



2018 ALABAMA WILD TURKEY REPORT

Welcome to Full Fans & Sharp Spurs, the fifth edition of the Alabama Department of Conservation & Natural Resources, Wildlife & Freshwater Fisheries Division, Wild Turkey Program report. This report provides turkey hunters and others with information concerning Alabama's wild turkey resource. The report contains biological and sociological data used by ADCNR to monitor and manage the state's turkey population.

This year we saw a slight decrease in participation in the avid turkey hunter survey, and we continue to encourage all turkey hunters to become partners with ADCNR in the conservation and management of Alabama's wild turkeys. Your participation in the avid turkey hunter survey is key to providing vital information used to better manage the resource. Any avid turkey hunter who would like to participate in the survey should contact Assistant Chief Amy Silvano at amy.silvano@dcnr.alabama.gov.

Your membership in the National Wild Turkey Federation (NWTF) benefits wild turkeys in Alabama tremendously. The Alabama Chapter of the NWTF is a strong supporter of ADCNR and their efforts to manage turkeys in Alabama. Through Hunting Heritage Super Fund and Tag Fund expenditures as well as property acquisitions, NWTF has helped open access for hunters to thousands of acres and has enhanced even more acres for wild turkey in Alabama. In addition, NWTF sponsors a reward program for people who provide significant information that leads to conviction of people illegally hunting turkeys. Anyone with information on illegal turkey hunting in Alabama should call 1-800-GameWatch.

Thank you for your efforts to enhance the management of that noble bird, the wild turkey. ✓

Cover Photo: Tes Randle Jolly







ACKNOWLEDGEMENTS

The Wildlife & Freshwater Fisheries Division (WFF) is pleased to share the fifth edition of our Wild Turkey Program Report, Full Fans & Sharp Spurs. In these pages, you will find results of our avid turkey hunter survey as well as our wild turkey brood survey. While this is not scientific data, it is valuable information that over time will reveal trends in our wild turkey population. We hope you enjoy this program report and extend you an invitation to assist us in collecting data. You will find directions for how you can assist inside.

This publication is a joint venture with the Alabama Chapter of the National Wild Turkey Federation (NWTF). NWTF is a strong conservation partner putting thousands of dollars on the ground in Alabama and across the country.

This report would not have been possible without the assistance of the ADCNR IT staff, ADCNR Information and Education staff, the field staff of the Wildlife Section and the members of the Alabama Wild Turkey Committee.

The data in this report was provided by WFF Division staff, other agency personnel, private landowners and turkey hunters from across the state. It would not be possible without your continued support.

Thank you all. Steve Barnett

The Alabama Department of Conservation and Natural Resources does not discriminate on the basis of race, color, religion, age, gender, national origin or disability in its hiring or employment practices nor in admission to, or operation of its programs, services or activities.

www.outdooralabama.com



Kay Ivey - Governor

Wildlife management is a long-term commitment to balancing the needs of wildlife with the needs of people. In our state, the Alabama Department of Conservation and Natural Resources is the lead state agency for this endeavor through their Wildlife and Freshwater Fisheries Division. I thank them for their dedication to managing our state's natural resources like the Eastern wild turkey.

It takes teamwork to produce projects like Full Fans and Sharp Spurs. If not for the cooperation of turkey hunters and organizations like the National Wild Turkey Federation, the data presented in this publication would not be possible. Because of the Department's efforts, along with the support

and collaboration of citizens and others, Alabama's wildlife will continue to thrive for future generations.



Christopher M. Blankenship -

Commissioner, Alabama Department of Conservation and Natural Resources

As many of you know, I grew up on the Alabama Gulf Coast, where the abundance of fishing opportunities occupied most of my time both recreationally and professionally.

When I became Conservation Commissioner, I wanted to expand my outdoors experiences. Wildlife and Freshwater Fisheries (WFF) Director Chuck Sykes graciously invited me on my first turkey hunt in the spring of 2018.

Although I'm late to this outdoors endeavor, it only took one gobbler in full strut to take my breath away and hook me into this turkey-hunting addiction that I've heard so much about. Director Sykes called the gobbler to well within shooting range. Despite my excitement, I managed to make an accurate shot and bagged my first turkey. That hunt was such a thrill, I immediately began outfitting myself for turkey hunting and can't wait until the 2019 season opens. Our task at the Alabama Department of Conservation and Natural Resources is to manage and conserve our natural resources, which include the majestic Eastern wild turkey.

Game Check and the Avid Turkey Hunter Survey are the tools that WFF biologists and managers use to gain as much information as possible on Alabama's turkey population so that the best management decisions can be made that benefit the birds and hunters.

Full Fans & Sharp Spurs is the compilation of the data collected by wildlife managers and turkey hunters who spend a great deal of time in the turkey woods. The data gives WFF officials information on any trends in turkey sightings and activity so that hunting pressure, predators and habitat changes can be factored into management decisions that will ensure wild turkeys continue to thrive in our great state.

I'm sure my busy schedule won't allow me to get to the turkey woods as much as I would like, but I do ask that turkey hunters who spend a great deal of time in the woods join the Avid Turkey Hunter Survey and increase the chances that strutting gobblers will remain in Alabama's hunting landscape forever...



Chuck Sykes - Director, Wildlife & Freshwater Fisheries Division

The Spring of 2018 was filled with highs and lows for many turkey hunters. Some had incredible seasons while others couldn't wait to for it to be over. Even though I only harvested one gobbler in Alabama, it was the most successful season I have had in many years. I know success is measured differently from person to person. Some are happy just to hear birds gobbling while others rate success on how many they put in the freezer. For me, the success of my season was measured by guiding four hunters to their first long beard. Three of those four had never harvested a turkey before. I'd like to challenge each of you to make it a priority to introduce someone to turkey hunting this year. Remember, someone new doesn't have to be a kid. The average age of my first timers

was 35. I want to thank the Alabama State Chapter of the NWTF for their continued support of turkey conservation and turkey hunters. Without their financial support and the willing participation of their members and many others in the avid turkey hunter survey, this publication wouldn't be possible. Good luck this season in the turkey woods and hopefully your ears will be filled with gobbles and your game bag with full fans and sharp spurs!



TABLE OF CONTENTS

| WFF Turkey Committee, District Map and Contacts | 5 |
|---|----|
| Alabama Hunting and Fishing Funding Facts | 7 |
| Alabama Turkey Surveys by District | 8 |
| District 1 | 9 |
| District 2 | 11 |
| District 3 | 13 |
| District 4 | 16 |
| District 5 | 18 |
| Brood Survey | 20 |
| Join the Avid Turkey Hunter Survey Team | 22 |
| Game Check and Wild Turkeys | 24 |
| First Harvest Certificate | 25 |
| Making the "Mast" of Your Turkey Property | 26 |
| Maximizing Marginal Habitat for Wild Turkeys | 28 |
| NWTF President and Biologist | 30 |
| NWTF Shotgun Giveaway Winner | 31 |
| NWTF Officer of the Year | 32 |
| Hunting Heritage Superfund | 34 |
| Alabama State Superfund Expenditures | 35 |
| NWTF License Plate | 37 |
| National Archery in the Schools Program | 38 |
| Become a Hunting Mentor | 40 |
| Save the Habitat. Save the Hunt | 41 |
| Special Opportunity Areas (SOAs) | 42 |
| Turkey Research Project Update | 44 |
| Wild Turkey Disease Mortality Form | 47 |

WILDLIFE AND FRESHWATER FISHERIES TURKEY COMMITTEE – Formed 2014



Alabamians have enjoyed a healthy wild turkey population for decades.

Through trapping and relocation,
Wildlife and Freshwater Fisheries
(WFF) replenished and bolstered wild turkey numbers throughout
Alabama and in other states as well.

Turkey hunters in Alabama are afforded

one of the longest spring seasons and most liberal bag limits in the country.

In the past, Alabama's turkey management team has consisted of primarily a turkey project leader and an assistant. These biologists have monitored the population trends in Alabama and surrounding states. Recently, neighboring states have reported a decline in their turkey populations. Furthermore, our

statewide surveys have indicated a downward trend in our reproductive success. These factors prompted the wildlife section to form a turkey committee with representation from each WFF district.

These wildlife biologists have conducted stakeholder meetings to solicit input from hunters and have met extensively with researchers from Auburn University. These collaborations have resulted in a Wild Turkey Research Project on a scale never attempted in Alabama. We are measuring survival, productivity and movements of turkeys in the three most significant landscapes for turkey populations in the state. This information will provide valuable insights for future wild turkey management. Working together, we hope to ensure the maximum sustainable wild turkey population to be enjoyed by future generations.

Alabama Wildlife and Freshwater Fisheries — District Offices

District 1

21453 Harris Station Road Tanner, AL 35671 256-353-2634 dcnr.d1wff@dcnr.alabama.gov

District 2

4101 Alabama Hwy. 21 N. Jacksonville, AL 36265 256-435-5422 dcnr.d2wff@dcnr.alabama.gov

District 3

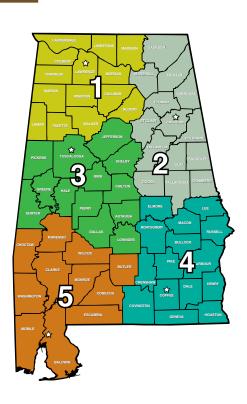
8211 McFarland Blvd., West Northport, AL 35476 205-339-5716 (Northport) 334-289-8030 (Demopolis) dcnr.d3wff@dcnr.alabama.gov

District 4

3520 Plaza Drive Enterprise, AL 36330 334-347-1298 dcnr.d4wff@dcnr.alabama.gov

District 5

30571 Five Rivers Blvd. Spanish Fort, AL 36527 251-626-5474 dcnr.d5wff@dcnr.alabama.gov





ADCNR COMMITTEE MEMBERS



Jud Easterwood — District 1 Wildlife Biologist

Jud Easterwood is a Certified Wildlife Biologist* and earned his B.S. degree in Wildlife Science from Auburn University in 1999 and his M.S. degree in Wildlife Biology from Colorado State University in 2002. He has worked on Wildlife Management Areas and on private lands in several Southeastern states as well as in Colorado, focusing on the management of wild turkeys, deer, bobwhite quail, and waterfowl. In 2006 he began working for the ADCNR Wildlife and Freshwater Fisheries Division as the biologist on Jackson County Waterfowl Areas and in 2011 began serving as the District 1 Supervising Biologist. He is primarily interested in wild turkey research and management and is thoroughly enjoying the privilege of serving as the District I Wild Turkey Committee member.



Courtenay Conring — District 2 Wildlife Biologist

Courtenay Conring earned her B.S. degree in Wildlife Sciences and Management from the University of Georgia in 2013 and her M.S. degree in Wildlife, Aquatic, and Wildlands Science and Management from Texas Tech University in 2016. She has worked on wildlife refuges managing for an array of gamebird species and assisted in research projects focusing on gamebirds, including waterfowl, sandhill cranes, and northern bob-whites throughout the southern United States. In December of 2016, she accepted a position with the ADCNR Wildlife and Freshwater Fisheries Division as the biologist over the Jackson County Waterfowl Areas. She is passionate about improving habitat for wild turkeys, assisting in turkey research, and preserving the turkey hunting heritage across Alabama.



Jeff Makemson - District 3 Wildlife Biologist

Jeff Makemson is a Certified Wildlife Biologist* and has been employed by the ADCNR Wildlife and Freshwater Fisheries Division for 25 years. He earned his B.S. degree in Wildlife Science from Auburn University in 1989. Jeff worked as the area wildlife biologist on Oakmulgee WMA for 23 years. Through his management efforts, and with the partnership of the U.S. Forest Service, the 45,000-acre Oakmulgee WMA is one of the state's top public turkey hunting areas. Jeff is the District III Wildlife Supervisor, covering a 13-county region of West Central Alabama. Jeff is very passionate about improving habitat for wild turkeys on our public and private lands across Alabama, assisting in turkey research, and preserving our hunting heritage.



Adam Pritchett — District 4 Wildlife Biologist

Adam Pritchett earned his B.S. degree in Wildlife Sciences from Auburn University in 2002. He began his career as a wildlife biologist with the ADCNR Wildlife and Freshwater Fisheries Division in 2005 at Barbour WMA, where his continued efforts to enhance habitat for wildlife populations on the 29,000-acre WMA has made it one of the more popular public turkey hunting areas in southeast Alabama. Adam provides technical assistance to landowners for managing the wildlife on their property.



Steve Barnett — District 5 Wildlife Biologist

Steve Barnett is a Certified Wildlife Biologist*. He earned a B.S. degree in Wildlife Management from Auburn University in 1984 and has worked for the ADCNR Wildlife and Freshwater Fisheries Division since 1986. He is the Supervising District Wildlife Biologist for an 11-county region in southwest Alabama and serves as the Wild Turkey Project Leader coordinating programs such as the Avid Turkey Hunter Survey and Brood Survey. Steve leads the ADCNR Wild Turkey Committee, composed of wildlife biologists representing each region, in making statewide turkey management recommendations. He also serves on the Technical Committee of the National Wild Turkey Federation coordinating grant funded projects and has been involved in several cooperative wild turkey research projects in Alabama. Steve and wife Victoria co-authored the book, The Wild Turkey in Alabama, in 2008.



NWTF & AWF COMMITTEE MEMBERS



Brandon Bobo - National Wild Turkey Federation Wildlife Biologist

Brandon Bobo received his bachelor's degree from Auburn University in Wildlife Sciences while working for the National Park Service. He has served as the Mississippi Regional Biologist for the National Wild Turkey Federation (NWTF) since February 2013, and has been serving as Alabama District Biologist as of 2015. With NWTF, Brandon is primarily responsible for giving technical assistance and providing guidance on management plans to landowners, as well as oversight of partnerships with organizations, state and federal agencies in the state. He has served on both the Mississippi Longleaf Council and Mississippi Prescribed Fire Council, and currently represents the NWTF on the Alabama Shortleaf Pine Initiative Committee, My Alabama Woods Team, Gulf Coastal Plain Ecosystems Partnership, Talladega Mountain Longleaf Conservation Partnership as well as the ADCNR Wildlife and Freshwater Fisheries Turkey Committee.



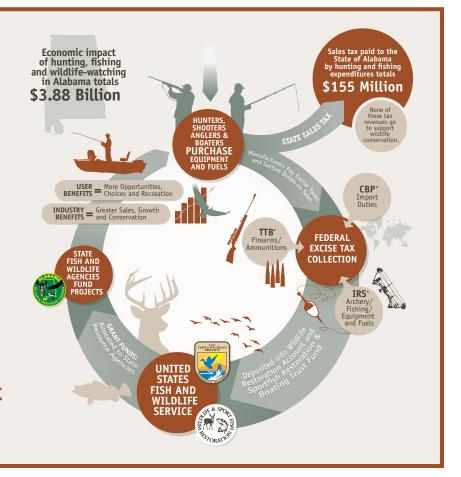
Kyle Marable — Alabama Wildlife Federation Wildlife Biologist

Kyle Marable holds a B.S. in Wildlife Sciences from Auburn University and a M.S. in Wildlife and Fisheries Science from Mississippi State University. Between undergraduate and graduate school, Kyle primarily worked to establish upland quail habitat as part of a Habitat Improvement Team in western Kentucky. His passion for ecosystem establishment, restoration and management led him to join the Alabama Wildlife Federation as a Resource Stewardship Biologist. Kyle is excited to represent AWF on the turkey committee and work toward improving the habitat and understanding of wild turkeys in Alabama.

