

NBGI's

Bobwhite Almanac

State of the Bobwhite 2023

*Native Warm-Season
Forage Resource
Center | 22*

*Influencing
National Legislation
to Benefit Bobwhites
and Grasslands | 20*



*Integrating Emerging
Technologies | 25*



- Bobwhite Foundation Supporter •
- 2017 NBGI National Fire Bird Award Winner •

Roundstone Native Seed is proud to be a part of NBGI's 2022 Bobwhite Almanac. It is our passion, our drive, and our mission to make a positive difference in the natural landscape by working alongside wildlife habitat conservationists. We are grateful that seeds we gather and produce grow into beneficial habitat for the northern bobwhite.

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NBGI'S BOBWHITE ALMANAC/STATE OF THE BOBWHITE REPORT is an annual publication of the National Bobwhite and Grassland Initiative (NBGI) to provide a range-wide snapshot of population, hunting, and conservation status of the northern bobwhite (*Colinus virginianus*) as well as a sampling of various efforts underway to reverse the bobwhite decline. This report is made possible by the financial support of participating state agencies, the Federal Aid in Wildlife Restoration Program, Clemson University, Park Cities Quail, and Roundstone Native Seed.

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NBGI is an initiative by and for the Technical Committee—25 state wildlife management agencies, along with numerous conservation groups, research institutions, and federal partners—to restore and maintain wild bobwhite quail, associated species, and their native habitats through science-based research and management to support healthy wildlife, soil, air, and water for the benefit of society. NBGI is headquartered at Clemson University College of Agriculture, Forestry, and Life Sciences.

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Director's Charge

Closing the chapter on the National Bobwhite and Grassland Initiative's 28th year was best characterized, in my mind, as the year of the firebird. Sure, it is one of our affectionate monikers for the northern bobwhite, but in this case, it represents the story of the Phoenix. This age-old tale describes an immortal bird that weakens and dies. After a period of renewal and change, the bird is reborn stronger than before generating a beacon of hope for the future.

Our annual meeting in Pennsylvania served as our re-emergence of a renewed version of ourselves. The Technical Committee finalized its new structure and defined a new way of doing business through smaller and more capable working groups. Our brand-new Foundation launched this year creating a laser-focused board of diverse and experienced conservation leaders to guide us. A new science coordinator was hired, Dr. Jared Elmore, who serves as a faculty member at Clemson University. He is working on the long overdue analyses and products the Coordinated Implementation Program (CIP) was designed to deliver. The future rests in our hands!

Our renewal could not have come at a better moment. In our profession's history, there has never been a time with more funding available for conservation. Pittman Robertson funds stand at historic highs. The Infrastructure Bill infused dollars in a new arena called "green infrastructure". Most notably, the Inflation Reduction Act will dedicate nearly \$20 billion to NRCS over the next four federal fiscal years for Climate Smart practices.

Native grassland plants serve as the perfect solution to these generational investments in conservation. Their deep roots foster drought tolerance and store large amounts of carbon below ground. They afford water infiltration recharging aquifers and neutralizing pollutants. They are resilient and cannot be destroyed by tornados, hurricanes, or wildfires. They can serve as reliable and productive forages for the livestock producer, and of course, they provide a home to countless imperiled species of wildlife, including our iconic Prince of Game Birds.

Despite these tremendous qualities, we must aggressively champion the grassland cause and boldly pursue



John Morgan

Director

*National Bobwhite and
Grassland Initiative*

funds. Forests and trees have long been recognized as nature's warehouse of carbon and invaluable to the environment. Native grasslands are not ubiquitously valued in this regard. Evidence is growing towards the benefits of blending grasslands and forests in the form of woodlands and savannas. Large volumes of above and below ground carbon coupled with an enhanced array of ecosystem services create collaborative opportunities among forest-focused partners. We must tell this story and prove it with data collected through our standardized and coordinated methodologies.

