A Message from the Chief

My favorite thing about working with the Wildlife Resources Division is connecting with hunters across this state and seeing the tremendous amount of great work our staff in the Game Management Section accomplishes each year serving our customers. This report outlines many of those accomplishments from around the state. Our customers devotion to hunting is what keeps us motivated to do all we can to ensure they have a great and safe hunting experience.

We hope this report provides some good insight to the variety of habitat management projects, population surveys, private land initiatives, and education programs ongoing within our section. We would appreciate any input on how we can make this report more beneficial in the future. As always, we encourage everyone to get out there and enjoy the wealth of outdoor recreational opportunities that Georgia has to offer.

1. **WRD Mission:** Conserve and promote fishing, hunting and wildlife resources through management, education and scientific research.

2. **WRD Vision:** Conserving diverse, healthy populations of fish and wildlife while maintaining related outdoor opportunities for every generation to enjoy.

3. **Game Management Overview:** Manages one million acres of land and more than 100 Wildlife Management Areas (WMAs) for hunting, fishing, wildlife enhancement, bird watching, hiking, camping and conservation education. Game Management conducts research and surveys to monitor hunter harvests, wildlife populations and habitats. These efforts support setting regulations and other management activities as well as providing technical assistance to landowners, private organizations and governmental agencies.

### HUNTING
- 642,545 residents hunt in Georgia
- Hunters spend more than 8.9 million days a year in the field
- Hunters account for $977 million in retail sales in Georgia, with a $1.6 billion ripple effect each year
- Hunting in Georgia is responsible for 23,996 jobs, $600 million in salaries/wages/earnings, $106 million in state and local taxes, and $145 million in federal tax revenue

### SHOOTING SPORTS
- More than 600,000 people participate in recreational target shooting in Georgia
- Shooters account for more than $532 million in retail sales with a total economic impact of $644 million
- Shooting provides over $243 million in salaries
- Shooting provides $41 million in state and local taxes and $58.8 million in federal taxes each year
The Game Management Section manages one million acres of land on more than 100 Wildlife Management Areas (WMAs) for hunting, wildlife enhancement, wildlife observation, hiking, camping and conservation education. This section also conducts research and surveys to monitor hunter harvests, wildlife populations and habitats. These efforts support setting regulations and other management activities as well as providing technical assistance to landowners, private organizations and other governmental agencies.

The Game Management Section also includes programs such as the Private Lands Program, the Hunter Development Program, the Forest Management Unit and statewide management programs for white-tailed Deer, Wild Turkeys, black bears, alligators and migratory birds.

The projects and work completed in this report reflect enhancements resulting from the passage of HB 208 in 2017, which increased hunting and fishing license fees.

Game Management leveraged additional license revenue with federal wildlife restoration funds to increase services and technical assistance to citizens, to improve habitat and access on WMAs and to create more awareness through educational programs. In FY 2018-19, the Game Management Section worked:

To improve wildlife habitat by:

- Using prescribed fire on 50,000 acres to enhance wildlife habitat
- Managing 6,700 acres of wildlife openings
- Planting over 3,300 acres of dove fields
- Managing over 5,100 acres of wetlands

To improve WMA access by improving and maintaining:

- 3,200 miles of roads
- 1,400 bridges, fords, and culverts
- 957 miles of trails
- 151 campgrounds
- 212 parking areas

And to manage healthy wildlife populations by:

- Banding over 3,400 ducks, doves and geese
- Checking over 370 black bear bait stations for black bear activity
- Examining 5,268 white-tailed deer and finding 100 cases of EHD
- Surveying over 171 miles of rivers, creeks, coastal areas, and reservoir shorelines monitoring American Alligator populations
Other Notable Accomplishments

On Wildlife Management Areas:

- 38,608 hunters harvested 4,269 deer
- 13,934 hunters harvested 866 turkeys

Customer Service Excellence:

- Responded to over 11,000 customer requests for assistance managing wildlife conflicts
- Private Lands Program biologists wrote conservation plans for 17 new 2019 contracts and completed over 175 follow-up contracts encompassing 33,000 acres
- Assisted 97 contacts across 120,269 acres with site-specific deer management needs as part of the new Georgia Deer Management Assistance Program

WRD Shooting Range Renovations:

- Wilson Shoals: Renovated 100-yard Rifle Range, Added Pistol Range & Office Building & Classroom
- Richmond Hill: Renovated 100-yard Rifle Range, Added Pistol Range & Classroom
- West Point: Renovated 100-yard Rifle Range, Added Berm for Pistol Shooters, Renovated Restrooms

New Game Management Programs

Urban Wildlife Program

As the population in Georgia continues to grow, more humans and wildlife are interacting. These interactions can be both positive and negative. Negative interactions can cause conflicts between humans and wildlife. Most of these conflicts in Metro Atlanta are now handled by the Urban Wildlife Program. Last year the Game Management section filled 6 positions in this new program to provide exemplary customer service and outreach to citizens of Metro Atlanta. In the program’s inaugural year, the Urban Wildlife Program team responded to 320 calls from Georgia residents in need of assistance.

Georgia Deer Management Assistance Program

Georgia Deer Management Assistance Programs are used by most southeastern states to address site-specific deer management issues with science-based flexibility on private lands. DMAPs offer the ability to resolve site-specific deer management issues at the individual property level through data collection and analysis while maintaining simplified and less complex hunting regulations across a much larger geographic area that are responsive to hunter desires (e.g., reduced doe bag limit). This strategy protects more casually managed properties from over-harvest, while affording science-based flexibility for more intensively managed properties.

Last year the Game Management section hired 3 wildlife biologists and appointed Charlie Killmaster, Statewide Deer Biologist to lead this program to assist private landowners in meeting the white-tailed deer management goals.
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YOUR LICENSE DOLLARS AT WORK
When you purchase a hunting or fishing license, did you know that it directly affects the work that WRD is able to do for you? Some examples of projects completed this past year using license dollar revenue, includes:

- Shooting Range Renovations: Extensive renovations were completed at West Point, Wilson Shoals and Richmond Hill shooting ranges.

