REWARD

Up to $500 for information leading to the arrest and conviction of persons exceeding the turkey bag limit, baiting turkeys, or illegally killing a wild turkey in the state of Mississippi.

Maximum Fine $500 and/or

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To report a violation contact:
TOLL FREE: 1-800-BE-SMART
(1-800-237-6278)
For more information on the Mississippi Wildlife Federation
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Cover photo by Steve Gulledge
Spittin’ And Drummin’

2015 Mississippi Wild Turkey Report
The Spring Gobbler Hunting Survey (SGHS) was initiated in 1996 to provide the 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 the MDWFP in monitoring populations and making management decisions in the best interest of the turkey resource and turkey hunters. The MDWFP appreciates the data collection efforts and comments from all individual 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 in this report.

Private land data from the 2006 – 2014 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 the 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.

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 four plus years of age. Monitoring spur length distribution should reflect changes in gobbler age structure over time. If age structure is increasing, a higher percentage of the 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 2014 season by more than 50 hunting clubs and approximately 550 individual hunters participating in the Spring Gobbler Hunting Survey.

Reproduction

During the 2014 brood survey period, a total of 1,209 hens were observed across the Magnolia State. Of these hens, 546 (45%) successfully produced at least one poult. A total of 2,284 poults were observed, and average brood size was 4.18 poults which was up from 2013. The average number of poults per total hens was 1.89 (Figure 1), which was up significantly from 1.03 observed in 2013. During the past 9 years, poults per total hens statewide has averaged 1.62 poults, and has ranged from a high of 2.05 poults in 2012 to a low of 1.03 poults in 2013.

Harvest Rates & Age Structure

Statewide harvest rates from the spring 2014 season were higher than those reported in 2013. On average, hunters harvested 3.5 gobblers for every 100 hours hunted (Figure 2). Over the past 9 years, harvest rates have averaged 3.3 gobblers per 100 hours hunted. Of the gobblers harvested, 48% of the birds harvested were likely in the 2-year old age class with spurs between 0.5 inches and 1.0 inches, and 50% of the birds harvested statewide were 3 years old or older, with spurs at least 1-inch in length (Figure 3).
Gobbling Activity

During 2014, seasonal gobbling activity was higher than observed during 2013. Hunters heard an average of 5.1 gobblers and 66.4 gobbles for every 10 hours of hunting (Figure 4). The number of gobblers heard was highest during the week of youth season (Figure 5), and number of gobbles heard was highest during week 6.

Turkey Observations

During the 2014 season, hunters observed an average of 18.3 adult gobblers, 8.5 jakes, 38.1 hens and 10.8 unknowns for every 100 hours of hunting (Figure 6). Overall, total turkey observations in 2014 were lower than observed during 2013, which was expected since the 2013 hatch was one of the lowest on record. Jake observations (8.5 per 100 hours) were also down (Figure 7).

2015 Season Forecast

Hunters should expect to encounter fewer 2-year old gobblers during the 2015 season as compared to 2014, which should equate to decreased gobbling activity and lower harvest rates. However, hunters should also expect a good carryover of 3-year old gobblers from the very good 2012 hatch. The above average hatch of 2014 should mean an increase in the number of jakes seen and should give reason for optimism for the 2016 season.
Turkey Region 1

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

Reproduction

During the 2014 brood survey, 1.63 poults per hen were observed in Region 1. This was up considerably from the 0.94 observed in 2013 (Figure 1). A total of 276 hens were observed, of which 127 (46%) successfully raised at least one poult. Successful hens had an average brood size of 3.54 poults, which was similar to the average brood size observed in 2013.

Harvest Rates & Age Structure

Hunters harvested 3.2 gobblers for every 100 hours of hunting during the 2014 season, which was lower than the 2013 season (Figure 2). Spur lengths of harvested gobblers suggested 51% of the total bag was comprised of birds which were likely 2-year olds (Figure 3). Forty-eight percent of the harvested birds were at least 3-years old with spurs greater than 1.0 inch.
**Gobbling Activity**

During the 2014 season, hunters heard an average of 4.7 gobblers and 63.7 gobbles for every 10 hours hunted (Figure 4). Gobbling activity was up from 2013 for Region 1. Total gobbles and gobblers heard were both highest during the youth week, and reached their highest values during the regular season in week 4. (Figure 5).

**Turkey Observations**

Turkey hunters observed an average of 102.4 turkeys per 100 hours hunted in 2014 (Figure 6) which was down from 2013. Jake observations (10.4 per 100 hours) were also down during 2014 (Figure 7).

