTF has collaborated with the Tombigbee and Bienville National Forests to implement two Stewardship Projects to improve wildlife habitat. Stewardship Contracting is an authority granted to the U.S. Forest Service by Congress and allows the Forest Service and its partners to use revenue generated through timber sales to complete important habitat restoration and enhancement activities.

The Bienville National Forest Healthy Forest Restoration Thinning-West Project includes 1,614 acres of timber harvest, hundreds of acres of mechanical and herbicide treatments to control unwanted and non-native species, planting of pine seedlings, and hazardous fuel reduction.

The Tombigbee National Forest Healthy Forest Restoration Project will include 1,047 acres of timber harvests, over 2,700 acres of wildlife stand improvements using mechanical and herbicide treatments, planting of 500 acres of shortleaf pine seedlings, and cedar removal on 50 acres to restore native prairie.

The Mississippi Chapter of the NWTF has committed Super Fund dollars to both projects.
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 MDWFP 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 2020.
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.

- 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.

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 2020.
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
- You can also register online at mdwfp.com/turkey or by calling MDWFP at (601) 432-2199

Mississippi Department of Wildlife, Fisheries, and Parks

Spring Gobbler Hunting Survey Application
Spittin’ & Drummin’

2021 MISSISSIPPI WILD TURKEY REPORT

The 2021 Mississippi Wild Turkey Report is a cooperative effort between the MDWFP Turkey Program and the Mississippi Chapter of the NWTF.

Photography by: Steve Gulledge

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