FY 19 REVENUE SOURCES

- Other Funds* $25,654,005 32%
- Federal Funds $32,237,376 41%
- State Funds: Other State Revenue $3,001,880 4%
- State Funds: License Revenue $18,139,497 23%

FY 19 EXPENSES

- Administration/License & Boat Registration $7,876,007 9%
- Wildlife Conservation $10,780,024 14%
- Game Management $44,319,348 56%
- Fisheries $17,027,380 21%

*Other funds made up of license plate sales, donations, timber revenue, bond funds, etc.
For several years, turkey reproduction and harvest have been trending upward in Northwest Georgia. The 2019 turkey season exemplified this positive trend with Polk County leading the state in terms of total harvest on private lands.

For Region 1 WMAs, a total of 3,938 hunters harvested 288 turkeys -- an impressive number for both the region and statewide. The year 2019 is the second highest harvest total for Region 1 WMA since surveys began.

Small areas resulting in small sample sizes can be misleading at times. It doesn’t change the fact the J.L. Lester in Polk County had the highest turkey harvest per square mile compared to any other WMA.

Sheffield WMA (parts of which are in Polk County) also had a respectable harvest of almost 2 gobblers per square mile.

Back ing this regional trend, 3 of the top 4 turkey producers over the past 10 years are areas in Polk and the surrounding counties.
Responded to over 2,712 customer requests for assistance managing conflicts with wildlife.

Improved over 400 acres of woodland habitat, by promoting forage using mechanical or chemical manipulation.

Issued 105 homeowner and landowner permits authorizing the removal of nuisance wildlife.

Prescribed burned 3,128 acres to achieving much of the region’s prescribed burning goals despite poor weather conditions for much of the burn season.

Spread over 4,000 tons of gravel on WMA roads to improve public access.

Planted 132 acres of summer and/or fall food plots with soybean, crimson clover, durana clover, sorghum, wheat and oats.

Planted 232 acres of dove fields on 7 WMAs with sunflower, brown top millet, sorghum and corn.
Black bears are not unique to Northeast Georgia, as it has the largest population in the state. This fact often comes with exciting opportunities for Georgia’s hunting customers and frustration for farmers and landowners. The summer of 2018 saw Northeast Georgia bear complaints spike to over 732 contacts. This included some complicated situations in resort neighborhoods where bears are often fed by tourists and homeowners. In one such neighborhood, a sow and 3 cubs learned to break-in and get what they wanted. In total, they broke into 12 houses, 9 garages, 3 cars and stole a picnic basket as well. This resulted in thousands of dollars in damage.

In 2018-19, bear harvest in Region 2 counties outside of WMA’s rose from 135 to 320 bears, a 137% increase. Interestingly, in years where increases occur outside of WMA’s, the WMA harvest is not as high. This may occur because locals tag out before public land hunts occur. Bear harvest on Region 2 WMAs dropped 29% from 2017-18 to 2018-19.

These results confirm successful bear management in action. As a result of the high bear harvest in 2018-19, Northeast Georgia bear complaints decreased 29% for the same period this summer.

Even with the reported damage and potentially dangerous encounters, area residents did not want the bears trapped, removed, or euthanized. The decision to intervene ultimately came with much deliberation with community safety in mind.

During this time, food resources were scarce at higher elevations, bringing hungry bears in areas with high human populations. This is not always a negative, as hunters enjoyed the 2018-19 bear season with animals at lower elevations and closer to settlements.
• Prescribed burned a total of 1200 acres.
• Responded to 2000 customer requests for assistance managing conflicts with wildlife, ~29% of those were bear complaints.
• Mechanically “daylighted” 4 miles of roads.

• Trapped and removed 164 Feral Swine from WMAs.
• Completed 2 reservoir goose surveys and 14 mast surveys to estimate wildlife populations and trends.
• Spread over 3475 tons (193 loads) of gravel across 32 miles of roads to improve public access.
• Sprayed, limed, fertilized, or planted 552 acres to promote food plots with iron clay peas, crimson, sorghum, clover, chicory, wheat, oats, or rye.
• Planted 123 acres of dove fields on 4 WMA with sunflower, brown top millet and corn.
• Mowed 500 acres of wildlife openings. and sidearm mowed 69 miles of roads.
• Maintained 40 miles of boundary.
• Rebuilt 8 miles of trails.
• Installed 4 culverts and 14 gates.
Feral hogs have been an ongoing management issue on many Region 3 Wildlife Management Areas (WMAs) for years. Di-Lane Plantation WMA has been fighting the feral hog battle since 2010. Sharpshooting and hunter harvest were the first tools utilized to reduce feral hog numbers from 2010–14. This technique was largely ineffective. In 2015, additional management techniques of trapping and rocket netting were implemented and in 2017, remote-triggered traps were used. Since January 2015, approximately 1,300 feral hogs have been removed from Di-Lane and the surrounding properties. USDA Wildlife Services has provided aerial operations assistance for the past 2 fiscal years and removed a total of 547 hogs from Di-Lane, Big Dukes Pond, and 35,000 acres of private land cooperative. In FY 2019, 156 feral hogs have been removed from Di-Lane and adjacent properties. We no longer see hog rooting in every fallow field. The dove fields have made enough seed to provide a quality hunting experience for our WMA dove hunters.

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Feral hog removal operations at Di-Lane WMA.
Wildlife Management Area Accomplishments

- Prescribed burned 7,880 acres.
- The wet winter assisted prescribed burning efforts on Tuckahoe WMA with approximately 1,000 acres burned using the flooded swamp along the Savannah River as a firebreak.
- Burned 2,600 acres on Clarks Hill WMA, an increase of more than 1,000 acres, as a result of improved user access roads and permanent firebreaks.
- WRD and the Army Corps of Engineers (ACOE) partnered to burn 423 acres on Keg Creek WMA. This is the first prescribed fire on the WMA in 10 years and first since ACOE thinned the timber on this 800-acre mitigation tract.
- Installed 75 miles of permanent firebreaks.
- Completed 220 acres of timber stand improvements using herbicide in pine stands.
- Planted 12 dove fields totaling 407 acres.
- Planted 354 acres of food plots.
- Manipulated over 5,100 acres to enhance/restore early successional habitat using a combination of mowing, disking, and/or herbicide.
- Improved 30+ miles of WMA roads using 8,000 tons of gravel this includes creating ~2.5 miles of new access roads.
- Managed 4 waterfowl impoundments.