HOW HUNTING AND FISHING IS FUNDED IN ALABAMA

Hunting and Fishing are great pastimes that offer tremendous recreational value for the participants. Conservation is big business for the state's economy and benefits all Alabama citizens, whether they hunt or not. It is important that everyone has an understanding of the economic importance of hunting and fishing in Alabama.

Not everyone helps fund wildlife conservation, but everyone benefits.





ALABAMA TURKEY SURVEYS



ALABAMA AVID TURKEY HUNTER SURVEY

(2018 RESULTS)

The Alabama Avid Turkey Hunter Survey was initiated in 2014 to provide the Alabama Division of Wildlife and Freshwater Fisheries (WFF) with biological information about wild turkey populations in the state. Cooperating hunters are asked each year to record observations from their hunts during the spring season. The gobbling activity and observational data obtained assists WFF wildlife biologists in monitoring turkey populations and in making management decisions. WFF appreciates those who are willing to take time to collect and submit this valuable information. All turkey hunters are encouraged to take part in this effort. This is an opportunity to be directly involved in the conservation and management of wild turkeys in Alabama. An invitation to participate in the survey is located in this report.

Gobbling Activity

The number of individual gobblers and total number of gobbles heard are used as indices to gobbling activity. Gobbling activity is reported as the average number of

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. The data can also be used to examine trends in the chronology of peak gobbling activity throughout a season.

Turkey Observations

Turkey observations are classified as gobblers, jakes and hens. Observation rates are reported as the average number of gobblers, jakes or hens observed during 100 hours of hunting. Observation rates provide indices to sex ratios, gobbler age ratios, and population size and trends. Jake observations reflect 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. High numbers of 2-year-old gobblers often lends itself to a good gobbling year. \checkmark



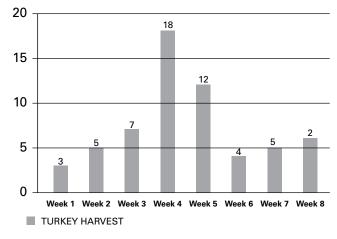
DISTRICT 1

District 1 is comprised of 14 counties in the northwest part of the state. It has several physiographic regions that are unique to north Alabama. The Plateau region consists of the Interior Low Plateau, Appalachian Plateau, and Tennessee Valley regions. The plateau is dominated by upland Oak/Hickory and Oak/Pine forest intermingled with pasture, grazing, and agricultural crops. Soils adjacent to the major rivers and flood plains in this region are highly fertile, and thus support much agricultural production, especially in the Tennessee Valley. Topography can vary greatly from steep ridges to low lying valleys. The Fall Line Hills separate the Appalachian Plateau from the Upper Coastal Plain. This area is characterized by gently rolling hills dominated by Pine/Oak forest and Oak/Gum/Cypress bottom lands near major drainages. The greatest habitat diversity in the state is located in the Fall Line Hills.

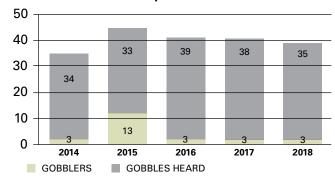
Harvest and Observations

Cooperators in District 1 reported hearing 7,711 gobbles from 619 gobblers and harvesting 60 birds during the 2018 spring turkey season. Within the district, harvest intensity was greatest during mid- and late- season, with peak harvest activity occurring during weeks 4 and 5.

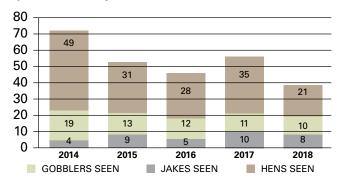
Spring Season Harvest by Week



Gobblers and Gobbles Heard per 10 Hours Hunted



Turkey Observations per 100 Hours Hunted



District 1 - Wildlife Management Areas that Provide Turkey Hunting

LAUDERDALE WMA

By Daniel Toole, WMA Wildlife Biologist

Lauderdale WMA encompasses 20,343 acres in Lauderdale County acquired under the Forever Wild Program and the Division of Wildlife and Freshwater Fisheries (WFF). The WMA consists of mature hardwoods, loblolly pine plantations, shortleaf pine reforestation areas, and recently harvested areas. Hardwood drains of various sizes and shapes designated as streamside management zones are interspersed throughout the pine plantations of varying age classes. This diversity of timber types is managed to provide a multitude of habitat compartments

for wild turkeys. Prescribed burning has been utilized in past years on the WMA on a relatively small scale. Beginning in fall 2014, prescribed burning efforts were increased greatly and will continue to be implemented on a three-year interval as a major tool to improve and maintain favorable habitats for wild turkeys. In conjunction with previously established wildlife openings, additional early successional units will be created and managed with prescribed fire, drum chopping, bush-hogging and seasonal disking. For more information on Lauderdale WMA, contact the District 1 Wildlife office at 256-353-2634.

RIVERTON COMMUNITY HUNTING AREA

By Daniel Toole, WMA Wildlife Biologist

Riverton Community Hunting Area (CHA) encompasses approximately 5,316 acres in Colbert County acquired by the Forever Wild Program. Loblolly pine plantations, shortleaf pine reforestation, and areas of recent timber harvests dominate the upland landscape on this CHA. Streamside management zones are interspersed throughout the area, providing a bottomland hardwood component to the landscape. For more information on Riverton CHA, contact the District 1 Wildlife office at 256-353-2634.

FREEDOM HILLS WMA

By Daniel Toole, WMA Wildlife Biologist

Freedom Hills WMA occupies approximately 33,896 acres in Colbert County acquired by the Forever Wild Program and WFF. The WMA contains tracts of mature hardwoods, dense loblolly pine plantations, shortleaf pine reforestation, and recently harvested areas. Hardwood drains of various sizes and shapes are interspersed throughout the WMA as streamside management zones among most of the plantation pines. Timber stand diversity provides a wide array of habitat types to benefit turkeys. Prescribed burning has been utilized in the past will continue to be implemented on a three-year interval to improve and maintain habitats beneficial to wild turkeys. In addition to the previously established wildlife openings, additional early successional units will be established and managed with prescribed fire, drum chopping, bush-hogging and disking. For more information on Freedom Hills WMA, contact the District 1 Wildlife office at 256-353-2634.

BLACK WARRIOR WMA

By Kevin Pugh, WMA Wildlife Biologist

Black Warrior WMA provides public hunting opportunities through a long-standing cooperative partnership with the U.S. Forest Service. This WMA is located within Bankhead National Forest in Winston and Lawrence counties and encompasses

over 92,000 acres of U.S Forest Service Lands, including the 26,000-acre Sipsey Wilderness. Mature oak/hickory and mixed hardwood/pine forest timber stand components dominate the landscape of the WMA. Recently, an effort to convert and restore loblolly pine stands to more naturally occurring shortleaf pine has been initiated. In addition, recent efforts to increase thinning operations in the pine stands has produced valuable early successional habitat for nesting and brood-rearing hens, which is of limited availability in this Forest. Prescribed fire is frequently implemented during both dormant and growing seasons to produce a wide array of vegetative diversity. Wildlife openings are planted with a variety of warm and cool season grains, peas and clovers in order to provide year-round supplemental food sources for wild turkey. For more information on the Black Warrior WMA, contact the District 1 Wildlife office at 256-353-2634.

SAM R. MURPHY WMA

By Kevin Pugh, WMA Wildlife Biologist

Sam R. Murphy WMA contains approximately 17,625 acres located near Guin, Ala., in Marion and Lamar counties. The Murphy Family continues to participate as a valuable partner in conservation with WFF by providing public hunting opportunities at no cost to the State. Plantations of loblolly pine of various age classes tend to dominate the landscape of this commercial forested WMA, with stands of mature hardwoods along steep slopes and streamside management areas, with agricultural fields along the river. The numerous wildlife openings distributed throughout the WMA are managed to provide warm and cool season supplemental food sources to all species of wildlife. For more information on the Sam R. Murphy WMA, contact the District 1 Wildlife office at 256-353-2634. ✓





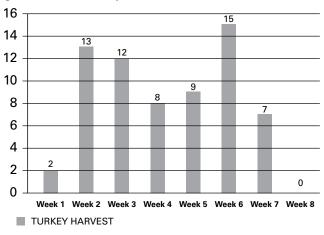
DISTRICT 2

District 2 consists of 14 counties stretching from east central Alabama to the northeast corner of the state. It is a diverse linear area that encompasses the Piedmont, Interior Plateau, Southwestern Appalachian and Ridge and Valley Ecoregions. The lower portion of the district is mostly rolling hills and becomes more mountainous as you move north. The flora is very diverse. Longleaf pine is found in the lower portion of the area while loblolly and shortleaf pine is more dominant further north. Deciduous forests of primarily oak and hickory are located throughout the region, often in drainages and on steep ridges. It is dissected by three river systems, the Tennessee in Jackson County, the Coosa in the central counties, and the Tallapoosa in the southern counties.

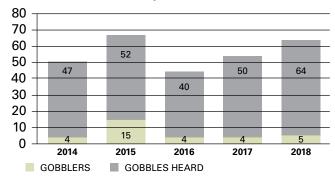
Harvest and Observations

Cooperators in District 2 reported hearing 11,904 gobbles from 1,004 gobblers and harvesting 66 birds during the 2018 spring turkey season. Within the district, harvest intensity was greatest during the first and second halves of the season, with peak harvest activity occurring during weeks 2 and 6.

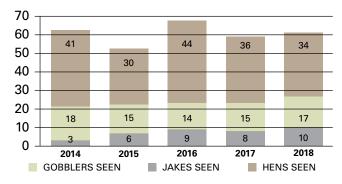
Spring Season Harvest by Week



Gobblers and Gobbles Heard per 10 Hours Hunted



Turkey Observations per 100 Hours Hunted



District 2 - Wildlife Management Areas that Provide Turkey Hunting

JACKSON COUNTY WMAS AND REFUGES

By Courtenay Conring, WMA Wildlife Biologist

Jackson County WMAs and Refuges are comprised of three WMAs and two Refuges primarily managed for waterfowl and other small game. The WMAs and Refuges combined are 26,934 acres located along the Tennessee River in Northeast Ala. (Southwestern Appalachians ecoregion) between the towns of Scottsboro and Stevenson. The WMAs and Refuges are provided through a partnership between Tennessee Valley Authority (TVA) and the Wildlife and Freshwater Fisheries Division (WFF). One of the Jackson County WMAs, Raccoon Creek WMA, has a tract acquired through the Forever Wild Program named Coon Gulf Tract. This property is 3,500 acres of mountainous terrain with oak-hickory hardwood forested slopes and planted pines with a few grass openings intermixed on the plateau. Native

warm season grasses are managed for in the openings through a bi-annual prescribed fire regime to provide more nesting and brood-rearing habitat for wild turkeys. Coon Gulf Tract is the only tract on the Jackson County WMAs and Refuges that offers turkey hunting opportunities. For more information about the Coon Gulf Forever Wild Tract, contact the Jackson Co. WMAs and Refuges Office at 256-437-2788.

JAMES D. MARTIN – SKYLINE WMA

By Frank Allen, WMA Wildlife Biologist

James D. Martin–Skyline WMA is located approximately 17 miles North of Scottsboro in Jackson County (Southwestern Appalachians Ecoregion) and is primarily mountainous. The WMA

District 2 - Wildlife Management Areas that Provide Turkey Hunting - (Continued)

represents a cooperative partnership of landowners including Alabama Power Company, the Forever Wild Land Trust, and WFF. The area is 60,732 acres and represents a varied collection of habitats including mature hardwood forests, upland pine stands, active timber harvests, fallow areas, and agricultural fields. The area is managed for wild turkeys through prescribed burning, management of cool and warm season wildlife openings, timber stand improvements, native warm season grass establishment, and roadside management to promote bugging areas for hens and broods. Habitat diversity allows for suitable nesting, brood-rearing and winter range habitats across the WMA. For additional information about hunting at James D. Martin-Skyline WMA, please 256-587-3114.

LITTLE RIVER WMA

By Brandon Howell, WMA Wildlife Biologist

Little River WMA exists through a cooperative partnership between the Alabama Division of State Parks, National Parks Service, the Forever Wild Land Trust and WFF. Located just east of Fort Payne in Cherokee and DeKalb Counties, the WMA occupies a little over 13,000 acres and represents land tracts held by the cooperative agencies and programs. Habitat types range from plantations of loblolly pine on the plateau to the hardwoods spanning from the slopes to the bottomlands along Little River. Timber thinning operations and prescribed fire are utilized to encourage open habitats of early successional vegetative species to produce nesting and brood rearing habitat for wild turkey throughout the WMA. Warm and cool season herbaceous plantings are also established throughout the WMA to provide supplemental nutrition and provide additional habitat. For more information on the WMA, contact the District Office 256-435-5422.

CHOCCOLOCCO WMA

By Brandon Howell, WMA Wildlife Biologist

Choccolocco WMA represents a continued cooperative conservation effort between the U.S. Forest Service, Alabama Forestry Commission, U.S. Fish and Wildlife Service and WFF. The WMA is located just east of the Anniston/ Oxford area in Calhoun and Cleburne counties and occupies over 56,000 acres comprised of land owned by the Alabama Forestry Commission, U.S. Forest Service, and the U.S. Fish and Wildlife Service (USFWS). The WMA hosts a wide array of habitat types including longleaf pine stands, plantations of loblolly pine, mixed hardwood pine forests, upland and bottomland hardwoods of all age classes and recently harvested areas. Timber stand management practices such as mid-rotation timber removal, thinning operations and prescribed burning all make for a considerable contribution to the wild turkey populations residing on the Choccolocco WMA. These management strategies have greatly increased the number of turkeys in the past two decades and will likely continue due to our valuable cooperative partnerships. For more information on Choccolocco WMA, contact the District Office at 256-435-5422.

HOLLINS WMA

By Steven Mitchell, WMA Wildlife Biologist

Hollins WMA represents a cooperative partnership between the U.S. Forest Service, Evergreen Forest LLC, 19 private landowners and WFF, providing 28,000 acres of public hunting opportunity in the rolling Appalachian foothills of Talladega and Clay Counties (Piedmont ecoregion) near the small town of Hollins, Ala. The area consists of mature longleaf pine stands, mixed hardwood-pine stands, and hardwood drains. Over 120 permanent wildlife openings have been established throughout the WMA and maintained in a variety of warm and cool season plantings for wild turkey and other wildlife species. Long rotation longleaf and loblolly pine timber management, coupled with a three-year rotational prescribed fire regime, produces a valuable collection of habitats for wild turkeys. Other management practices that benefit turkey populations include mowing, strip disking, and selective timber harvesting. For more information on Hollins WMA, contact the District II Wildlife and Freshwater Fisheries Office at (256) 435-5422.