**2015 Season Forecast**

Brood data for Region 1 suggests that the 2013 hatch was one of the lowest on record for the region, and jake observations were down during the 2014 season. We expect that hunters will encounter lower numbers of 2-year old gobblers during the 2015 season, along with lower gobbling rates compared to recent seasons.
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

Region 2 had a decent hatch during 2014, with 1.71 pouls observed per total hen (Figure 1). While we had limited brood survey data from 2013, jake observation data from 2014 suggest that the 2013 hatch was much lower than the good hatch of 2012, but also better than 2008, 2009, and 2011 when flood waters significantly limited turkey reproduction in this region.

Harvest Rates & Age Structure

During the 2014 season, an average of 5.0 gobblers were harvested for every 100 hours of hunting (Figure 2), which was up significantly from 2013, due to a very good hatch in 2012. Spur length data suggested 56% of the birds harvested in Region 2 were likely 2-year old birds (Figure 3), and 44% of the harvested birds were 3-years old or older.
Gobbling Activity

As expected, gobbling activity for 2014 was significantly higher than that recorded in 2013 for Region 2 (Figure 4). Hunters in this region heard an average of 6.1 gobblers and 81.5 gobbles per 10 hours of hunting. The number of gobblers heard peaked during youth week, while number of gobbles heard was highest in week 5 in Region 2 (Figure 5).

Turkey Observations

Overall turkey observations were down sharply from the previous year during 2014, which was expected following a lower hatch in 2013. Hunters saw an average of 107.9 birds per 100 hours of hunting (Figure 6). Jake observations also decreased significantly to 12.7 per 100 hours in 2014 (Figure 7).

2015 Season Forecast

The Mississippi Delta seems to be set on a boom and bust cycle during recent years. After flooding caused three very poor hatch years in 2008, 2009, and 2011, the good hatch of 2012 had a positive impact on hunting in the region. Solid hatch years in two of the past three years (2012 and 2014), combined with some reproduction in 2013, have the turkey population in this region climbing back. However, lower jake observation numbers from last year should mean a reduction in the number of 2-year old birds for this year, which should mean less gobbling than Region 2 observed last year.
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

An average of 2.21 poults per total hen were recorded for Region 3 in 2014 (Figure 1), which was up significantly from 1.0 in 2013. A total of 414 hens were seen in this region during the 2014 brood survey, and 180 (43%) of the hens successfully produced at least one poult. Average brood size was 5.09 poults per successful hen, which was up from 2013.

Harvest Rates & Age Structure

Hunters harvested 3.3 gobblers per 100 hours of hunting in Region 3 during 2014 (Figure 2), which was up slightly from 2013. Fifty-two percent of harvested gobblers were considered 2-year old birds with spurs of 0.5 to 1.0 inches, while 48% were considered to be at least 3 years old (Figure 3).
Gobbling Activity
During 2014, hunters heard fewer gobblers (4.3) and gobbles (55.5) per 10 hours of hunting (Figure 4) compared to 2013. Gobbling activity peaked in this region during midseason, with hunters hearing the most gobblers during week 3, and the most gobbles during week 5 (Figure 5).

Turkey Observations
Hunters observed an average of 64.2 turkeys per 100 hours hunting during the 2014 season (Figure 6), which was down considerably compared to 2013. Jake observations also decreased to 7.0 per 100 hours hunting (Figure 7).

2015 Season Forecast
Brood survey data and jake observation indicate that Region 3 hunters should encounter fewer 2-year old gobblers in 2015 compared to last year, which could lead to less gobbling activity and decreased success rates. However, very good hatches in 2012 and 2014 should increase overall turkey observations in this region.
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

A total of 1.83 poults per total hens were observed for Region 4 during the 2014 brood survey (Figure 1), which was significantly higher than the observed hatch in 2013. Fifty-one percent of the hens observed successfully reproduced, and average brood size was 3.58 poults for Region 4.

Harvest Rates & Age Structure

Region 4 turkey hunters harvested 4.0 gobblers per 100 hours of hunting in 2014 (Figure 2), which was up from 2013. The percentage of older gobblers (with spurs at least 1-inch long) was 53% (Figure 3), while the percentage of 2-year old birds in the harvest was 45%, which was similar to 2013.
Gobbling Activity

Gobbling activity for Southwest Mississippi was up slightly during the 2014 season (*Figure 4*) as hunters heard 6.5 gobblers and 83.3 gobbles per 10 hours of hunting. The number of gobblers heard in this region peaked during youth week, while the number of gobbles heard was highest during the third week of the regular season (*Figure 5*).

Turkey Observations

Turkey hunters observed 64.2 turkeys per 100 hours of hunting in 2014 (*Figure 6*) which was down some from 2013. Hunters observed 8.2 jakes per 100 hours hunting (*Figure 7*) which was also down from the 14.7 observed in 2013.