Technical Assistance

Fulton, Columbia, Gwinnett and Richmond Counties accounted for >61% of the regions 4,000+ nuisance wildlife and technical assistance request calls last year. Most of these calls were handled over the phone, but regional staff responded to 663 onsite request for technical assistance.

Wildlife Technician IV Kevin Von Seggern conducted a dove field management/educational field day for local landowners at Walton WMA.

Regional staff also trapped and banded 342 doves and 213 ducks last year.
In FY 2019, Region 4 associates conducted 17,539 acres of prescribed burning on the following WMAs: BF Grant, Big Lazer Creek, Blanton Creek, Cedar Creek, Chattahoochee Fall Line (Almo, Black Jack Crossing, Fort Perry and Hilliard areas), Clybel, Joe Kurz, Oaky Woods, Ocmulgee, Rum Creek, Sandhills, Sprewell Bluff, and West Point. Prescribed burning was conducted in old fields, black land prairie sites, dove fields and forest stands during both dormant and growing season conditions. Ignition methods included drip torches, ATV torches, helicopter and spherical ignition launcher.

Over 2,100 hours were spent managing 762 acres of dove fields in Region 4 on BF Grant, Big Lazer Creek, Blanton Creek, Cedar Creek, Chattahoochee Fall Line – Fort Perry Area, Clybel, Joe Kurz, Perry Dove Field, Rum Creek, Standing Boy Creek, and West Point WMAs. This also included the new R3 dove field on Clybel WMA in partnership with the Georgia Wildlife Federation. Species planted included: brown-top millet, buckwheat, corn, Egyptian wheat, proso millet, sorghum, sunflowers, and wheat. Many areas had portions of fields fenced to prevent deer damage.
Region 4 Accomplishments
FY 2018–2019

- WMA deer camera surveys were performed on Big Lazer Creek, Cedar Creek, Chattahoochee Fall Line (Almo, Fort Perry and Hilliard areas), Ocmulgee and Rum Creek.
- Alligator survey routes were conducted twice on the upper Flint and Ocmulgee Rivers totaling 22 miles.
- 26 managed check-in deer hunts were operated on 14 areas that totaled 4,638 hunters and 1,000 deer.
- 170 Canada Geese were banded.
- 302 Wood Ducks were banded.
- 329 Morning Doves were banded.
- 356 Wood Duck nest boxes were checked and data recorded while being cleaned.
- 749 nuisance contacts were handled involving 691 hours.

- 180+ bear stations were surveyed across Bleckley, Houston, Pulaski, Twiggs and Wilkinson Counties to perform the annual Central Georgia Black Bear Bait Survey.

- 1,628 hours managing roads & trails.
- 120 hours planting trees & shrubs.
- 692 hours managing food plots including 12 special Hunt-and-Learn plots on Clybel WMA.
- 450 hours managing water level in impoundments.
- 300 hours spraying vegetation.
- 554 hours mowing.
- 732 hours managing firebreaks.
- 3 special parking areas were established on Echeconnee Creek WMA.
On October 10, 2018 Southwest Georgia residents experienced the storm of the century when Hurricane Michael entered Georgia as a category 3 hurricane. Three Wildlife Management Areas (WMA) in Southwest Georgia were among areas heavily impacted.

Downed trees and debris blocked customer and staff access to 139 miles of roads on Chickasawhatchee, Silver Lake, and Mayhaw WMAs. While staff from across the state helped clear public roads blocked by trees and debris, local staff worked diligently to restore customer access logging 144 man-days in October clearing WMA roads. Their efforts were aided by staff from Region 3.

Roads were not the only thing impacted by the storms. Region burn plans had to be adjusted to make way for timber salvage operations and staff had to deal with 188 miles of firebreaks blocked by downed trees and debris. Region staff spent a good portion of the year on recovery efforts.

Late fall brought heavy rains to a recovering Southwest Georgia. The area experienced localized flooding - blowing out WMA roads and the dam on the region’s primary waterfowl impoundment, Cordele Fish Hatchery. Floods breached the dam in two places, rendering staff unable to regulate water levels on the impoundment. Most of the hunts scheduled for 2018 and 2019 were cancelled.

The breaches also blocked staff access to the water control structure. This was a challenge for staff because repairs could not begin without removing boards from the structure. Due to the size of the boards, heavy equipment was needed at the structure to remove them. Flooding not only impacted. The Wildlife Resources Division's Fisheries Management section was also impacted. High water levels shut down fisheries boat ramp crew projects. After learning of damage to the Cordele Impoundment, fisheries staff responded by bringing equipment and staff to aide the Game Management section with the first stages of repairs. Region staff will complete final repairs in August 2019.
Region 5 Accomplishments
FY 2018–2019

- Prescribed burned a total of 8,326 acres with 87% (7223 acres) of burns completed in the growing season.
- Responded to 896 customer requests for assistance managing conflicts with wildlife.
- Improved 275 acres of habitat, by creating early successional and other foraging habitat using mechanical or chemical manipulation.
- Issued 252 homeowner and landowner permits authorizing the removal of nuisance wildlife.
- Responded to approximately 3028 customer inquiries about wildlife management, WMA management, regulations, licensing, etc.