COOSA WMA

By Steven Mitchell, WMA Wildlife Biologist

Coosa WMA encompasses 17,600 acres in the Piedmont ecoregion of Alabama, near Rockford in Coosa County. The WMA is comprised of land acquired by the Forever Wild Program and WFF, and lands of our cooperative partners including Alabama Power Company, Kaul Lumber Company, Cahaba Timber, and F. Perkins to provide public hunting opportunities. Coosa WMA represents one of the state's oldest established hunting areas. The west side of the area is bordered by the Coosa River, with Mitchell Lake contained inside the WMA. The WMA accounts for thousands of acres of mountain longleaf pine habitat interspersed with hardwood drains, mixed pine-hardwood, and recently harvested areas in the process of being restored to longleaf pine stands. The property hosts one of the last remaining populations of red-cockaded woodpeckers (RCW) outside of Alabama's National Forest system. Heavy thinning operations of mature pine stands and prescribed burning conducted on threeto five-year rotations are practices used to manage for RCWs. These wildlife management techniques also serve to create ideal nesting and brooding habitat for wild turkeys. Other management practices used to benefit wild turkeys on the area include mowing, strip disking, and maintaining permanent wildlife openings in a variety of warm and cool season forages. For more information on Coosa WMA, contact the District II Wildlife and Freshwater Fisheries Office at (256) 435-5422. ✓



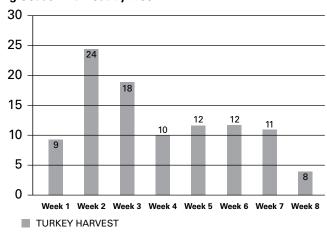
DISTRICT 3

This region consists of 13 counties in west central Alabama. It is a very diverse region consisting of eight ecoregions: southern inner piedmont, blackland prairie, flatwoods/blackland prairie margins, fall line hills, southeastern floodplains and low terraces, low rolling hills, sandstone ridges and shale hills. The southern portion consists mostly of blackland prairie, bottomland hardwood, Oak/Gum Cypress bottomlands near major drainages and industrial pine forest habitats. This area lies below the fall line and has mostly flat, to slightly rolling, terrain. Soils adjacent to the major rivers and flood plains in this region are highly fertile, and thus support much agricultural production. The soils are typically not rocky. The northern portion of the district consists of the fall line hills with rocky soils. It is comprised of mostly oak/hickory, mixed pine/hardwoods, industrial pine forest habitats, intermixed with transition zones thus creating great habitat diversity.

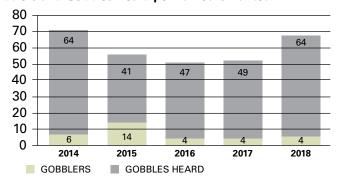
Harvest and Observations

Cooperators in District 3 reported hearing 19,639 gobbles from 1,350 gobblers and harvesting 104 birds during the 2018 spring turkey season. Within the district, harvest intensity was greatest during the first half of the season, with peak harvest activity occurring during weeks 2 and 3.

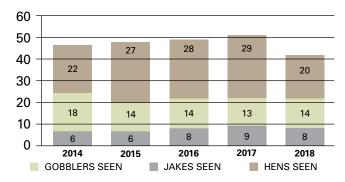
Spring Season Harvest by Week



Gobblers and Gobbles Heard per 10 Hours Hunted



Turkey Observations per 100 Hours Hunted



District 3 - Wildlife Management Areas that Provide Turkey Hunting

CHARLES D. KELLEY-AUTAUGA WILD-LIFE MANAGEMENT AREA

By Jeff L. Makemson, District Supervising Biologist

The Charles D. Kelley / Autauga Wildlife Management Area (WMA) is 9,138 acres, centrally located in Alabama. It is in northeastern Autauga County, 15 miles north of Prattville. Historically, the area has been managed in industrial pine forest planted in loblolly and longleaf. Hardwoods are found in the bottomlands and established streamside management zones. Rolling hills and sandy soils are found throughout this unique and diverse WMA. This important public outdoor recreational area was recently purchased in phases by the Alabama Division of Wildlife and Freshwater Fisheries and the Forever Wild Land

Program. The WMA is managed through a partnership with the Wildlife and Freshwater Fisheries and State Lands Division of the Alabama Department of Conservation. Sportsman may pursue both small and big game animals while other outdoor enthusiast can soak up nature in the forest by taking a stroll down one of the many roads meandering throughout the property. The area boasts a healthy population of white-tail deer, turkey and small game animals. More than 80 wildlife openings are planted in a variety of cool and warm season crops for wildlife. Pine stands will be burned on a three- to five-year rotation to enhance nesting and brood rearing habitat for many wildlife species. Extensive powerline right of ways and old logging decks are mowed to maintain early successional habitat. Gates have been installed to minimize vehicular disturbance during peak nesting and brood rearing season for many wildlife species. Some areas

District 3 - Wildlife Management Areas that Provide Turkey Hunting - (Continued)

will remain gated during turkey season to create popular walk-in turkey hunting areas. Many generations of Alabamians will greatly benefit from this public land acquisition and conservation partnership. For more information about this area please contact the District III Wildlife and Freshwater Fisheries Office at 205-339-5716

CEDAR CREEK SPECIAL OPPORTUNITY HUNTING AREA (SOA)

By Justin Gilchrist, Area Wildlife Biologist

Cedar Creek Special Opportunity Area (SOA) is unique property in south Dallas County bordering the Alabama River and Cedar Creek, between Selma and Camden. The WFF, along with the Forever Wild Land Trust, purchased this property for the public to experience a special hunting opportunity. This SOA has a limited number of slots for a successful permit holder and guest to hunt a dedicated 300-400-acre unit for two to four days. The smaller units and limited quota (random drawn permits) hunting format is to reduce hunting pressure and increase the quality of the hunting experience. Permits to hunt the SOA are obtained through an online selection process. Interested hunters can apply and pick their preferred hunt dates. The cost for this unique hunting experience is only the purchase of a state hunting license and WMA license. Management of the SOA is conducted through a conservation partnership between the Alabama WFF and the State Lands Division. In each hunting unit, wildlife openings are planted in a variety of cool season crops to supplement native vegetation to benefit a variety of wildlife species. Prescribed fire is used in existing pine stands and burns are conducted annually on a three- to five-year rotation. While current camera surveys indicate whitetail deer and turkey are found throughout the property, planned management efforts will greatly improve the habitat, population, health and age structure of these species. Many generations of Alabamians will benefit from this public land acquisition and conservation partnership. For more information on Cedar Creek visit outdooralabama. com or contact the Demopolis Wildlife and Freshwater Fisheries Office at 334-289-8030.

MULBERRY FORK WMA

By Chas Moore, WMA Wildlife Biologist

Mulberry Fork WMA is located just north of the Black Warrior River in southern Walker and eastern Tuscaloosa counties near the town of Oakman. Hunting rights on this 33,280-acre tract were secured by the Forever Wild Program from Molpus Timberlands for WFF to manage and conduct public hunting programs. The terrain is very steep and rugged, as this area represents the

southern end of the Appalachian Mountains. Molpus Timberlands primarily manages the loblolly pine stands on the WMA as a commercial forest with timber stand ages ranging from recently harvested to 25 years of growth. Streamside management zones are scattered and interspersed throughout the property and primarily consist of older aged hardwoods. Roughly 40 wildlife openings are planted annually for both cool and warm season supplemental forage for wild turkeys. For more information on hunting the Mulberry Fork WMA, please contact the District III Wildlife and Freshwater Fisheries Office at 205-339-5716.

PORTLAND LANDING SPECIAL OPPORTUNITY HUNTING AREA (SOA)

By Justin Gilchrist, Area Wildlife Biologist

Portland Landing SOA is an exciting new public land hunting opportunity for the 2018-19 season. This unique property is in South Dallas County and borders Pine Barren Creek on the Dallas/Wilcox county line. The Alabama Division of Wildlife and Freshwater Fisheries, along with the Forever Wild Land Trust, purchased this property for the public to experience a special hunting opportunity. This Special Opportunity Area (SOA) will have a limited number of slots for a successful permit holder and guest to hunt a dedicated 300-400-acre unit for two to four days. The smaller units and limited quota hunting format were implemented to reduce hunting pressure and increase the quality of the hunting experience. Permits to hunt the SOA are obtained through an online selection process. Interested hunters can apply and pick their preferred hunt dates. The cost for this unique hunting experience is only the purchase of a state hunting license and WMA license. Management of the SOA will be conducted by the conservation partnership of the Alabama WFF and the State Lands Division. In each hunting unit, wildlife openings will be planted in a variety of cool and warm-season crops to supplement the native vegetation to benefit a variety of wildlife species. Prescribed fire will be introduced seasonally throughout the SOA to sustain and enhance wildlife populations and habitats. While current camera surveys indicate whitetail deer and turkey are found throughout the property, planned management efforts will greatly improve the habitat, population, health and age structure of these species.

The Portland Landing SOA will also serve as the hub for the Adult Mentored Hunt Program. The Adult Mentored Hunt Program was established to provide a one-on-one opportunity to anyone over the age of 19 who is new to hunting or has limited lifetime hunting experience. This program provides new hunters the opportunity to learn basic hunting skills and about our valued hunting traditions from experienced hunters. Many generations of Alabamians will greatly benefit from this public land acquisition and conservation partnership. For more information on Portland Landing SOA or the Adult Mentored Hunt Program

visit outdooralabama.com or contact the Demopolis Wildlife and Freshwater Fisheries Office at 334-289-8030.

WILLIAM R. IRELAND, SR. -CAHABA RIVER WMA

By Chas Moore, WMA Wildlife Biologist

William R. Ireland, Sr.-Cahaba River WMA lies along the Cahaba River in central Alabama in Shelby and Bibb counties near the towns of Helena, Montevallo, and West Blocton. The WMA encompasses a total land acreage of 37,897 acres. Molpus Timberlands owns 27,894 acres in which hunting rights have been acquired through the Forever Wild Program with WFF managing the hunting programs. Other valuable cooperative landowning partners include Hancock Forest Management (2,744 acres), RMS (3,070 acres), and USX (689 acres). The USFWS owns another 3,500 acres, known as the Cahaba River National Wildlife Refuge, and is included in the WMA. The terrain throughout the area is very steep, rocky, and rugged. The uplands are typically plantation pine stands managed on a 25- to 30-year rotation with older stands typically being thinned. Streamside management zones are abundant along the many creeks that feed into the Cahaba River and are comprised of older aged hardwoods. Approximately 80 wildlife openings managed in cool season and warm season forage crops to benefit native wildlife of the WMA and are scattered throughout the area. For more information on William R. Ireland, Sr.-Cahaba River WMA, contact the District III Wildlife and Freshwater Fisheries Office at 205-339-5716.

OAKMULGEE WMA

By Drew Tincher, Area Wildlife Biologist

Oakmulgee Wildlife Management Area represents the oldest WMA in Alabama, established in 1937 as a cooperative partnership with the U.S. Forest Service. The WMA consists of 45,000 acres located in Bibb, Hale, Perry and Tuscaloosa counties in west central Alabama. The terrain is reminiscent of the landscape just north of the fall line with its moderate to steep rolling hills. Longleaf pine stands dominate the upland ridges with mature hardwoods in the bottomlands. Following U.S. Forest Service requirements to manage for the red-cockaded woodpecker, pine stands are thinned to a park-like appearance and burned on a three- to five-year rotation. The prescribed burning practice implemented by the U.S. Forest Service on the WMA greatly enhance habitat conditions for the wild turkey and many other wildlife species. This forest management regime type creates ideal nesting and brood rearing habitat for wild turkeys. More than 100 wildlife openings are planted and maintained in a variety of warm and cool season forages throughout the WMA. Selected areas are seasonally closed to motorized vehicles to create popular walk-in turkey hunting areas. For more information on Oakmulgee WMA, contact the District III Wildlife and Freshwater Fisheries Office at 205-339-5716.

LOWNDES WMA

By Dalton Bray, Area Wildlife Biologist

Lowndes WMA encompasses 15,920 acres acquired in a cooperative partnership with the U.S. Army Corps of Engineers, the Forever Wild Program, and WFF to provide public hunting opportunities and other outdoor recreational activities. Lowndes WMA is located in the northwest corner of Lowndes County approximately 4 miles northwest of the town of White Hall and 30 miles west of Montgomery. Lowndes WMA lies along the Alabama River and consists of fallow agricultural fields, hardwood river bottoms, swamp drainages, and mixed pine hardwood stands. Approximately 6,200 acres of fallow agricultural fields have been replanted with a mix of hardwood species. Eighty-seven permanent wildlife openings are scattered throughout the WMA. Three Green Tree Waterfowl Reservoirs and mourning dove fields provide a diversity of outdoor recreational hunting opportunities. The wildlife openings are planted in a variety of cool season grains and clovers to benefit a variety of wildlife species. Loblolly pine stands on the area are prescribed burned on three-year rotations to provide suitable habitat and brood rearing for wild turkeys and other wildlife species. Other wildlife management practices that benefit wild turkey populations include mowing, strip disking, and selective timber harvests. For more information on hunting on Lowndes WMA, call the District III Wildlife and Freshwater Fisheries office at 205-339-5716.

DAVID K. NELSON WMA

By Justin Gilchrist, WMA Wildlife Biologist

David K. Nelson WMA is located at the confluence of Tombigbee and Black Warrior rivers near Demopolis, Alabama. The funding for this land acquisition and management support for this WMA are provided by our cooperative partner in conservation, the U. S. Army Corps of Engineers. The WMA is composed of nine tracts of land comprising 8,557 acres. The WMA is predominately alluvial river floodplains and bottomland hardwood habitat intermixed with various managed pine stands and native warm season grasses. Approximately 70 acres of wildlife openings are planted annually in both warm and cool season seed varieties throughout the WMA. Pine stands and native warm season grass openings are burned on a three- to five- year rotation. These prescribe burns are implemented to provide maximum benefit and improved habitat quality for the wild turkey and a variety of other wildlife species. The 2,500-acre Damsite Tract is the only unit within the WMA that is accessible by vehicle. The remaining eight tracts are accessible by boat only. For more information concerning the David K. Nelson WMA, call the Demopolis Wildlife and Freshwater Fisheries office at (334) 289-8030. ⊁



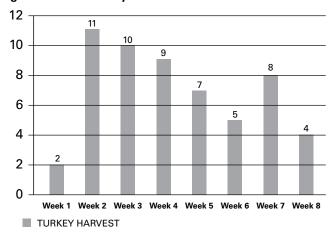
DISTRICT 4

This region consists of 15 counties in the southeastern corner of Alabama. This region has four eco-regions: piedmont, coastal plain, black belt and lower coastal plain. The piedmont area is located on the northern fringe of the region and is mostly mixed pine-hardwood forest type with rocky mountainous terrain. The black belt region is centrally located in the region and is mostly a grassland area with some oak-hickory forest along with loblolly pine plantations. The coastal plain has mostly hardwoods in the riparian areas and a mix of loblolly and longleaf pines in the uplands. The lower coastal plain is located along the southern most portion of the region and has swampy gum-cypress lowlands and the uplands are dominated by longleaf pine.