2015 Season Forecast

*Hunters in Region 4 should expect to find fewer 2-year old gobblers to chase during the 2015 due to a poor hatch in 2013. Overall outlook continues to be bright for this region which has been a regional hotspot for Mississippi turkey hunters.*
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 the drier sites.

Reproduction

A total of 1.77 poults were observed per hen during the 2014 brood survey (Figure 1), which was up from 2013 in Region 5. A total of 37% of the hens observed successfully reproduced, and average brood size was 4.74 poults, both up from 2013.

Harvest Rates & Age Structure

Region 5 hunters harvested 3.3 gobblers per 100 hours of hunting in 2014 (Figure 2), which was up from 2013. Forty-two percent of the birds harvested had spurs between 0.5 and 1.0 inches, while 56% had spurs longer than 1 inch (Figure 3).

<table>
<thead>
<tr>
<th>Year</th>
<th>Harvest Per 100 Hours Hunted</th>
<th>Spur Length Classes (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>2.2</td>
<td>56% 0.1-0.5”</td>
</tr>
<tr>
<td>2007</td>
<td>3.3</td>
<td>46% 0.5-1.0”</td>
</tr>
<tr>
<td>2008</td>
<td>2.5</td>
<td>53% 1.0-1.25”</td>
</tr>
<tr>
<td>2009</td>
<td>2.3</td>
<td>55% &gt;1.25”</td>
</tr>
<tr>
<td>2010</td>
<td>2.2</td>
<td>48% 0.1-0.5”</td>
</tr>
<tr>
<td>2011</td>
<td>2.9</td>
<td>40% 0.5-1.0”</td>
</tr>
<tr>
<td>2012</td>
<td>2.5</td>
<td>40% 1.0-1.25”</td>
</tr>
<tr>
<td>2013</td>
<td>3.3</td>
<td>53% &gt;1.25”</td>
</tr>
<tr>
<td>2014</td>
<td>3.3</td>
<td>58% 0.1-0.5”</td>
</tr>
</tbody>
</table>

Figure 1: Poults Per Total Hens

Figure 2: Harvest Per 100 Hours Hunted

Figure 3: Spur Length Classes (%)

2015 Mississippi Wild Turkey Report
Gobbling Activity
During 2014, hunters in this region heard 4.4 gobblers and 59.1 gobbles per 10 hours, which was up from 2013 (Figure 4). The number of gobblers and gobbles heard peaked during the youth week of the season (Figure 5).

Turkey Observations
Total turkey observations decreased during 2014 to 68.7 birds per 100 hours hunting (Figure 6), and jake observations were 7.9 per 100 hours, which was down from 2013 (Figure 7).

2015 Season Forecast
Region 5 hunters should expect a decrease in the number of 2-year old gobblers they find during the 2015 season. This should result in decreased gobbling activity and harvest rates since 2-year old birds tend to be more vocal and susceptible to harvest.
Join Our Spring Gobbler Hunting Survey Team

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

**THE SPRING GOBBLER HUNTING SURVEY (SGHS) WAS INITIATED IN 1996**
by the Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP) to fill the
need for a long-term dataset that would aid in monitoring and managing the state's turkey
population. It is one of the sources of data that makes this report possible every year.

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

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

**Benefits of Participating in the SGHS**

- The information you collect will be made available to you within the MDWFP Turkey Program’s annual report, *Spittin’ and Drummin’* which is available online at [www.mdwfp.com/turkey](http://www.mdwfp.com/turkey). This report discusses turkey population trends in each region.

- You’ll receive an individualized report that summarizes the data you sent us. These reports will allow you to see trends in activity from the time you, or your hunting club, spent turkey hunting. This information can be used to tailor management decisions for your specific property.

- Your name will be entered into a special shotgun raffle aimed at increasing participation in the SGHS.

- You can improve your turkey hunting knowledge and skills by keeping track of your own hunting experiences and habits throughout the season. The MDWFP will provide you with analysis of various topics that will be highlighted for you in special reports and articles.

- Management decisions of the MDWFP that directly affect your recreational opportunities as a sportsman and conservationists will be made using the best available data.

- You will become a part of our natural resource’s history by gathering evidence that stands for or against questions such as should season dates be set earlier, later, or left the same? Should we allow a controlled fall season in areas with high turkey densities? Will certain regulations improve hunting quality, carry-over more gobblers, or increase gobbling activity?

**How can I Participate?**

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

**New SGHS Participants can enroll online at [www.mdwfp.com/turkey](http://www.mdwfp.com/turkey)**
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
The 2015 Mississippi Wild Turkey Report is a cooperative effort between the MDWFP Turkey Program and the Mississippi Chapter of the NWTF.