- Spread approximately 3500 tons of gravel over 16 miles of roads to improve public access.
- Planted 71 acres of summer and/or winter food plots with iron clay peas, crimson, sorghum, wheat, oats, or rye.
- Planted 288 acres of dove fields on 8 WMA with sunflower, pearl, and browntop millet.
- Seasonally disked 1110 acres of wildlife openings to promote brood rearing habitat for quail and turkey.
- Cleared downed trees and removed debris from 327 miles of WMA roads and firebreaks.
Over the past two years, Region 6 has expanded Ohoopee Dunes WMA in Emanuel County from 4 tracts totaling 2,500 acres to 8,600 acres in almost 1 contiguous tract with 1 small tract to the south. Hunters have benefited greatly from this addition. This past deer season 2 check-in deer hunts were hosted resulting in 64 hunters harvesting 38 deer (59% success rate). During turkey season, 108 hunters harvested 14 turkeys (13% success rate). As more habitat management practices are implemented, hunters should reap the benefits well into the future. This past burn season staff prescribed burned 1,660 acres of upland habitat and created new wildlife openings in conjunction with timber thinning operations.

One highlight of Region 6’s early hunting season is youth dove hunting on public fields, and in particular the hunt at the Appling County Dove Fields. This hunt and the 2 general hunts that follow are made possible through the USDA VPA program which allowed WRD to secure a 4-year lease on the fields. But what makes this hunt special is the care taken by the landowner and a dedicated group of volunteers to prepare the fields and make it an excellent experience. Through their efforts, donations provide lunch for each youth hunter and supervising parent and door prizes for each youth hunter. Since 2014, enough funds have been raised to hold a drawing for a lifetime license for one lucky youth. WRD provides logistical support and educational displays for the event.

This popular hunt has drawn hunters from as many as 14 South Georgia counties and northeast Florida. In its peak year, 132 youth hunters and 106 parents signed out 1,275 doves (an average of 5 doves/hunter).
Prescribed burned 8,915 acres on WMAs. Extremely wet conditions prevented the completion of many planned burns.

- Installed 260 miles of firebreaks on WMAs to provide control of prescribed burns and protect unburned areas.
- Mowed, graded, rocked and maintained 632 miles of roads and trails for public access to WMAs.
- Checked and maintained 412 of the 801 wood duck nest boxes in Region 6. Water levels impeded checking many boxes this year.
- Hunters harvested 772 deer (13% success) and 78 turkeys (7% success) on 115,766 acres of WMA land.
- Tagged 124 bears during the 12-day S Zone bear season.
- Answered 972 requests for nuisance wildlife/technical assistance including 686 deer crop damage permits.
- Answered 129 requests for wildlife management planning advice.

- Made 1,292 contacts at wildlife education programs.
- Completed 165 miles of survey lines to gauge alligator, black bear, and neotropical migrant bird population densities and trends.
- Spent 138 hours trapping tegus - an invasive lizard species with a localized population reported over a 3-county area of east central Region 6.
- Banded 454 doves and wood ducks to evaluate populations densities, species movement, and survival.
- Managed 730 acres of dove fields for public access, including 43 new acres cleared for planting in 2019.
- Managed 1,438 wetland acres for waterfowl through water level control and herbicide application.
- Planted, disked, or otherwise manipulated 656 acres of food plots to provide forage and cover for wildlife.
- Improved WMA infrastructure including conversion of an open, dirt-floored equipment shed (below left) at Alapaha River WMA to an enclosed shop/check station with concrete floor and office space (below right) and replacing siding and doors on the check station at Dixon Memorial WMA (bottom).
The Coastal Region of Game Management continued to meet habitat management goals and objectives during FY19, in addition to continuing recovery efforts to damages brought by Hurricanes Michael and Irma. A proud accomplishment included the successful application of prescribed fires to 8,423 acres of land across 9 WMAs. Following the acquisition of additional lands within the region WMA system, Game Management continued coordination of setting long-term goals and objectives for these diverse and sensitive properties.

Vehicular access was regained to the McGowan Lake Tract of the Altamaha WMA, following extensive repairs and enhancements to a low water crossing leading into the property. Sportsmen again have access to this 46-acre lake and adjacent primitive camping area.

Progress continued to be made on work associated with the $8.72 million Ducks Unlimited site-specific agreement for repairs and improvements to Altamaha Waterfowl Management Area. An additional accomplishment included the conversion of three staff positions on the Altamaha WMA into Wildlife Technicians. This best met the needs of the property to provide the best habitat possible for waterfowl and associated wildlife and improving conditions for our customers.

The contract was awarded for the construction of three bridges on Ossabaw Island. The replacement of restrictive culverts with bridges is part of a settlement associated with an oil spill in the Savannah Harbor that sought to improve salt marsh habitat along the coast. With collaboration from the College of Coastal Georgia, environmental monitoring stations were established in the marshes and tidal creeks of the construction areas to record the enhancement of adjacent salt marsh habitat that should occur when these bridges are installed.
Region 7 Accomplishments
FY 2018–2019

• Conducted populations surveys for waterfowl and alligators along 156 miles of survey route.
• Banded 65 individual birds for waterfowl and dove population monitoring.
• Processed nuisance alligator removal permits related to 104 public complaints.
• Provided 665 hours of disaster relief assistance to public agencies.
• Conducted endangered species nest protection along 18.5 miles of beach and adjacent habitats, removing approximately 1,328 feral hogs.
• Removed 116 tons of residential waste from Sapelo Island.
• Safely transported 64,368 passengers to/from Sapelo Island.
• Contacted 14,893 visitors to the Sapelo Island visitor center, 2,133 students and 1,515 tour visitors.
• Repaired and improved 26 WMA structures used for WMA operations and maintenance.

• Provided hunting, fishing and outdoor recreational opportunities on 174,190 acres WMA lands.
• Actively managed and enhanced 3,120 acres of impounded wetlands, including 32 miles of dikes, control structures and other critical infrastructure damaged during hurricane and storm events, for waterfowl, shorebirds and associate wildlife.
• Planted, enhanced and maintained 559 acres of wildlife openings and fields to benefit turkey, quail, dove and other game species.
• Maintained and improved more than 588 miles of WMA roads for public access.
• Provided island access, support, and transportation to 938 quota hunters during waterfowl, deer, and feral hog hunts.
• Staffed check stations on 66 days of check-in deer hunts.