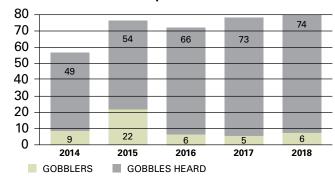
Harvest and Observations

Cooperators in District 4 reported hearing 12,495 gobbles from 962 gobblers and harvesting 56 birds during the 2018 spring turkey season. Within the district, harvest intensity was greatest during the first half of the season, with peak harvest activity occurring during weeks 2 and 3.

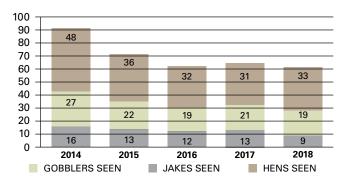
Spring Season Harvest by Week



Gobblers and Gobbles Heard per 10 Hours Hunted



Turkey Observations per 100 Hours Hunted



District 4 - Wildlife Management Areas that Provide Turkey Hunting

FOREVER WILD GOTHARD – AWF YATES LAKE WEST WILDLIFE MANAGEMENT AREA

By Richard Tharp, WMA Wildlife Biologist

Forever Wild Gothard–AWF Yates Lake West WMA is located in Elmore County just north of the city of Tallassee. The WMA encompasses 5,606-acres acquired by the Forever Wild Program to provide public hunting opportunities and is cooperatively managed by State Lands Division and WFF. The area is heavily forested and primarily consists of uneven-aged, mixed hardwood-pine stands. Mature hardwoods are scattered throughout the area, primarily located along the steep slopes and drains that border the Tallapoosa River. Mature stands of longleaf pine can

still be found along the ridge tops of gradually steepening slopes. No food plots are currently planted on the area, however, habitat management practices, such as prescribed burning, assists in improving habitat quality. For more information about Yates Lake WMA, please call 334-347-1298.

BARBOUR WILDLIFE MANAGEMENT AREA

By Adam Pritchett, WMA Wildlife Biologist

Barbour WMA is located in Barbour and Bullock counties near the small town of Clayton. It encompasses 28,213 acres, includ-

District 4 - Wildlife Management Areas that Provide Turkey Hunting - (Continued)

ing property acquired through the Forever Wild Program and WFF. Most of the area consists of longleaf and loblolly pine timber with hardwoods in the streamside management zones. The northern portion of the WMA has been restored to a long-leaf pine ecosystem. Frequent prescribed burning is utilized as a habitat management tool on the entire area to produce viable turkey habitats. The long-term timber management goal is to establish uplands in an open pine habitat, converting loblolly pine stands to longleaf pine where soils are appropriate and maintain hardwood stands on steep slopes and in drainage systems. Permanent wildlife openings are scattered throughout the entire area and are planted with both warm and cool season crops to provide year round food and cover for turkey and other wildlife. For more information about hunting Barbour WMA, contact the area biologist at 334-529-3222.

BOGGY HOLLOW WILDLIFE MANAGEMENT AREA

By Griff Johnson, RF, WMA Wildlife Biologist

Boggy Hollow Wildlife Management Area is a cooperative partnership with the U.S. Forest Service, NWTF, and Quail Forever. Boggy Hollow consists of approximately 7,000 acres within the Conecuh National Forest in Covington County, Ala. This WMA is managed as a bobwhite quail focal area and will provide additional habitat for nongame species including gopher tortoise and red-cockaded woodpecker. Boggy Hollow WMA is located off State Route 137 just west of Wing, Ala. The terrain is flat to low rolling hills, typical of the lower coastal plain. Mature hardwoods primarily reside along streamside management zones and drains. In addition to an emphasis on quail habitat, Boggy Hollow will also provide exclusive small game and deer hunting opportunities during regular season dates. Thursdays and Fridays will be dedicated to squirrel, rabbit, raccoon and opossum hunting. Quail hunters will have dedicated hunting days on Wednesdays and Saturdays. Deer hunters will be given archery-only hunting days Sunday through Tuesday. Turkey hunting will also be permitted on Boggy Hollow on regular season dates. For more information about Boggy Hollow WMA, please call 1-334-898-7013.

BLUE SPRING WILDLIFE MANAGEMENT AREA

By Griff Johnson, RF, WMA Wildlife Biologist

Blue Spring WMA is a cooperative partnership between the ADCNR Wildlife and Freshwater Fisheries Division (WFF) and the U.S. Forest Service (USFS). Blue Springs WMA is 24,783 acres nestled within Conecuh National Forest. Longleaf and slash pine dominates the forest with some fire tolerant hardwoods in the uplands and bottomland stream corridors. The USFS manages the forest on a long term rotation of 70 plus years. These long rotations are part of their comprehensive plan to restore historical longleaf pine habitat in the coastal plain. The USFS utilizes prescribed fire on a 2- to 5-year rotation, and mechanical understory and midstory removal to help promote suitable habitat for a variety of species like Eastern wild turkey. In addition to USFS's forest management practices, WFF manages permanent wildlife openings to provide quality habitat for a variety of wildlife species. For more information about Blue Spring WMA, please call 1-334-898-7013.

GENEVA STATE FOREST WILDLIFE MANAGEMENT AREA

By Griff Johnson, RF, WMA Wildlife Biologist

Geneva State Forest WMA is a cooperative partnership between WFF and the Alabama Forestry Commission (AFC). It spans 16,634 acres, in which AFC owns 7,280 acres. AFC acreage is forested with longleaf and slash pine, burned at 2- to 3-year intervals. Some mature hardwoods are present along small creek bottoms. Through timber management carried out by AFC, a mosaic of suitable habitat is created for Eastern wild turkey. Two recent purchases by WFF added 9,354 acres to the WMA. The new addition consists of industrial managed loblolly pine plantations of varying age classes, in which several older stands have been thinned. Terrain on both ownerships is flat to low rolling hills. Permanent openings are managed to provide habitat for a variety of wildlife species. For more information about Geneva State Forest WMA, please call 1-334-898-7013.

UCHEE CREEK SPECIAL OPPORTUNITY AREA (SOA)

By Richard Tharp, Wildlife Biologist

Uchee Creek SOA is a new public land hunting opportunity that opened for the 2018 season. This property is located in northwest Russell County southwest of Phenix City near Seale, Ala. This diverse property is bisected by Uchee Creek and contains some

coveted black belt soils. The Forever Wild Land Trust purchased this property and partnered with the Alabama Division of Wildlife and Freshwater Fisheries to allow the public a special hunting opportunity. Uchee Creek SOA will have a limited number of openings for a permit holder and guest to hunt a predetermined hunt unit for two to four days. This format of a limited quota (random draw hunts) and unit hunt setting is designed to reduce hunting pressure and provide a quality hunting experience. Permits to hunt the SOA are obtained through an online selection process. Interested hunters can apply and pick their preferred hunting dates. Licenses required are a state hunting license and a wildlife management area license. Management of the SOA will

be a partnership of the Alabama Wildlife and Freshwater Fisheries Division and State Lands Division. Each unit contains wildlife openings that will be planted in a variety of cool season crops to supplement the native vegetation to benefit many wildlife species. Annual prescribed fire will be utilized as a management tool. This SOA has a healthy population of white-tailed deer and eastern wild turkey and will provide an enjoyable and rewarding hunting experience for many hunters. For more information on Uchee Creek SOA visit our website at www.outdooralabama.com or contact the District 4 Office Wildlife and Freshwater Fisheries Office at 334-347-1298. \(\neq \)



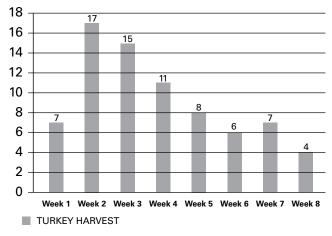
DISTRICT 5

District 5 consists of 11 counties in southwest Alabama. This ecoregion is part of the coastal plain, which rises from gentle, rolling hills in the south, to steep, mountain-like ridges to the north. The extreme north end of the district transitions to open prairie. This region is bisected by the lower reaches of the Alabama and Tombigbee Rivers, the confluence of which forms the Mobile-Tensaw Delta. Forest types include uplands dominated by piney woods interspersed with oak, beech, and magnolia with broad stream bottoms in oak, gum, bay, and cypress associations. Loblolly pine plantations are the major forest type throughout with scattered compartments of historic longleaf.

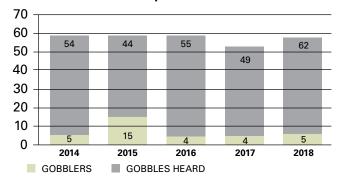
Harvest and Observations

Cooperators in District 5 reported hearing 13,828 gobbles from 1,149 gobblers and harvesting 75 birds during the 2018 spring turkey season. Within the district, harvest intensity was greatest during the first half of the season, with peak harvest activity occurring during weeks 2 and 3.

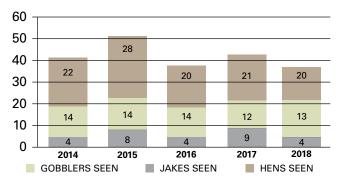
Spring Season Harvest by Week



Gobblers and Gobbles Heard per 10 Hours Hunted



Turkey Observations per 100 Hours Hunted



District 5 - Wildlife Management Areas that Provide Turkey Hunting

W. L. HOLLAND AND MOBILE-TENSAW DELTA WMA

By Thomas E Harms, WMA Wildlife Biologist

W.L. Holland and Mobile-Tensaw Delta WMA are located in the lower portion of the Mobile-Tensaw Delta south of Interstate 65 in Baldwin and Mobile counties. The area encompasses approximately 51,040 acres of tracts acquired by the Forever Wild Program, WFF and our cooperative partners in conservation, the U.S. Army Corps of Engineers and Ducks Unlimited. The W.L. Holland and Mobile-Tensaw Delta WMA are primarily composed of open marsh in the lower regions with islands of bay, cypress and tupelo gum as latitude increases, which is primarily accessible only by boat. Two compartments are accessible by vehicle. One tract, termed the Jacinto Port tract, is in transition to be restored to a longleaf pine community leaving hammocks of live oaks with scattered pockets of other hardwoods in lower areas. Rotational prescribed burning of this tract will assist turkey populations in providing early successional acreage to enhance nesting and brood rearing habitats. For more information, contact the District V office at 251-626-5474.

PERDIDO RIVER WMA

By Chris Nix, WMA Wildlife Biologist

Perdido River WMA encompasses approximately 17,337 acres east of Robertsdale in Baldwin County. The acreage was acquired through purchases by the Forever Wild Program and State Lands Division to provide hunting and recreational opportunities in southwest Alabama. The WMA is primarily composed of plantation pine timber stands with interspersed streamside management zones along the drainages and the Perdido River. An effort

to restore coastal tracts of longleaf, through the conversion of the numerous loblolly plantations is currently in progress on the WMA. Thinning operations of both loblolly and longleaf stands are being conducted and prescribed fire is currently being used to maintain these areas to provide improved nesting and brood rearing habitats on the area. Permanent wildlife openings are also maintained in a mixture of warm and cool season plantings to benefit turkeys. For more information, contact the District V office at 251-626-5474.

UPPER DELTA WMA

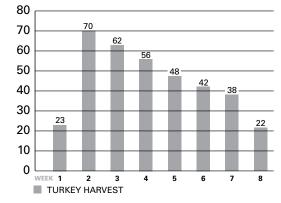
By Thomas E. Harms, WMA Wildlife Biologist

Upper Delta WMA is located in the northerly portions of the Mobile-Tensaw Delta in Baldwin and Mobile Counties, north of Interstate 65. The WMA encompasses approximately 42,451 acres resulting from acquisitions completed by the Forever Wild Program, The Nature Conservancy, Ducks Unlimited, Florida Gas and WFF to provide public hunting opportunities. The majority of the WMA lies within the alluvial floodplains of the Mobile-Tensaw Delta with its meandering waterways and interior scattered islands comprised of low perimeter hardwood ridges with interior basins dominated by cypress and tupelo gum. The majority of this WMA is accessible only by boat. A small tract composed of more upland habitats is located in the north Baldwin County section. This portion is accessible by vehicle and consists of loblolly pine plantations currently being restored to longleaf pine. This restoration will provide our wildlife managers a better opportunity to manage these longleaf stands with prescribed fire to provide suitable nesting and brood rearing habitats for wild turkeys. For more information, contact the District V office at 251-626-5474.

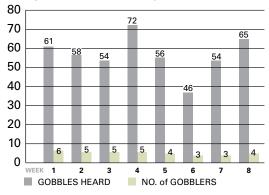
2018 Statewide Harvest and Observations

Cooperators statewide reported hearing 65,577 gobbles from 5,084 gobblers and harvesting 361 birds during the 2018 spring turkey season. Statewide harvest intensity was greatest during the first half of the season, with peak harvest activity occurring during weeks 2 and 3.





Spring Season Gobblers and Gobbles Heard per 10 Hours Hunted by Week



^{*} Harvest numbers compiled from 236 avid hunter survey respondents and represent only a subset of the total harvest within Alabama



BROOD SURVEY

Reproduction

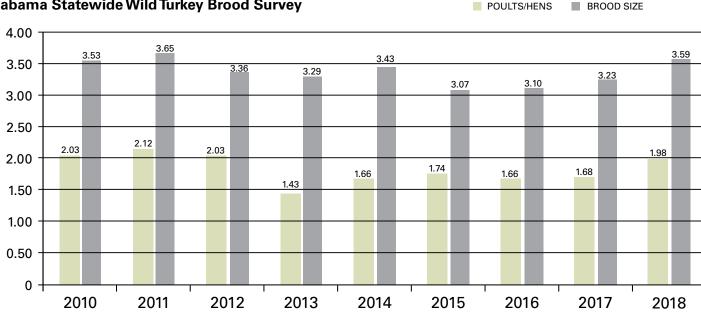
During the months of July and August, the wild turkey brood survey is conducted across the state by WFF personnel, resource professionals from other state and federal agencies, and interested hunters and landowners. This effort began in 2010. Brood surveys provide information concerning reproduction and are valuable in monitoring turkey population trends. Hens observed with at least one poult are considered successful. Hens without poults are considered unsuccessful. It is assumed they 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 the number of successful hens and provides an index to poult survival. Poults per hen is defined as the number of poults observed divided by the total number of hens seen. Poults per hen is the most practical reproductive index because it considers successful hens, unsuccessful hens and poult survival.

Wildlife biologists typically rate brood survival based on the average number of poults per hen. Recruitment of four or more poults per hen is considered excellent, three is good, two is fair, and one or less poult per hen is poor. While survival of one poult per hen is poor, researchers contend that as long as hens are successful, a turkey population can be maintained. However, the goal is to optimize conditions through habitat enhancement and other management applications to promote optimal reproductive success and high turkey populations.

Although it is not considered scientific data, results of the brood survey play a critical role in our assessment of turkey populations. Therefore, it is imperative that we receive as accurate data as possible. In order to make a viable estimate of reproduction, we need input from every county in the state. If you have the time and desire to take part in the brood survey we would like to talk with you.