Game Management staff hold Black-bellied Whistling Ducks during banding survey.

Sunflower field at Region 7 WMA.
Georgia alligator hunters harvested 278 alligators during the 2018 alligator hunting season, up slightly from the 10-year average of 250 alligators. There were 1,000 alligator hunters drawn for the Quota Hunt. The 278 successful hunters each hunted an average of 2.87 nights.

The average length of harvested alligators was 103 inches, similar to the long-term average of 100 inches. The longest alligator harvested in 2018 was 162 inches, on par with the long-term average of 161 inches.

Georgia WRD staff surveyed 171.9 miles of rivers, creeks, coastal areas, and reservoir shorelines. A total of 1,053 alligators were counted for a 2019 population index of 6.1 alligators per mile. This year’s index brings the 3-year average to 5.7 alligators per mile, slightly above the alligator management plan’s goal of 5 alligators per mile for the statewide average. Annual spotlight surveys are the best method to determine alligator population trends.
Game Management staff annually survey the Rhetts Islands impoundments on Altamaha WMA to count the number of alligator nests on the site. This provides an overall index to the possible number of alligator nests in Georgia. This year, construction in and around the impoundments caused lower water levels, and a reduced count of only 12 nests, well below the long-term average of 28 nests, and the most recent 10-year average of 22 nests.
Black Bear Population Monitoring

1. Georgia’s Central Zone black bear population is monitored through a network of 180+ summer bait station survey sites (76 of which have been sampled since 2007 - graphed below) and the collection of data from both road-killed and harvested bears. From the Population Viability Analysis for Central Georgia and the statewide bear management plan, the most important parameter to track is annual female deaths (graphed below).

2. In FY2019, no bears were harvested from the one-day, 3-county season. Harvest has averaged 10 since 2011. Seventy-eight bears have been harvested since the county-wide season started in 2011, with 52% being composed of females. Prior to 2011, harvest was restricted to a one-day hunt on Ocmulgee & Oaky Woods WMAs (1989 was last year for Oaky Woods & 2010 was last year for Ocmulgee). The WMA hunts averaged < 2/year.

3. Bait Station survey results have been mostly stable with the exceptions being the first year of the survey (2007), 2012 the year after the greatest year of harvest (2011) and the last 2 years.
The bear population in North Georgia remains healthy and strong. Bait station surveys have been conducted across designated routes in North Georgia either every year or every other year since 1983 with 2017 being the last year surveyed. Visitation rates rose steadily from a low of 12.3% in 1983 to a high of 76.7% in 2009. Bear bait station surveys serve as an index to population change over time and help us determine bear population trends.

Harvest opportunities in north Georgia are plentiful with Georgia bear hunters enjoying one of the longest bear seasons to be found anywhere in North America. On private land, bear season runs concurrently with deer season beginning with archery on the 2nd Saturday in September and concluding with firearms, which ends on the 2nd Sunday in January.

Oak mast surveys are conducted across North Georgia each year in the fall (August 20th – 31st). This information is useful for our hunters - to increase hunter success, but also helps Game Management staff interpret trends seen in nuisance bear behavior, harvest, and the number of road-killed bears.

In the mountains, oak mast was rated “POOR” in the fall of 2018 (Total Oak Rating = 1.70). This poor mast crop contributed to a higher than normal harvest (515 bears) in 2018. The presence of legalized deer bait across the landscape also may have contributed to the higher than normal harvest; however, that is difficult to assess.

Cohutta WMA had the highest overall harvest (49 bears) of any WMA.

Harvest per square mile was highest on Chattahoochee WMA (14 bears), followed closely by Dawson Forest WMA (14 bears), and Cohutta WMA (49).

Lumpkin County had the highest overall harvest (57 bears) of any county, excluding WMA harvest.
Wildlife biologists and technicians across north Georgia conducted numerous bear education programs for wildlife watchers and homeowner groups in the mountains (est. 300 people).

The Bear Committee worked to produce the Strategic Management Plan for Black Bears in Georgia (2019-2029). This included hosting three public meetings across the state to collect public input. A total of 43 individuals attended the meetings. In addition, 33 individuals submitted input electronically, in writing, or by telephone.

Handled in excess of 1,275 calls or complaints about bears. This required more than 140 man-days of time spent properly responding to these calls/complaints and providing technical guidance and hands-on assistance to minimize and resolve these human-bear conflicts.
Georgia’s Southern Zone black bear population is monitored in cooperation with Okefenokee NWR staff through a network of 193 summer bait station survey sites, and the collection of data from harvested bears at fall check stations.

Bait station surveys have been conducted across designated routes in South Georgia every year since 1994. While trending up through 2006 and tracking well with increasing harvests, bear visits to summer bait station sites have flattened in recent years in the wake of habitat changes brought about by 3 major wildfires that encompassed the entire Okefenokee Swamp and much of the surrounding private timberland. The 10-year survey goal is 36% (brown line graphed).

Hunting bear with dogs is a long-standing tradition in southeast Georgia and is allowed on private lands over four 3-day weekends (Thursday-Saturday) in late September/early October. Only still-hunting is allowed on Dixon Memorial WMA with open dates in archery, primitive weapons, and firearms season.

FY2019 total harvest for the 12-day, 7-county season was 124 (92 male, 32 female). Harvest has averaged 134 over the last 5 years and 115 over the last 10 years. The 10-year harvest goal is 110 (dotted line graphed).

Harvest opportunities in South Georgia are primarily available on private lands in/around the Okefenokee Swamp with some opportunity available to public land bear hunters on Dixon Memorial WMA.
Overview

The 2018-19 deer season was yet another excellent year despite one of the most serious outbreaks of hemorrhagic disease in recent years. Statewide 278,403 deer were taken by 203,254 Georgia hunters. Regional and statewide deer harvest estimates have historically been determined through telephone surveys which continue today. However, the mandatory harvest reporting system, Georgia Game Check, began collecting harvest data in 2016. Total deer harvest is now estimated from a combination of Game Check minimum harvest reports that are compliance adjusted from reporting rates developed in the telephone survey. As a result, the drop in harvest from 2015 to 2016 is an artifact of the change in methodology rather than a significant drop in harvest.

Historic Perspective

Georgia’s deer population reached an all time high in 1997, then declined steeply until the mid-2000’s. Throughout the 1990’s, most of Georgia’s deer population was in a state of overabundance and a reduction was necessary to balance the population with the available habitat. The primary causes for the decline were an increase in hunter harvest as bag limit and season length increased and a sharp decline in fawn recruitment. While a reduction in the population was welcomed, deer density had fallen below acceptable levels. As a result, either-sex days were manipulated to reduce female deer harvest in 2013. By 2015, female harvest was reduced significantly enough to slightly increase and stabilize the population. Because the population model is driven by deer harvest data, it was sensitive to the change in method for harvest estimation in 2016. However, the deer population for the majority of the state has been stable for the last 5 years.
Disease

Georgia is fortunate to have a strong herd immunity to hemorrhagic disease, so outbreaks capable of causing regional population declines are rare. 2018 didn’t have an exceptional number of reports of the disease, however the mortality rate was significant at 74% where it did occur.

To date, Chronic Wasting Disease has not been found in Georgia, however recent discoveries in Arkansas, Mississippi, and Tennessee have increased our level of concern. We are continually monitoring the population and adapt our disease surveillance strategy whenever new scientific information becomes available.
Fawn Recruitment

Fawn recruitment is the ratio of fawns per adult doe that survive to deer season, which is one of the most important measures of productivity of the deer population. The best available science suggests that the proliferation of coyotes in Georgia likely played a significant role in the decline in fawn recruitment from the 1990’s until the mid-2000’s. However, fawn recruitment has been stable for the last 10 years at what is likely the new normal.

Research

As a result of significant declines in the deer population on the Chattahoochee National Forest and associated WMAs, a fawn mortality study was launched in 2017. During the 2018 capture season, only 23% of radio-collared fawns survived and 80% of the mortalities were attributed to predation. Using mortality investigation and DNA testing, most mortalities were attributed to coyotes followed by black bears and a single mortality to a bobcat. Baited trail camera surveys have been used to estimate local deer population abundance and population demographics for the last couple of decades. However, the methods lacked rigorous testing for much of that time and new literature has shown biases associated with baited surveys. To improve survey accuracy and eliminate complications with bait on WMAs, a new passive survey was developed. The new method will be tested on WMAs across the state in 2019 for final adjustment and will likely be available to the public for use in Fall 2020.

Both projects are a collaborative effort between the Wildlife Resources Division and the University of Georgia.
Hunter Education Program

The Hunter Development Program (HDP) continued to promote and monitor the growth of Georgia’s Hunter Education and Hunter Education Instructor Program. Georgia currently has 285 active certified hunter education instructors that consist of Georgia DNR Law Enforcement Game Wardens, volunteer instructors and agricultural educators from all over the state. Together these instructors have accounted for 120 classes offered across Georgia with a total of 2,000 participants during FY19.

In efforts to ensure the growth of Georgia’s Hunter Education and the Hunter Education Instructor Program, HDP offered hunter education instructor academies for volunteer instructors, agricultural educators, and LED Game Warden Cadets.

Volunteer and Ag Ed Teacher Academies are in-service workshops that will provide Agricultural Education teachers and Hunter Education Volunteer Instructors with administrative processes and program procedures along with outdoor hands-on exercises. Upon completion, instructors received the resources and the materials to teach hunter education.

The 32nd Cadet Ranger Academy was a Hunter Education Instructor workshop held for LED Game Warden Cadets. This two-day program certified these new employees as hunter education instructors. The workshop provided 19 Cadets with the administrative processes and program procedures along with outdoor hands-on exercises. Upon completion, Cadets received the resources and the materials to teach hunter education.
National Archery in the Schools Program (NASP)

NASP continues to be a strong program in Georgia’s physical education and agriculture classes. Tournaments are very popular among schools and numbers continue to increase. During the 2018-2019 school year, 5,221 archers competed at 39 District (NASP) tournaments held at various schools throughout the state.

The Hunter Development Program hosted regional qualifiers in Athens, Perry and Moultrie where 1,098 competed to see who would advance to the State Championship.

The State Championship was held at the Georgia National Fairgrounds on March 1, 2019. At the championship, 712 archers competed in Elementary, Middle and High School divisions.

NASP Academic Archer Program

HDP continued to promote and monitor the growth of the Academic Archer Program throughout the state. Georgia schools (public, private and home-schooling associations) participating in NASP may register their student archers in the program between the months of September and March.

FY19 marks the Academic Archer Program’s third year of implementation in Georgia. The program has grown with each progressing year. FY19 saw a 30% increase in individual participation and 9% increase in school participation when compared to FY18 figures.

The 2018-2019 competitive NASP season also saw substantial growth among student archers and school presence at Regional Qualifying Events and the State Championship. Of the hundreds of student archers present at the three 2018-2019 Regional Qualifying Events, over 86% were registered Academic Archers, a 22% increase when compared to FY17 figures.
The Georgia State Championship is the single largest NASP related event in the state. Of the 712 archers present, 552 were registered in the Academic Archer Program (78% of total archers present). Of the 30 schools participating at the State Championship level, all 30 had registered student archers in the Academic Archer Program.

Each Academic Archer Program participating school present at the State was presented with a plaque recognizing the achievement.

**Give It A Shot Program**

The Give It A Shot Program promotes shooting sports to new shooters by offering a basic-level, introductory course in safe firearm education and includes a live-fire session.

These events are held across the state at WRD’s staffed shooting ranges. Hunter Development staff, Range Safety Officers and volunteers assist in teaching safe firearms handling.

**Give It A Shot – FY18 & FY19**
Hunter Development Program Highlights
FY 2018–2019

Shooting Ranges

HDP manages 17 firearm ranges and 21 archery ranges across the state. In FY19 approximately 70,000 customers utilized our public ranges.