The survey begins July 1st and ends August 31st. During that time, we ask that you record any turkeys you encounter in your normal daily activities. If poults are seen we ask that you provide a size class estimate. In addition, we need to know the date and location. Our brood survey packet will provide a guide sheet to assist you in entering your data online. If this is something you are interested in, please contact Assistant Chief Amy Silvano at amy.silvano@dcnr.alabama.gov. ✓

Alabama Statewide Wild Turkey Brood Survey



2018 WILD TURKEY BROOD SURVEY OBSERVATIONAL DATA SUMMARY Observational surveys were conducted during the months of July and August.

| Without Poults Without Poults Without Poults Without Poults With Poults With Poults PER HEN BROOD SIZE BROOD SIZE HENS WITH POULTS HENS WITH POULTS 1:2.02 |
|---|
| |
| 90 706 2534 326 1.96 3.59 54.48% 1:2.02 |
| |
| |
| 08 157 477 61 1.31 3.04 43.01% 1:2.03 |
| 24 237 773 48 2.14 3.26 65.65% 1:2.60 |
| 57 89 363 76 2.49 4.08 60.96% 1:1.16 |
| 52 185 772 127 2.29 4.17 54.9 % 1:2.46 |
| 49 38 149 14 1.71 3.92 43.68% 1:1.45 |
| 53 118 376 10 2.20 3.19 69.01% 1:3.05 |
| |
| |
| |
| |
| |
| 2 0 0 0 0 0.00 0.00 0.00 1:0.25 |
| 16 25 75 7 1.83 3.00 60.98% 1:1.58 |
| 13 8 30 1 1.43 3.75 38.1 % 1:2.10 |
| 30 299 1153 180 2.18 3.86 56.52% 1:1.98 |
| 98 322 1132 130 1.83 3.52 51.94% 1:2.22 |
| 28 17 84 5 1.87 4.94 37.78% 1:1.41 |
| 0 0 0 0 0.00 0.00 0.0 % 1:0.00 |
| |
| 18 422 1581 272 33 64 198 17 74 97 364 26 10 5 15 1 10 5 7 1.00 3.00 33.33% 10 0 0 0 0.00 0.00 0.00 0.00 16 25 75 7 1.83 3.00 60.98% 13 8 30 1 1.43 3.75 38.1 % 13 8 30 1 1.43 3.75 38.1 % 20 1153 180 1.83 3.52 51.94% 28 17 84 5 1.87 4.94 37.78% |



JOIN THE AVID TURKEY HUNTER SURVEY TEAM

ARE YOU PASSIONATE ABOUT TURKEY HUNTING?

WOULD YOU LIKE TO CONTRIBUTE TO THE CONSERVATION AND MANAGEMENT OF TURKEYS IN ALABAMA?

IF YOUR ANSWER IS YES, THEN READ ON.

The Avid Turkey Hunter Survey was initiated in 2014 as a means of collecting long-term data on turkey activity and population numbers. The data collected by cooperators forms the basis for this report. We appreciate all of those who took part and need much more participation. The more hunters that participate the better our data will be. From this dataset, biologists at ADCNR gain valuable information on statewide and regional trends in gobbling activity, hunter effort, harvest rates, age structure and sex ratios. This knowledge ultimately helps ADCNR make decisions that link the interests of sportsmen with management of the state's turkey resource. These decisions directly affect your recreational opportunities as a sportsman and conservationist. The data you collect will provide valuable insight concerning questions such as should the season or bag limit be changed or left the same? Will certain regulations improve or degrade the quality of turkey hunting? These are topics that should be vitally important to the avid turkey hunter.

Participation in this process allows hunters a unique opportunity to directly contribute to the conservation and

management of turkey in Alabama. Participants will receive a copy of "Full Fans & Sharp Spurs," the Alabama Turkey Program annual report that discusses turkey population trends, biology and management in each area of the state.

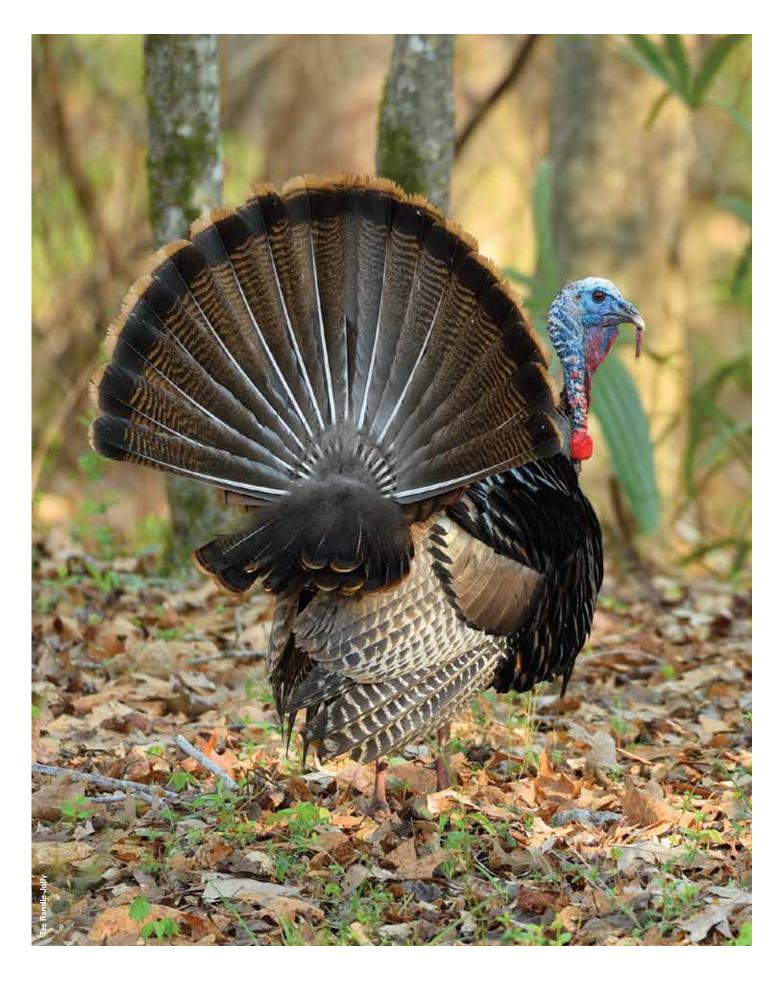
How Can I Participate?

If you turkey hunt in Alabama you are eligible and encouraged to participate. The only cost to you is a minute or two of your time following every hunt to record information on what you observed. Many hunters keep a hard copy of their data and enter it on our research website at the end of the season, while others enter their data each day.

If you would like to become involved, please contact the ADCNR Turkey Program Biologist listed below or go to www.outdooralabama.com/wild-turkey. Your efforts will assist ADCNR in monitoring Alabama's turkeys to make decisions in the best interest of the resource and the hunters. \checkmark

For questions or to participate in the survey, please contact:

Amy Silvano, Assistant Chief Alabama Division of Wildlife and Freshwater Fisheries, Wildlife Section amy.silvano@dcnr.alabama.gov







GAME CHECK & WILD TURKEYS

The 2017-18 seasons marked the second year of mandatory Game Check for deer and turkey. We commend all who lawfully complied with the recording and reporting their harvests. Your participation enables wildlife biologists with WFF to make better management decisions on your behalf. Harvest data obtained through Game Check provides resource managers with information that was unattainable in the past. From1963 and through 2017, WFF conducted an annual hunter harvest mail survey. The survey provided useful information regarding the number of deer and turkey harvested. However, the mail survey sampled only licensed hunters which represents less than

50% of the estimated hunting population within Alabama (USFWS National Survey of Fishing, Hunting, and Wildlife-Associated Recreation 2011). Unfortunately, a better understanding of the state's deer and turkey harvest, and how harvest is distributed across the state and throughout the season was needed to inform management decisions. The incomplete representation of harvest and harvest distribution for deer and turkey can lead to misinformed management decisions that could negatively impact species populations and ultimately hunter dissatisfaction with harvest opportunities.

The new mandatory Game Check allows for harvest data to be obtained from both licensed and license except hunters for a more accurate representation of harvest statewide. Through Game Check participation, biologists can observe trends in harvests at the county level, statewide, or on specific public landholdings such as wildlife management areas. In addition, Game Check provides data on harvest characteristics such

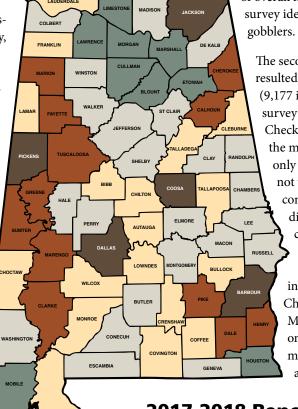
as harvest timing and intensity during a season. Accumulation of more detailed and representative harvest data over multiple

seasons offers biologists a means for targeted management recommendations to ensure healthy and sustainable populations of wild turkeys. For turkey hunters, this translates to more gobbling birds and ample harvest opportunities.

As with any new program, change sometimes can be slow to accept. Beginning in the 2017-18 season, we transitioned from our traditional harvest mail survey to a more efficient telephone survey performed by Responsive Management, Inc. to acquire hunting and harvest information for comparative analysis with Game Check. The updated harvest surveys poll both license and

license exempt hunters for a better representation of overall harvest statewide. Our 2017-18 harvest survey identified a turkey harvest of 28,093 gobblers.

The second year of mandatory Game Check resulted in a total of 9,623 turkeys reported (9,177 in 2017). Comparing the telephone survey harvest estimate against Game Checked turkey, reporting compliance with the mandatory Game Check program is only at 34.3%. Obviously, compliance is not where it needs to be. However, we are confident that over time as more hunters discover how simple the process is to record and report as well as knowing this information will guide future management decisions, compliance will increase. Please do your part to Game Check and champion the cause to others! More information about Game Check is on the back cover of this publication and may also be found at www.outdooralabama.com. ¥



2017-2018 Reported Turkey Harvest by County

Total Harvest for 2017-2018 Hunting Season (November 2017 - April 2018) 1 - 78 79 - 130 131 - 174

175 - 220 221 - 340

Turkey Harvests Reported through Game Check

2018 Reported Turkey Harvest Per Hunter*

| • | • | |
|--|--|--|
| # of Turkey Harvested Per Hunter | Frequency for #Turkey Harvested Per Hunter | % Frequency for #Turkey Harvested Per Hunter |
| 1 | 3,420 | 61.63% |
| 2 | 1,177 | 21.21% |
| 3 | 545 | 9.82% |
| 4 | 227 | 4.09% |
| 5 | 178 | 3.21% |
| | 5,549¹ | |

¹ Number of Unique Turkey Hunter IDs in Game Check *Totals do not include automated telephone reporting data

2018 Season Harvest Totals

Harvest Total Without Auto Phone Reporting **9,213**Total Harvest **9,570**

in a hunter's lifetime.

2017 Reported Turkey Harvest Per Hunter*

| # of Turkey Harvested Per Hunter | Frequency for #Turkey Harvested Per Hunter | % Frequency for #Turkey Harvested Per Hunter |
|--|--|--|
| 1 | 3,184 | 62.59% |
| 2 | 1,098 | 21.58% |
| 3 | 455 | 8.94% |
| 4 | 222 | 4.36% |
| 5 | 123 | 2.42% |
| | 5,0871 | |

¹ Number of Unique Turkey Hunter IDs in Game Check *Totals do not include automated telephone reporting data

2017 Season Harvest Totals

Harvest Total Without Auto Phone Reporting **8,266**Total Harvest **9,103**



If you would like to download a First Harvest certificate, visit www.outdooralabama.com/hunting.



MAKING THE "MAST" OF YOUR TURKEY PROPERTY

By Jud Easterwood, Wildlife Biologist, Alabama Division of Wildlife and Freshwater Fisheries

Wild turkeys will consume a myriad of foods and are essentially opportunistic feeders. They will eat whatever they can find most available throughout the year, which is important since food availability changes rather drastically with the shifting seasons. During the first several weeks of life, early successional habitat replete with native grasses and forbs is critical for poult development and survival. After this vulnerable stage of life, food needs shift from an insect-based diet to more of a seed, fruit, nut, berry, and vegetation-based diet. Early successional habitat remains a critical component to thriving turkey populations; however, when viewing needs through an individual adult turkey prism, the importance of hard and soft mast increases significantly.

When judging quality of turkey habitat regarding mast, there are several factors such as diversity, quality, and accessibility that influence the impact of mast on turkey populations. Once these factors are assessed, there are management options that can be put into place to maximize productivity across the year and into the future.

DIVERSITY

The first step is to inventory which mast-producing species are present. When "mast" is mentioned most folks think "hard mast," and more specifically, acorns produced by oaks. When inventorying oaks, an important consideration is

it takes only one year for white oak acorns to mature, whereas it takes two growing seasons for red oak acorns to mature. Not only should species and family (white vs. red) of oaks be considered, but other nut



producers such as beech and chinkapin should be assessed as well. A diversity of nut-producing species in the forest increases the odds of having at least some hard mast produced each fall and ensures against total crop failure in a given year.

In addition to hard mast, plants that produce soft mast are critical to turkey populations throughout the year. Fruit and berry producers such as black gum, dogwoods, hawthorns, Chickasaw plums, American plums, muscadine, black cherry, persimmon, blackberry, blueberry, mulberry, American beautyberry, greenbriar, sumac, and poison ivy are just a handful of species that can be found growing naturally across Alabama. A scouting trip through a property can reveal the abundance of these soft mast producers and begin to provide insight to habitat quality across the seasons. While mulberries, wild plums, and blueberries peak in late spring to early summer, blackberries, black cherries, muscadines and other wild grapes mature a bit later and are often available for a longer period through the heat of summer into early fall. American beautyberry, dogwood, sumac, gallberry, wax myrtle, and greenbriar berries mature much later and are available in early fall sometimes persisting into late fall and early winter, being particularly important during years of poor acorn and nut production.

QUALITY

Once inventory has been taken on the property, an important item to consider is the quality of mast producers. The first step is to identify trees that are better producers in the forest. This should be done over a period of a few years, as trees cycle production and, based on a variety of factors, experience "boom or bust" years. A good method for rating your oaks for productivity can be found on the Quality



Deer Management Association website at: www.qdma.com/survey-acorns-now-improve-production. This is a great tool to initiate the management process for oaks as well as other mast-producing species. In short, once you determine which trees are the best producers, the less desirable species or less productive trees may be removed. Trees that are removed will open the canopy and allow sunlight to reach the forest floor, allowing "turkey friendly" grasses and forbs to emerge. The removal of competitive trees also allows the more desirable trees to access more water and nutrients, bolstering their mast productivity even more. It is typically a good idea to consult with a wildlife professional if you decide to move forward with a wildlife-friendly timber harvest.

ACCESSIBILITY

Just because a property might have a good diversity of quality mast producers, their juxtaposition with each other, as well as with useable turkey habitat should be considered as well. A strong producing hardwood stand in the middle of a four-year rough clearcut might put a ton of acorns on the ground, but if turkeys

will not move through the surrounding habitat to get to the acorns they are of no value to the population. While there is nothing better than a thorough "boots on the ground" assessment of habitat, studying a recent aerial photograph can provide valuable information regarding diversity and layout of habitat on property you can manage. The best use of aerial photography, however, might be its use to evaluate neighboring properties allowing you to factor in habitat types of adjoining properties. This information can then be used to determine which management practices are most needed for turkeys in the area.

To improve accessibility for ranging turkey flocks, mast-producing trees and shrubs can be maintained, enhanced, or planted in strategic locations. When planting, consider a variety of mast producers (diversity) along roadsides, field edges, fencerows, or even scattered throughout wildlife openings on the property. Tree nurseries now offer more vigorous stock of many desirable mast producers. Selecting these, using tree protectors and reducing competing vegeta-

tion around the newly planted trees is the best way to ensure establishment. An added benefit of planting in this manner is it facilitates exclusion of fire on prescribed burn-managed properties; i.e., these are places that can easily be disked around or raked around to prevent damage from prescribed burns.

Considering accessibility on a smaller scale, chinkapins can be enhanced and made easier to reach for wild turkeys by cutting the stem at the ground surface, which will produce dense thickets within a few years. This provides cover and food for turkeys as well as other wildlife species.

Turkey flocks depend on a variety of food items across the year. By providing the most diversity of quality mast producers scattered in ideal locations on your property, the odds increase that the flock remains healthy even during years of poor hard mast production. Perhaps more importantly, it increases the chance that turkeys will want to spend time foraging on your property year-round, whether it is fall, winter, summer, or spring. \checkmark



MAXIMIZING MARGINAL HABITAT FOR WILD TURKEYS

By Courtenay Conring, Wildlife Biologist, Alabama Division of Wildlife and Freshwater Fisheries



If you have lived in Alabama long enough, you have probably seen turkeys crossing or hanging out by or in a road. At times you probably tried to dodge them, maybe even cursed them a little, then went on about your day, but have you ever wondered why turkeys were there in the first place? The simple answer is, wild turkeys like openings. Openings, whether deep in a remote tract of land or in a field along a highway, attract wild turkey use throughout the year.

In this article, I use the term "opening(s)" to describe an area that is mostly comprised of early successional grasses and forbs. These early successional grasses and forbs are what grow after a disturbance, such as burning, spraying, disking, etc., and require disturbance to keep woody species from taking over. Furthermore, openings are not dominated by trees and have little, if any, short, woody vegetation.

Roadside linear openings (RLOs), also known as rights-of-ways, are openings that run adjacent and parallel with a road. With roads already covering much of the landscape and continuing

to be built, creating and maintaining RLOs is one of the easiest ways to enhance wild turkey habitat. You may be thinking, "near a road is not exactly the safest place for a turkey." While you are correct, turkeys already use RLOs, including some that are less than suitable habitat. Since roads are everywhere, turkeys use RLOs, and conducting management practices along roadsides is relatively easy, we should strive for making them safer and more beneficial for the birds.

To get to the root of why turkeys use RLOs we must look back to some of the most basic instincts needed to survive: fight or flight. When dealing with predators, turkeys almost always choose flight. Just as flight is a strength for turkeys, knowing when to fly is also critical, which takes us to their partnering line of defense: eyesight. Archibald Rutledge, an avid outdoorsman and writer, once stated, "The turkey's eyes are such that he can see a bumblebee turn a somersault on the verge of the horizon." While that imagery seems exaggerated, from my time spent hunting turkeys, I agree with Rutledge's declaration and know their reliance on vision is one of the many reasons wild turkeys frequent RLOs.

RLOs not only give them higher visibility, but usually ample room to run for flight take-off when evading predators. In addition to allowing them the best opportunity to use their survival strengths, RLOs also serve as paths of least resistance when traveling, offer close escape cover, afford a place for courtship displays, and provide a buffet of seeds, sprouts, tubers, and bugs for forage.

Much like the fight or flight instinct, eating, hiding, and reproducing are every bit as important to wild turkeys. RLOs have the potential to provide opportunity for each of these activities as well. If you manage for diversity in forbs and grasses, you can give turkeys a reason to use RLOs all year. During the summer, RLOs are mainly providing turkeys, especially hens with poults, food and cover from predators. In the fall and winter, RLOs can still be used for food and for forming their cool season flocks, but the cover aspect has somewhat diminished by this point. During late winter/spring months, turkeys will use well-managed RLOs for consuming protein in preparation for nesting, for nesting itself, brood-rearing, and courtship activities.

Going back to turkey vision, it along with calling, are the key components in turkey courtship. Due to their linear design, RLOs allow calls to travel further without interference. When managed for shorter, less dense vegetation, RLOs increase visibility and mobility for courtship displays. Also, I would be remiss if I failed to mention an aesthetic value associated with openings regarding turkey courtship: To the hunter, bird watcher, and the hen, the iridescent feathers, patriotic head coloration, and strutting behavior of a wild turkey gobbler is most brilliant when showcased in the open sunshine.

Management practices to enhance turkey habitat on given RLOs will differ, but the general goals are the same. You want RLOs large enough that turkeys will use them and still close enough to trees so turkeys can fly up and escape predators. The recommended width of an RLO is not an exact size but is dependent on frequency of disturbance. For example, an RLO being managed for turkeys may need to be 30-50 yards wide off the road before a turkey feels comfortable using it along a busier highway. On the other hand, a hunting club road that receives little traffic is likely used as is for travel, but turkeys could use it for other needs if you simply widen it two dozer blade widths on each side and allow native plants to grow next to the road. This practice will also help the landowner maintain roads that hold water by allowing more sunlight to reach them and dry the wet spots.

Another positive for increasing your RLO widths, or widening the roads, is it is usually more cost effective than creating a new opening amongst a timber stand. If widening roads is not an option, the entire roadbed of seldom traveled roads may be maintained in native warm season plants through fall disking or planted with warm or cool season crop such as chufa, millet, and clover.

Once you have created the space for the RLOs, your goal is to have a diversity of forbs and grasses to grow in them. Having a diverse array of forbs and grasses means you have species flowering, seeding, and dying at different times during the year, taking turns providing food and cover for turkeys. To achieve this goal, you first need to assess what forb and grass species are occurring there naturally. It will take a full year if you create your RLOs using a dozer or a bush hog and a disk to grasp what is in your seedbank. Once you have an idea of what species are present, you can research online or reach out to a wildlife professional, such as a biologist, consultant, or county extension agent, to determine whether your forbs and grasses are beneficial to turkeys and decide what steps to take next.

If you have desirable forbs, such as ragweed, clovers, and partridge pea, and grasses/sedges like crabgrass, broomsedge, or yellow nutsedge, then it is a matter of keeping them disturbed on a routine basis (usually a two-year rotation is the maximum you want to wait between disturbances). Disturbance could be running a prescribed fire through your RLOs. If this technique is used, remember to engage or consult someone experienced in prescribed fire techniques. Other common disturbances used on RLOs are mowing, disking, and spraying herbicide. Whichever disturbance you choose, you should alternate your RLOs so you always have some standing cover and food while the disturbed RLO regenerates.

It should be mentioned that stands of great forbs and grasses can become too dense and difficult for turkeys to use. Disturbance also helps with the vegetation density issue. If you are unsure whether your RLO vegetation is too dense, go to the edge of your RLO and get down on the ground in a push up position. Once in position, look in to your RLO and search for little travel corridors. If your vegetation is too dense, the first 5 inches off the ground will be too thick for anything small, like a turkey poult, to walk through. If you can see openings and small travel corridors, the density of your vegetation is probably just right.

If you are not one of the lucky people who have a naturally phenomenal seed bank in their RLOs with little to no management effort, do not fret! You might have to do a little more work to get the results you want, but they are still easily attainable once you have the right information. As if turkeys were not enough incentive to manage your RLOs, these practices also benefit many other species, such as songbirds, white-tailed deer, and Northern bobwhites.

RESOURCES AND ASSISTANCE

There are ample free resources, from wildlife professionals to books and articles online, that can describe what plants turkeys prefer in RLOs, or rights-of-ways, and how to manage for them. The Alabama Division of Wildlife also has a Technical Assistance Program, with biologists available throughout the state to provide guidance on wildlife management options for your property. \checkmark





NATIONAL WILD TURKEY FEDERATION

Craig Scruggs, Alabama State NWTF Chapter President



When I joined the NWTF many years ago, I had no idea just how big a part they played in preserving the very ideals that I grew up with. I came to understand how important conservation is to hunting, that if you take from nature, you find a way to put back, and you respect the outdoors and teach others to do the same. The NWTF brings together hundreds of men and women from all walks of life who share the same

passions and values. Yes, the NWTF is about turkeys, but it's so much more.

Personally speaking, I believe working with the state's youth has been one of the most rewarding experiences of my time in NWTF. Archery in the Schools has been a huge hit, providing kids with a healthy outlet for their curiosity and energy. I've seen our volunteers mentor kids who have no parents to show them the outdoors. I've witnessed the faces of handicapped men, women, and children light up when they get the opportunity to go hunting. The word "turkey" is in the name of the organization, but it's "people" the NWTF really cares for, and isn't that what this life is all about? God gave us wildlife, and the NWTF is proof that He can use that wildlife to bring people together.

In my time as state chapter president, the Alabama NWTF has provided funding for and/or participated in habitat management,

purchased habitat equipment, invasive species control, mentored hunts, JAKES events, Archery in the Schools, supported public land acquisition, and supported travel for science-based meetings. The national board also entrusted the property in Elmore County to our care and management. When you support your local NWTF by attending banquets and purchasing merchandise, and when you choose to buy the NWTF tag, please know that your money is going to one of the many activities and management projects that the NWTF supports.

Our organization is growing every year. I've seen firsthand how the NWTF board of directors and staff work tirelessly so that future generations can love and appreciate the sport of hunting; but volunteers are the backbone of this organization, and your service and dedication do not go unnoticed. No one waves a magic wand and turkeys appear for us to hunt. There's a lot that goes into creating habitats, protecting our Second Amendment, seeing that laws are upheld, and being good stewards of the land. I have no doubt that the NWTF will continue this mission for those who come after us, but we must all educate our children and grand-children so that this blessing of nature can continue. I hope you will continue to support the NWTF in their efforts.

August 2019 will bring to an end my four years at the helm of the Alabama NWTF Chapter. I cannot say enough good things about our state board of directors and staff, and I also want to thank my wife for her help and support. Thank you for allowing me to serve as your state chapter president. It has been an honor and a privilege I will never forget. Save the habitat. Save the hunt. \checkmark

Brandon Bobo, NWTF Regional Biologist



I am thrilled to see us continuing to obtain data and supply this publication for turkey hunters and conservationist across Alabama for now a half decade. The data that you provide as an Avid Turkey Hunter Survey participant further enhances the data that we now have through the implementation of Game Check. The detailed data this report

provides paired with the trend data we observe through brood surveys, and now mandatory harvest reporting, really expands our ability to make informed decisions about what recommendations we would advise through the State Turkey Management Committee. As I have been travelling around the state over the summer, I continue to hear excellent reports of multiple poults per hen, which gives me hope that this indicates an above average nest success rate. I've also received various emails, phone calls and texts referencing multiple poults with hens. This all points to a great season two years down the road, when those hatchlings have full fans!

I continue to write annual reports that look exceedingly as impressive as the prior year's report for this publication, when it comes to the accomplishments of the Alabama State Chapter of the National Wild Turkey Federation. This year is no different, as the commitment and relentless dedication of our members and volunteers have bolstered us into another banner year for NWTF in Alabama. I continue to applaud and thank all of NWTF's members, volunteers, sponsors, partners and donors, as you are all the lifeblood of our organization. I would be remiss if I did not pay homage to our partners, without whom we would never accomplish the feats that have been seen throughout the years: the Alabama Department of Conservation and Natural Resources, Natural Resources Conservation Services, U.S. Forest Service, Department of Defense, Alabama Forestry Commission, U.S. Fish and Wildlife Service, The Nature Conservancy, The Longleaf Alliance, Alabama Forestry Association, American Forest Foundation, Alabama Cooperative Extension Services, Alabama 4-H Foundation and several others not listed.

As always, I'd like to take a moment to thank my wife, Ashley, for putting up with me in those seasons we love so dearly to be outdoors pursuing God's creation, and I'd like to thank my daughter, Karlie, for filling my life with so much joy! Again, another extension of gratitude belongs to my friends, colleagues and fellow NWTF members, as you all continue to fulfill my spirit to press on towards NWTF's mission to conserve the wild turkey and preserve our hunting heritage. Last, but certainly not least, a thank you is owed to all of those who fight or have fought for this great country; it is you who preserve our freedom to enjoy our way of life!

For the first time in over half a decade, I've now come up empty-handed at the end of two seasons. Well I shouldn't quite say "empty," as I've been filled with lessons learned and thrilling, heart-pumping, adrenaline-filled moments. I hope all of you had a better season, and I look forward to another year to apply those lessons learned in pursuit of more of those chest-pounding moments! \checkmark



Rodney Logan receives a Winchester Longbeard SXP 20-gauge shotgun from Alabama National Wild Turkey Federation (NWTF) State Chapter. Pictured with the happy winner is NWTF Regional Director Matt Wilkins. Logan, an avid turkey hunter from Ariton in Dale County, was randomly chosen from all 2018 Avid Turkey Hunter Survey participants.

2018 Alabama Wild Turkey Report

knowledge ultimately helps the WFF make manage-

ment decisions that link the interests of sportsmen

with the wise use of the state's turkey resource. Thank

you to all the hunters who participated in the survey and thanks to the Alabama Chapter of the NWTF for

their strong support and for supplying the shotgun

for the drawing.



ALABAMA'S NWTF OFFICER OF THE YEAR



Senior Conservation Enforcement Officer Jody Yancey

The 2019 National Wild Turkey Federation Officer of the Year for Alabama is Senior Conservation Enforcement Officer Jody Yancey of Cherokee County. He is a single father with two daughters. He does taxidermy work and volunteers as a softball coach at a local high school in his spare time.

Officer Yancey simply loves anything to do with turkey hunting, especially enforcing conservation law designed to protect them for future generations. In addition to protecting

the wild turkey through his work, he is also an active NWTF member and avid turkey hunter, having successfully completed two turkey hunting Grand Slams.

Officer Yancey began his career with the Department of Conservation and Natural Resources in 2016 after spending six years as a police officer with the City of Guntersville and the Town of Fyffe. During his first turkey season working enforcement with the Department, Officer Yancey made 18 turkey hunting related cases. From September 2017 through August 2018, in only his second year as an enforcement officer, he made 137 arrests and assisted on 90 others. He also issued or assisted with 133 written warnings of violations. Included in these totals were 12 arrests for hunting turkey by the aid of bait and two arrests for hunting turkey without a non-resident license, one hunting turkeys without permission arrest, and nine warnings for other turkey hunting violations. The manner in which he enforces the law speaks to Officer Yancey's devotion to the wild turkey and to the protection of our natural resources.