With some overlap, 69% of these visitors shot rifle, 56% shot handguns, 13% shot shotguns, 27% shot muzzle-loaders, and 3% shot archery.

The most visited range was Clybel Shooting Range in Mansfield followed by Mike Commander Shooting Range in Albany.

We continue to see an increase in our customer base. This past year we had approximately 70,000 customers visiting staffed ranges. As we see more customers visiting our ranges, we have seen an increase in the number of compliments from these visitors. In FY19, there were 46 compliments and 3 complaints. In FY18, there were 43 compliments and 1 complaint and in FY17 there were 20 compliments and 3 complaints.

Google Reviews offered similar enthusiasm for HDP’s shooting ranges.

![Pie chart showing discipline breakdown for FY19](image)

**FY19: Discipline Break-Down Manned Ranges**

- **49%** rifle
- **40%** pistol
- **9%** shotgun
- **2%** muzzle

![Bar chart showing shooting range reviews](image)

**Shooting Range Reviews**

<table>
<thead>
<tr>
<th>Year</th>
<th>Compliments</th>
<th>Complaints</th>
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<tr>
<td>FY17</td>
<td>201</td>
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Shooting Range Renovations

FY19 proved to be very busy with range renovations on WRD’s staffed shooting ranges. Of the nine staffed ranges, three were renovated. West Point in LaGrange, West Point in Alto and Richmond Hill in Brunswick were all renovated using Pittman-Robertson dollars and funds from the license revenue increase.

West Point Shooting Range reopened in April with an extended shooting range of 150 yards, a cover was built over the shooting line, and side berms were added.

Wilson Shoals Shooting Range reopened in May with an added pistol range, improved rifle range and newly constructed classroom.

Richmond Hill Shooting Range reopened in June with an added pistol range, improved rifle range and newly constructed classroom.
Three water control structures were replaced at the B. F. Grant WMA waterfowl impoundments. With the assistance of Parks Construction and Engineering, the old, rusted structures were removed, and new concrete structures with HDPE pipes and earthen berms were installed. New gate valves were installed, as well as flashboard riser structures to allow precise control of the water levels to provide maximum habitat quality for migrating and wintering waterfowl. Following this investment into the site, WRD has opened the area to public waterfowl hunting through our quota system. FY2019 was the first year hunting has been allowed on the B. F. Grant wetland complex.

Georgia’s newest duck species, the Black-bellied whistling duck continues its natural expansion across the state. Black-bellied whistling ducks are native to Central and South America, but have spread from Mexico into Texas and Louisiana, and now are getting established in Georgia, Florida, and South Carolina.

With strong support from Georgia’s waterfowl program and the Atlantic Flyway Council, the U. S. Fish and Wildlife Service has changed the way waterfowl regulations are selected in the Atlantic Flyway. Rather than using the population status of Eastern Mallards, the U. S. Fish and Wildlife Service will now use the combined population status of wood ducks, Ring-necked Ducks, American Green-winged Teal, and Common Goldeneye to select the season length and bag limit for the Atlantic Flyway duck hunting season.
- Captured and banded 1,325 Canada Geese.
- Captured and banded 590 Wood Ducks.
- Captured and banded 1,479 Mourning Doves.
- Captured and banded 41 Black-bellied Whistling Ducks.
- Captured and banded 11 Mottled Ducks.
- Counted 5,372 Canada Geese during summer reservoir survey.
- Analyzed mark-recapture data for estimating Canada Goose Population at 225,000.
- Monitored expansion of Black-bellied Whistling Ducks into 68 Georgia counties.
- Counted 48 Mottled Ducks and 116 Black-bellied Whistling Ducks in the Altamaha WMA summer aerial survey.
- Replaced 3 water control structures at B. F. Grant waterfowl impoundments that improve management of 45 acres of wetlands.
- Managed 14,558 acres of wetlands on 31 impoundments across the state.
- Planted 3,145 acres on 54 dove fields across the state for hunting opportunity.
- Maintained 1,146 Wood Duck nest boxes that produced an estimated 7,488 ducklings.
- Issued 55 permits to allow landowners to manage nuisance problems caused by Canada Geese.
FY19 saw the loss of 6 of 11 Private Lands Program (PLP) personnel through retirement or resignations and one new hire in May. The remaining staff stepped up and met the obligations with our partners and provided great service to our customers.

Continuing WRD’s agreement with the Natural Resources Conservation Service (NRCS), biologists certified completion of practices and provided technical assistance for the following Working Lands for Wildlife (WLFW), Bobwhite contracts. These are federal monies provided to cost share with private landowners numerous habitat improvement practices, such as prescribed burning and tree thinning.
- 14 from 2016
- 9 from 2017
- 25 from 2018

Staff also wrote conservation plans for 17 new 2019 contracts. During this time, they also wrote plans for and/or monitored 40 new Working Lands for Wildlife (WLFW) Gopher Tortoise contracts for 2019 and about 100 contracts from 2016-2018.

As part of the agreement with NRCS, the Bobwhite Quail Initiative (BQI) has paid $117,639 since 2016 in incentives to landowners enrolled in the Bobwhite/Pine Savanna WLFW program upon completion of management practices such as prescribed burning and brush management.

In addition to WLFW contracts, biologist assisted with 8 Wetland Reserve Easements (WRE) plans and provided input on NRCS policy and attended local work group meetings. Outside of NRCS, PLP biologists provided technical assistance to landowners across the state on a variety of topics including bobwhites, turkeys, deer, hellbenders, golden winged warbler, native grazing, pollinators, field and stream buffers and prescribed burning.

Technical assistance included:
- 20 new plans, 5,445 acres
- 52 new verbal recommendations, over 6,800 acres
- Over 175 follow-up contacts, about 33,000 acres
PLP biologists also assisted regions with management, nuisance requests, check-in hunts and surveys.