On the first weekend of the 2018 spring turkey season, Officer Yancey was checking a piece of property for violations. He heard someone on the adjoining property calling turkeys and soon after

heard what he believed to be a rifle shot. Upon investigation, he discovered three individuals seated near an active corn feeder, all of whom denied they were hunting even though they were dressed in camouflage and in possession of firearms. When asked about the rifle shot, one hunter replied that he was shooting at a red bird. Yancey artfully convinced the non-resident hunters to be forthcoming with the truth. All three were charged with hunting turkeys with the aid of bait and the hunter whose family owned the land was charged with using a prohibited firearm, for choosing to turkey hunt with an AR-15 rifle.

Also during the 2018 turkey season, Officer Yancey had an encounter with two juveniles who were poaching on some hunting club property. After turning them over to their parents, Yancey decided to go the extra mile. He asked the president and members of the hunting club to mentor the juveniles. They agreed, which provided the young turkey hunters a place to hunt as well as someone to train them in the traditions of safe and ethical hunting.

Officer Yancey also realizes the importance of public outreach, partnerships and the absolute necessity of providing opportunities for today's youth to experience our natural resources. He has been actively involved in the state's Archery in Schools program by helping to set up and judge the state championship in Montgomery. He not only manages the hunter education needs in Cherokee County, but routinely volunteers to assist with classes in the adjacent counties. He has also assisted with organizing and working several youth shooting sports events, including the Ducks Unlimited event in Cherokee County and a Department of Conservation sponsored event in Marshall County.

If you have an encounter with Alabama Senior Conservation Enforcement Officer Jody Yancey, please congratulate him for being chosen as the 2019 National Wild Turkey Federation Officer of the Year. He is truly deserving of the recognition and will wear the title with the pride and honor that only a devoted turkey hunter and NWTF member can truly appreciate. ✓





NWTF HUNTING HERITAGE SUPER FUND AND TAG FUND 2018

This year has once again exceeded the year's past in terms of production for conservation on the ground as well as outreach and education for future hunters. As a bit of background regarding the Hunting Heritage Super Fund, these funds are generated through our fundraising events such as banquets, major donor events, gun blasts, etc. This is why it is imperative that our volunteers continue to remain the driving force behind our organization, and it becomes increasingly important to become an active NWTF member in your local chapter if you are not already. For those of you interested in becoming a member please contact one of your local NWTF Regional Directors: Howard Dahlem at hdahlem@nwtf.net (North AL), Tyler Briggs at tbriggs@nwtf.net (Central AL) and Matt Wilkins mwilkins@nwtf.net (South AL).

Of the Super Fund dollars raised every year, the state chapter earmarks 20 percent of the total funds towards a land acquisition account. This account is maintained for the specific purpose of handling upfront expenses of newly obtainable lands for due diligence and appraisals. Without the NWTF, ADCNR would likely not be able to make the necessary initiation of the acquisition process, which is a real-life example of how encouraging the partnership between NWTF and ADCNR has become for sportsmen and women in Alabama. We are currently in the process of obtaining some additional WMA inholdings, and we're also excited about opportunities for the acquisition of additional Special Opportunity Areas (SOA) in the state. For more information on these new and innovative Special Opportunity Areas, please visit outdooralabama.com.

The Alabama State Chapter of NWTF also has a separate fund dedicated to the accommodation of requests and supplementation of sound habitat enhancement projects on the ground in Alabama, as well as the ability to meet the fiduciary needs of outreach events and educational programs such as Archery in the Schools programs, mentored hunts, Jake's Days, Women in the Outdoors Events, disabled hunter events among many others. These funds are generated through the sales of NWTF license plates in the state of Alabama, so keep in mind when buying your tag that almost \$50 of the purchase of that custom NWTF tag goes directly towards this account, and thusly, our initiative to Save the Habitat. Save the Hunt.

In combination of the Super Fund, Land Acquisition Account



Left to right: Steve Barnett, WFF Wild Turkey Project Leader; Justin Grider WFF R3 Coordinator; WFF Director Chuck Sykes; Keith Gauldin, WFF Wildlife Chief; and Alabama NWTF Board of Directors members Craig Scruggs, Craig Harris, Scott Brandon and Charlie Duckett.

and License Plate Fund, the Alabama Chapter of NWTF was able to devote \$379,562.49 towards conservation projects, outreach and education, as well as public land acquisition among various other areas of esteemed funding support.

NWTF utilized its abundance of partners nationally and within state boundaries to leverage dollars for the furtherance of our mission of wild turkey conservation and hunting heritage preservation. This past fiscal year of 2018, NWTF in Alabama was able to provide the initial dollars towards projects that total approximately \$1.4 million dollars. This means that for every \$1 raised and spent from NWTF, almost \$5 were leveraged to be utilized for all the aforementioned uses.

Another way we leverage these dollars is through the Wildlife Restoration Act, more commonly referred to as Pittman-Robertson dollars awarded to AL Wildlife and Freshwater Fisheries, which allow the obtainment of a 3:1 match generated from licenses, ammunition and firearms sales in the state. NWTF uses these funds to leverage our funds in one regard, while we also utilize other partners such as the U.S. Forest Service on Stewardship Contracts to generate a 4:1 match allowing us to maximize conservation work on National Forests. Other agencies and non-government organizations supply a plethora of matching funds as well. \checkmark

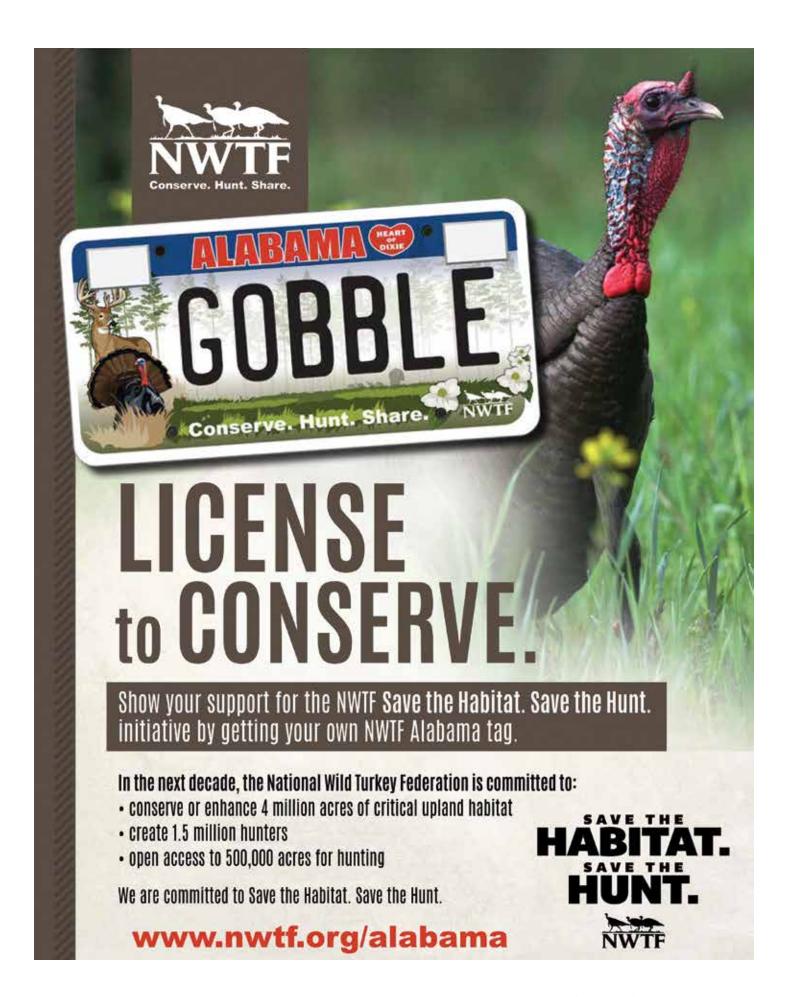
2018 ALABAMA STATE SUPER FUND EXPENDITURES

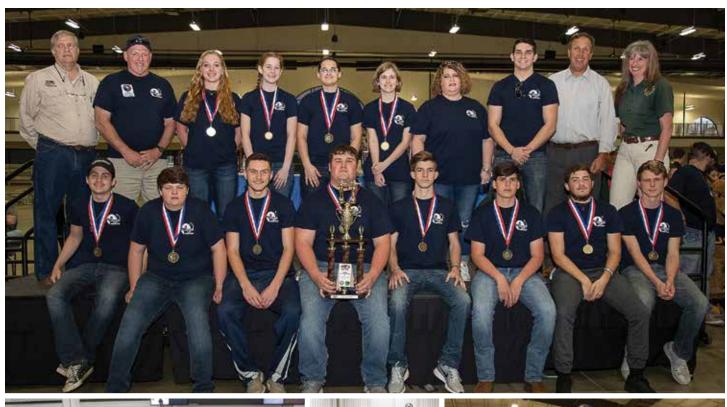
| SCHOLARSHIPS | 24 Local Chapter Scholarships | \$11,500.00 |
|--|--|--------------|
| | 1 State Scholarship | \$2,500.00 |
| EDUCATION | Alabama's Archery in the Schools Program | \$12,298.00 |
| | National Archery in the Schools Program Alabama state tournament | \$5,000.00 |
| | Educational materials | \$6,635.00 |
| | Full Fans and Sharp Spurs printing | \$7,162.00 |
| HUNTING HERITAGE | Hunting Heritage Foundation | \$5,084.00 |
| | National Assembly of Sportsman Caucuses | \$2,000.00 |
| OUTREACH EVENTS | 20 Total Outreach Events (Hunts, Jake's Days, etc.) across the state | \$10,100.00 |
| | 2016 NWTF Convention AL State Chapter attendance | \$29,684.51 |
| | Becoming an Outdoors Woman Event | \$5,000.00 |
| ALABAMA SUPER FUND PROJECTS - WMAS, | Habitat Projects | \$80,837.74 |
| SEED SUBSIDY, REWARDS, & RESEARCH | Gulf Coastal Plain Ecosystem Partnership Burn Crew support | \$10,000.00 |
| | Talladega Mountain Longleaf Conservation Partnership Burn Crew support | \$20,000.00 |
| | Research | \$3,250.00 |
| | Seed Subsidy and Conservation Seed Program | \$41,791.64 |
| | Conservation Enforcement Officer Equipment | \$1,820.73 |
| REMAINING TAG FUND PROJECTS | Jake's Memberships | |
| | Outreach Events | |
| | Hunter Education Specialist Position Support | |
| | Mentored Hunt Supplies | |
| | Administrative (operational expenses) | |
| | Local chapter committee meetings and incentives | |
| | District NWTF Biologist Support | |
| | Mail-out notifications, publications, and printing | |
| | District NWTF Biologist Support | |
| | Mail-out notifications, publications, and printing | |
| | Total: | \$124,898.87 |
| Total | | \$379,562.49 |



NWTF EXPENDITURES

















National Archery in the Schools Program

The NWTF has been a strong supporter of the National Archery in the Schools Program (NASP) in Alabama for 12 years. Not only has the Alabama Chapter donated thousands of dollars to this highly worthwhile program, but its members have also participated as volunteers at the annual state tournament.

NASP is designed to teach Olympic-style target archery to 4th-12th grade students. Core content covers archery history, safety, technique, equipment, mental concentration and self-improvement. Students shoot at bull's-eye targets placed in front of an arrow resistant net in their gymnasium. Equipment used is state-of-the-art and designed to fit every student. In addition, there are reading and writing assignments, physics and science projects, history lessons, and other essential scholastic achievements that turn a simple recreational activity into a fun and powerful learning experience. Archery is a life skill that people of all ages and physical abilities can participate in which can lead to better health and self-esteem.

The benefits of the program include much more than learning a new sport. Archery and other shooting sports have a direct benefit to wildlife conservation by way of money generated from the Pittman-Robertson Excise Tax applied to archery equipment. Many of the participants, their friends and families go on to become lifelong archers and lifelong

contributors to wildlife conservation through the purchase of equipment.

Alabama was the second state to implement the curriculum into the public-school system. Over 400 schools have purchased equipment and are conducting the program as part of the physical education curriculum. With a conservative estimate of just 150 children per school at 400 schools means approximately 60,000 Alabama school children are being exposed to archery programming each year. New schools enroll in the program continuously and we receive daily requests for information regarding the program from teachers, parents and schools.

This program culminates each school year with a state championship. We have grown from 200 youth attending the first state championship in 2004 to over 1,236 participating in 2018. Due to the popularity of the program and limited space at the venue, we began holding regional events to qualify for state. Last year we conducted nine regional events where 3,789 students attempted to qualify for the state championship. Next year we will increase the state event from one day to two, to be able to increase the number of schools and participants.

Next year's event will be held on April 5-6, 2019. Roughly 4,000 people will attend the state event including students, teachers, parents, volunteers and spectators. ✓



BECOME A HUNTING MENTOR



HAVE YOU EVER

INTRODUCED SOMEONE TO HUNTING?

Teaching someone the skills they need to be a successful hunter and cultivate a lifelong passion for the outdoors can be very rewarding. The future of hunting in America depends on you.



Become a hunting mentor and "Take'em hunting!"





Learn more about the mentor hunting program by visiting OutdoorAlabama.com or contact Justin Grider at justin.grider@dcnr.alabama.gov or 205-339-5716.

HABITAT. SAVE THE SAVE THE HUNT.



It gives us at the NWTF great pride to know that we are exceeding our goals at this halfway point of our 10-year Save the Habitat. Save the Hunt. Initiative. Thus far we've accomplished over 2.5 million acres of conserved habitat, with Alabama coming in second in the United States with 246,368 acres contributed! We've also accomplished 404,081 acres of public access to hunting, with Alabama accounting for 8,065 of those acres through public land acquisition. Finally we've been able to recruit over 1.2 million hunters across the country. The following is a list of the three main objectives for the initiative:

Conserve or enhance at least 4 million acres of upland habitat.

- Create hunting access on at least 500,000 acres of new available lands.
- Create 1.5 million new hunters through outreach and legislation.

The following list of accomplishments should motivate any avid turkey hunter, volunteer, or just outdoor enthusiast to get involved and on-board with NWTF in its initiative to Save the Habitat. Save the Hunt. With help from volunteers as well agency and organization partnerships, we have been able to boast an overabundance of accomplishments towards the Save the Habitat. Save the Hunt. Initiative in 2018 as follows:

Alabama Save the Habitat. Save the Hunt. 2018 Accomplishments

| | • | | | |
|--|--------------------|-----------------|----------------------------|--------------------------|
| PROJECT NAME | CONSERVED ACRES | ACCESS ACRES | AL CHAPTER NWTF DOLLARS | PROJECT MATCH DOLLARS |
| Public Land Project | | | | |
| Oakmulgee Thinning and Longleaf Planting | 818 | 0 | \$- | \$54,058.90 |
| Bankhead NNIS Removal | 325 | 0 | 1,386.00 | \$6,620.00 |
| Marion Co. Forestry Planning Committee | 453 | 0 | 1,483.10 | \$7,520.00 |
| TMLCP Burn Crew | 54,460 | 0 | 20,000.00 | \$200,000.00 |
| GCPEP Burn Crew | 23,578 | 0 | 10,000.00 | \$262,500.00 |
| Pelham Range Wildlife Openings | 38 | 0 | 4,500.00 | \$26,738.00 |
| Redstone Arsenal NWSG Plantings | 21 | 0 | 2,226.00 | |
| AL Division of State Lands Rx Fire | 2,012 | 0 | 5,250.00 | 5,250.00 |
| Barbour WMA Rx Fire | 1,814 | 0 | 62,692.64 | 208,386.85 |
| Choccolocco/Little River WMA Rx Fire | 805 | 0 | | |
| Charles D. Kelley WMA Wildlife Openings | 25 | 0 | | |
| Cedar Creek Rx Fire | 400 | 0 | | |
| Coosa/Hollis WMA Rx Fire | 1,939 | | | |
| Fred T. Stimpson WMA Wildlife Openings | 20 | 0 | | |
| Geneva WMA Wildlife Openings | 10 | | | |
| Jackson County WMA Rx Fire | 93 | | | |
| | | | | |
| CSP and Seed Subsidy | | | | |
| Seed Program Total | 28,108 | 0 | 41,791.64 | 41,791.64 |
| Totals: | 114,919 | 0 | 149,329.38 | 812,865.39 |



SPECIAL OPPORTUNITY AREAS (SOAs)

By Jeff L. Makemson, District III Supervising Wildlife Biologist

During the 2017-18 hunting season, the Alabama Wildlife and Freshwater Fisheries Division (WFF), in partnership with the Forever Wild Land Trust, embarked on new and exciting public land hunting opportunities. The Special Opportunity Areas (SOA) concept provides another option for resident and non-resident hunters searching for a change from traditionally managed public hunting lands.

Most of our Wildlife Management Areas (WMAs) are 20,000 to 90,000 acres in size. Many experienced and inexperienced hunters find this overwhelming when trying to decide where to hunt and not knowing if someone else is in the same area. This new model offers more of a private hunting club atmosphere, appealing to both traditional and non-traditional public land hunters.

SOAs are 3,000 to 7,000 acres in size, which is typically smaller than most traditional WMAs. SOAs are more suitable for a limited quota (randomly drawn permit) hunting format to reduce hunting pressure and increase the quality of the hunt and overall outdoor experience. This hunting concept offers a limited number of slots for a successful permit holder and guests to hunt a unit, usually 300 to 500 acres, for two to four days.

To reduce hunting pressure and increase the likelihood of a successful hunt after a unit is hunted, it may be two to three weeks before that unit is hunted again. It is very similar to the hunting experience one would expect to have when booking a private hunting lodge for a few days at a much cheaper and affordable price. A valid state hunting license, either all game or small game, depending on which type of hunt, and a Wildlife Management Area License are required to hunt any of the SOA limited quota hunts. Hunters are also required to have a free Conservation Identification Number. Out-of-state hunters are also eligible to register for an opportunity to hunt these unique areas. Most of the SOAs are in very rural and under-served areas of the state where hunting is a way of life and visiting hunters are very important to the local economy.

Each SOA has specific hunts for a variety of game species including deer, turkey, waterfowl and small game. Crow Creek,

Cedar Creek, Portland Landing, Uchee Creek, Fred T. Stimpson and Upper State are current land tracts designated as SOAs in Alabama.

SOA land tracts, size, location and type of hunting permitted are:

- Crow Creek (400 acres), located in Jackson County offers adult archery deer hunting for a permit holder and one guest and waterfowl hunting on select dates and times throughout the season for a permit holder and three guests.
- Cedar Creek (6,400 acres), Portland Landing (4,744 acres) in Dallas County and Uchee Creek (4,735 acres) in Russell County offer deer and turkey throughout those seasons for the permit holder and one guest and small game hunting on selected dates for the permit holder and three guests.
- Fred T. Stimpson (5,320 acres) and Upper State Sanctuary (1,920 acres) in Clarke County offer adult archery deer hunts for a permit holder and one guest, youth deer hunts for a youth hunter and youth guest with their supervising adult permit holder, and squirrel hunts for a permit holder, youth and up to five guests (at least one additional guest must be a youth). Fred T. Stimpson also provides a limited quota opportunity for a youth waterfowl hunt.

Interested hunters must successfully attain a limited quota permit through the limited quota randomized selection process administered through the www.outdooralabama.com website. To apply follow the "Hunting" link to "Special Opportunity Areas" and begin the registration process. \checkmark





TURKEY RESEARCH PROJECT UPDATE FROM THE ALABAMA COOPERATIVE FISH AND WILDLIFE RESEARCH UNIT

James B. Grand, U.S. Geological Survey, Cooperative Research Units, Dadeville, Alabama, barry_grand@usgs.gov

Prepared: December 10, 2018

As we enter the final year of the five-year project to examine the productivity and survival of eastern wild turkeys in Alabama, the results are starting to come in. While we are continuing to mark and monitor turkeys on all the study areas, we finally have some results to share. These first results are from research conducted by graduate students, Stephen Zenas and Matt Gonnerman, who started in the first year of the project and recently published their theses at Auburn University. Their theses focused on the survival and productivity of turkey populations on our study areas in northeast, west, and southeast Alabama. Survival and productivity are important aspects of any population. It is the net gain from survival or it's compliment, mortality, and production, that determine the growth rate or trend for a population.

Stephen's research examined mortality and survival rates. Specifically, he estimated the rates of mortality following capture, and the seasonal and annual rates of survival during the following years for the turkeys we marked. In the first chapter of his thesis, Stephen demonstrated that capturing and marking turkeys influences their survival for some time afterward. This was no surprise and has been demonstrated before in a wide variety of wildlife species. Stephen also confirmed another well-known fact that this capture-related mortality for turkeys is related to heat-stress and the effects are diminished when the weather is cooler. In fact, it is typical for researchers conducting projects such as this one to discard information from the first couple of weeks after marking to avoid underestimating survival rates.

The exact causes of mortality during this period are poorly understood and are of three general types. The first type is the

result of injury, which rarely occurs, but is always a risk when capturing and handling wild animals. Turkeys can be struck by the net, which travels at considerable velocity when propelled by cannons or rockets. We attempt to reduce this type of injury by taking extreme care to aim cannon nets above the height of turkeys and to never fire the cannon when turkeys are too near the net or have their heads up. Sometimes this requires a great deal of patience and we missed capturing more than a few turkeys to err on the side of caution. Turkeys may also injure themselves while tangled in the net or by thrashing about in holding boxes. Covering their heads with a dark cloth, removing captured turkeys from the net quickly and carefully, holding them in crates only if necessary, and using crates that are small enough to prevent excessive movement all serve to reduce capture-related injury.

The second type of mortality results from what is commonly referred to as capture myopathy. When animals are restrained, they sometime overexert themselves, which affects the blood flow to muscles. This can result in high levels of acid build up and may result in death of the muscle tissue. There is little that can be done to detect or reverse the effects of capture myopathy, so the best course of action is to prevent it. Many of the precautions described in the previous paragraph to reduce injury also reduce the risk of capture myopathy.

The third type of capture-related mortality is more difficult to assess and may result from marking animals using transmitters that are too large for their body-size or that reduce their ability to escape predators. For this reason, we only attached transmit-

ters to adults or poults that were nearly as large as adults. These birds were easily capable of carrying the transmitter in flight when released. Occasionally, we received reports of birds with harness-related injuries, but these were extremely rare. Nonetheless, we made adjustments to allow room for turkeys to move and grow in the transmitter harness and it was far too frequent that harnesses fell off because we left them too loose. Capture-related mortality is inevitable in wildlife research and we go to great lengths to minimize the losses.

We attempted to minimize the effects of heat-stress by capturing turkeys when the weather was cool. However, we could only capture turkeys on most of our study areas in August and September. As many of you know, the weather can be quite warm during this time of year. Prior to August, poults are too small to capture and handle safely. By October, hard mast becomes more available, and turkeys stop responding to bait. In January and early February, arguably the best time to bait and capture turkeys, deer season in Alabama is in full swing, and turkeys refuse to leave the safety of hardwood bottoms and dense woodlots. Soon thereafter, turkey breeding and hunting seasons begin; trapping during this period would be disruptive to breeding and capture-related mortality would cast dispersion on estimates of survival and harvest rates.

What did we do? We got creative and restricted trapping to early morning or evenings when the temperature was below 80 degrees. We also use air conditioning! You may have wondered if you saw an idling truck near one of our capture sites with the interior filled by plywood boxes just large enough to hold a few turkeys. When necessary, we used a fan or battery-powered leaf

blower to pump air into an ice-filled chest with a dryer duct channeling cooled air into the holding box. These "red-neck air conditioners" were not pretty, but they were effective.

One of Stephen's results that we did not expect was that the negative effects of capture on survival lasted much longer than was previously thought. Steve found that although the mortality rate after capture dropped rapidly after birds were released, the effects could still be detected for over 30 days afterward.

As expected, and after accounting for potential capture-related mortalities, the seasonal and annual survival rates Stephen estimated differed between males and females and between subadults, less than 1 year old, and adults more than one year old. He estimated that 44% of adult males survive each year, and about 24% were harvested. He also estimated that 48% of adult females survive annually. The survival rates of adults of both sexes are lowest in spring and summer, when males are harvested and distracted by breeding activities and females are vulnerable during breeding and nesting. We made no attempt to estimate the causes of mortality, except when hunters reported harvesting marked birds, because it is nearly impossible to distinguish between predation and scavenging. Interesting enough, subadult birds had higher survival rates than adults. Stephen estimated the survival rate of birds in this age group were 54% and 57% for males and females, respectively, from their first fall to the following spring. These are the first survival estimates for Alabama turkeys in over 30 years. Steve's adult survival estimates were considerably higher than recent estimates from populations in Kentucky and Kansas, but very similar to estimates from Georgia and Mississippi. His estimates of subadult survival were also



higher than estimates from Kentucky, but somewhat lower than those for turkeys in Georgia.

The second thesis published by one of the Auburn students came from Matt Gonnerman. Matt's focus was on the use of gobble counts and camera surveys to estimate turkey populations and to use the estimates of hen and poult numbers from those surveys to estimate the populations' productivity. Wildlife biologists often use indices to track abundance and detect changes in wildlife populations. If those indices are affected by the distribution of counts across an area or over a period of time, they can result in very different estimates of population size and trend. For this reason, a large part of Matt's research focused on the differences in turkey habitat use, because it affects our ability to accurately estimate the size of populations. Without a firm understanding of the relative number of turkeys in different habitats, it would be easy to obtain incorrect population indices and estimates by not distributing the survey effort correctly among habitats.

Matt also examined the detectability of turkeys on surveys. Much effort has been focused in recent years on determining the factors that affect our ability to count wildlife accurately on surveys of various types. So-called imperfect detection results not only from our inability to count every animal, but from the effects of time of day, weather, and habitat on our ability to do so without bias. Like the effects of habitat on density, the effects of time of day, weather, and habitat conditions on detection can result in very biased estimates of populations.

Matt used the results of thousands of gobble counts in a very complex analysis. He reported that as you might expect, gobble surveys were affected by temperature, wind condition, and differed among regions of the state. He found that use of areas by gobblers varied within the hunting season, and gobblers used more survey areas during the middle of the spring season than early or late in the season. He also found that wildlife openings were more likely to be used by gobblers when they were surrounded by a higher percentage of forest and when that forest was comprised of a greater percentage of pine than hardwood. He found a similar relationship between forest habitat and the density of gobblers. While he found that approximately onethird of wildlife openings were used by gobblers, he estimated that the density was lower than expected, averaging about one gobbler per two square miles.

The second part of Matt's analysis was based on data collected from camera surveys conducted in late summer at 172 wildlife openings spread across the four different areas in 2015 and 2016. Matt, his technicians, and fellow students reviewed over 296,000



images collected using game cameras. Only 2.6% of those images contained turkeys. As you might expect, hens were observed almost twice as often as jakes and gobblers, and poults were observed about half as often as jakes and gobblers. Matt's analysis showed that habitat surrounding wildlife openings affected the number and type of turkeys he saw in images. As the amount of pine forest increased, so did use of openings by turkeys; this was true for males, females and poults. Interestingly, the use by poults declined as the availability of wildlife openings increased. Matt estimated that across all four study sites, over 60% of wildlife openings were used by turkeys, but use varied from a high of 82% on Scotch to a low of 42% on Skyline. Only about 26% of openings across all areas were used by males, and use varied from 29% at Oakmulgee to 16% on Barbour. Females used openings less frequently than males, averaging 46% across all areas but use varied less, ranging from 36% at Skyline to 48% at Oakmulgee. Poults used 14% of openings on each study area.

Perhaps Matt's most interesting results were the densities of turkeys. He estimated the average density of turkeys across the study was 4.75 birds per opening. The density of males averaged approximately one gobbler per opening and was lower than the density of females or poults. Across all the sex and age groups the highest density of birds occurred at Scotch WMA and the lowest was at Skyline WMA. Perhaps the most disconcerting results were the low estimates of productivity. The highest estimate of poults surviving in late summer per hen was 1.3 at Scotch and the lowest was at Barbour where the poults per hen ratio was less than 0.5. These results, in conjunction with survival rates presented by Stephen Zenas, suggest that turkey populations on WMAs declined more rapidly than anyone imagined during 2015 and 2016. \(\neq \)

Wild Turkey Disease Mortality Form

The Alabama Department of Conservation and Natural Resources (ADCNR) is interested in documenting WildTurkey Mortality caused by disease. Monitoring this mortality will provide information to assess the impacts of disease and help better manage the wild turkey resource. Sportsmen can play an important role by reporting sick or dead turkeys and assisting the ADCNR 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 the ADCNR if you observe or have previously observed a sharp decline in a local turkey population.

HANDLING TURKEYS: Sick turkeys should be reported to ADCNR Wildlife and Freshwater staff. Fresh carcasses of dead wild turkeys 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). Submit the bird as soon as possible. However, if the turkey cannot be turned in to the ADCNR within 48 hours, it can be frozen as long as necessary.

CONTACTING THE ADCNR: Contact Assistant Chief Amy Silvano at 334-242-3469 or your local ADCNR Wildlife and Freshwater Fisheries District Office. Numbers are available on page 5.

RECORDING INFORMATION: Please record the following information and submit this form with the turkey.

| Name: | |
|---|---|
| Address: | |
| Phone: | _ Email: |
| Date turkey was found:// | |
| Location: (property, road, county, town) or G | PS coordinates: |
| | |
| | |
| | |
| Description of turkey when found: | |
| | |
| | |
| | ALABAMA. |
| Additional Comments: | Sil |
| | WINDUM SHERIES |
| | * PESHWATER |

47



HARVEST DATA IS CRITICAL FOR **EFFECTIVE WILDLIFE MANAGEMENT**

OUTDOOR AL

0+538+754 \$1MPH NE

Rules & Regulations

Season Bag Limits

Feeding Times

Sulligent

HARVEST REPORTING

Game Check

FIELD GUIDE

(e)

囲

WEATHER

Licenses

Add Location

Snapper Check

with game specific

Wildlife Management Areas

Hunt smarter with peak feeding times and moon phase details

76° 73



THE EASIEST WAYS TO CHECK YOUR HARVEST

- 1. Outdoor Alabama App
- 2. OutdoorAlabama.com/gamecheck