In September 2018, Georgia hosted the annual National Bobwhite Technical Committee meeting in Albany. Over 120 professionals from 20 states attended the 6-day meeting which included field tours of Pineland Plantation and Chickasawhatchee WMA and a Coordinated Implementation Program (CIP) workshop.

Covey counts and breeding bird monitoring routes are conducted each year to help us track our progress with quail and upland management and helps us provide recommendations for regulations. Each fall PLP coordinates and conducts fall covey counts on 6 WMAs and 2 private properties across the state. The counts cover 105 monitoring points and over 12,000 acres. In late spring, breeding bird counts are conducted on over 160 points on 6 WMAs and 1 private property. These counts monitor for 7 species that utilize upland savanna habitats, including Bobwhite quail, Bachman’s Sparrow, Prairie Warbler, Loggerhead Shrike, Indigo Bunting, Field Sparrow and Painted Bunting. Fall counts provide a population index that can be used to set harvest rates and track population changes over time. Breeding bird counts provide an indication of presence or absence on the landscape. Both counts are valuable tools in management.

As part of PLP’s outreach, PLP biologists presented presentations or worked booths at more than 25 events and reached over 1000 people. BQI has long promoted recruitment of new quail hunters through our annual BQI youth quota quail hunts. This year, 4 youth hunters experienced a wild bird hunt with great success. Continuing our support of R3, biologists also spoke at several Hunt and Learn programs around the state.
In FY2019, WRD's Wild turkey program:

- Continued long-term population monitoring of turkey populations statewide,
- Supported turkey research in the Georgia Piedmont, and
- Continued outreach and collaboration with other state agencies and organizations.

### Population and Harvest Monitoring

#### Production Survey

DNR personnel and volunteers record all turkeys seen with or without poults, during June, July and August. Average observed poults per hen are calculated for each year and are used as a measure of relative quality of the reproductive season as compared to the long-term data set. Poults/per hen values have decreased since the survey began in 1978. In 2018, an average of 1.6 poults/hen were observed, which is slightly above the 5-year average of 1.4 poults/hen.

### Avid Hunter Survey

The spring turkey population is indexed through cooperators reporting their daily hunting statistics throughout the turkey hunting season. Two metrics calculated include hours it takes to harvest a turkey (a measure of hunter effort), and gobblers heard per hour (an index of the male turkey population).
Statewide Harvest

Statewide, an estimated 46,995 (up 5% from 2018) turkey hunters harvested 17,073 gobblers in 2019 (no change from 2018). Jakes accounted for 1467 of the total gobblers harvested (9%), up 1% from 2018.

Wildlife Management Area Harvest

In 2019, 13,934 hunters signed in on 113 WMAs, a 9% decrease from 2018. These hunters harvested 866 gobblers, a 3% decrease from 2017. Jakes comprised 21% of the WMA harvest. Overall, hunters had a success rate of 6.2% on wildlife management areas in Georgia.
Wild Turkey Program Highlights
FY 2018–2019

Research

Ecology of Wild Turkeys in the Georgia Piedmont

The University of Georgia and WRD are conducting research on two WMAs in the Piedmont to investigate several aspects of turkey ecology. On BF Grant and Cedar Creek Wildlife Management Areas, researchers are looking at gobbling activity and if it is affected by hunters and other predators such as coyotes, looking at movements and habitat use by males, and reproductive behavior and success of hens. They are using autonomous song meters to track gobbling, and using gps technology to monitor turkey movements and reproductive activity.

As part of this research, the Spring 2019 turkey season on Cedar Creek and Cedar Creek-Little River opened on April 6, two weeks later than the statewide season. This change was made to determine if a delay in opening the season impacts reproductive success.

Collaboration

The wild turkey program enjoys a productive partnership with the Georgia chapter of the National Wild Turkey Federation. WMAs across the state received NWTF Superfund allocations to complete projects such as:

- Over 5,000 acres of prescribed fire conducted on WMAs along the coast.
- Herbicide understory treatments and prescribed burn on over 150 acres on Clybel and Rum Creek WMAs.
- Mechanical vegetation treatments to daylight 7 miles of roads on Wilson Shoals WMA.
- Over 300 acres of herbicide understory treatments and prescribed fire on Big Lazer and West Point WMAs
- Land purchases to open new WMAs and expand existing properties in Bulloch and Paulding counties.

Researchers fitting a GPS transmitter on a hen on B.F. Grant WMA.

A forest stand on Clybel WMA after receiving herbicide and prescribed fire treatment.
Each year the Forest Management Unit (FMU) implements wildlife habitat management projects across the state. Main objectives of this unit include establishing and regenerating forest stands, managing healthy forests and desirable tree species, and harvesting timber for the betterment of wildlife habitat. These goals are accomplished while also recognizing the economic impact of the timber resource. In FY2019, timber revenue was generated on 17 different WMAs and on 2 State Parks thinning approximately 1,400 acres and harvesting 745 acres of regeneration. The average total value of timber removed per acre was $742 and a total of 274,000 tons of timber was harvested.

One of the biggest challenges this year for FMU was dealing with the expansive timber damage incurred from Hurricane Michael. As a result of the hurricane, staff conducted approximately 3,200 acres of timber salvage operations on WMAs and State Parks totaling 40 work days of hurricane-related cleanup.
• Generated over of $3.3 Million in timber revenue.
• 1192 acres reforested. Total of 654,000 seedlings planted. Reforestation cost of $307 per acre.
• 443 acres of seedling survival checks completed.
• Prescribed burned 2,489 acres.
• 236 prescribed burn evaluations completed.

• Started the first phase of the statewide timber inventory process. The operable timber acres on each WMA was stand type mapped.
• $140,000 was spent on road construction for timber extraction.
• 119,000 miles driven by staff members. (This is equal to 4.8 trips around the earth.)
• Over 60 hours of continuing education classes attended.
Acknowledgments

This guide was developed and updated by staff of the Georgia Department of Natural Resources’ Wildlife Resources Division. We thank the many individuals who helped compile and review the information provided.

Download a version with the latest updates:

https://georgiawildlife.com/about/what-we-do

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