Our CIP focus areas are poised to become the field laboratories for the quantification of ecosystem services. By tracking management actions, changes in vegetative structure, and bird response, we created an

appealing setting for other ecosystem service assessments. We must immediately elevate and expand the notoriety of these sites. Rolling Plain Research Ranch has become the first privately funded CIP focus area. We aspire to develop more sites like these over the next year. We continue to pursue sites on federal properties including military installations. The time to act is now!

The only way we succeed towards bold, conservation delivery endeavors is working shoulder to shoulder. The burgeoning funds are both a blessing and a curse. Pursuing funds takes more time, gaining new funds takes more work, and aspirations for new funds create a culture of competition. The NBGI has always been centered on bringing parties together, under the umbrella of habitat, to change how people use and view the land. We have a strong home in Clemson University; we have a nimble Foundation ready to assist; we have a Habitat Management Service Center designed to reduce red tape. We can only wield these assets with our partners – standing shoulder to shoulder. Can we count on you in 2024?



A Foundation for the Future

John Morgan and Aaron Jeffries | *NBGI*

For nearly three decades, a voluntary collaboration among 25 state wildlife agencies set a vision for the future to solve a conservation crisis. The objective of restoring habitat to bring back bobwhite and associated grassland birds was bold and would take agencies to places they had never been. It would test their resolve, their patience, and their willingness to commit to an innovative team working across state lines on challenges greater than any organization could conquer alone.

Until the last few months, this collaboration required non-profit organizations and universities to serve as an administrative vehicle to manage our finances and staff. Those efforts, albeit successful, put the partnership on shaky ground and relied too much on others to guarantee the future. The model limited opportunities by working within other organization's structures and operational models. The time has come for the National Bobwhite and Grassland Initiative (NBGI) to take flight towards an unrestricted future!

The NBGI Foundation (NBGIF), a fully established 501(c)3 organization, was launched this year. We have secured liability insurance, conducted two board meetings, and developed capacity to hire and manage employees and contractors. The NBGIF is a registered vendor with Clemson University and serves an important central role for running the NBGI's Habitat Management Service Center (HMSC), an administrative hub to efficiently connect the public and private sectors for conservation delivery. The new financial flexibility reduces administrative barriers with state agency and other partners. We are providing important new services like assisting with registrations for meetings and seamlessly paying vendors. NBGI Annual Meetings will greatly benefit from this administrative support. Of course, our state partners number one benefit, policy and advocacy support, can easily be administered under our new non-profit organization.



Importantly, this new NBGI structure delivers a critical executive leadership function that has been somewhat lacking over the years. The NBGI Management Board was designed to serve this purpose, but the volume of attendee churn was just too high. The multitude of meetings at AFWA and the North American Conferences minimized the body's effectiveness. The partnership also attempted two leadership workshops to help meet this important need, but little overlap of attendance was achieved again.

The ten-member NBGIF Board meets two times per year. Deeper discussions and engagement have been an immediate by-product of the smaller and more focused Foundation meetings. The new Board also creates an important nexus with the private sector (four members). These board members represent important leaders in the seed industry, cattle industry, and conservation non-profit sectors. Bringing in these new voices will open doors for greater collaboration on the private landscape where more than 85% of the bobwhite range exists. Additionally, a board member brings invaluable knowledge to Department of Defense opportunities. In several states, the highest densities of bobwhite likely exist on military installations. Bombing represents a non-traditional prescribed fire!

The NBGI has wasted no time deploying the new organization's potential. State wildlife agencies are using the non-profit to pay memberships dues and investing state funds towards the Coordinated Implementation Program services. Jen Mock is contracted directly with the Foundation making it much easier for the Quail Coalition to provide financial support. These benefits come with zero administrative costs to partners!

The HMSC is up and running. Tennessee Wildlife Resources Agency has a technician supported through the NBGIF. Kentucky Fish and Wildlife have two WMA projects being administered for contract habitat management services. Several non-profit grants have been submitted to help stand up the HMSC as well.

The most significant new use of the Foundation is the Regional Conservation Partnership Program (RCPP). We believe this use of the non-profit will put state

wildlife agencies in the driver's seat for private lands conservation delivery. NBGIF submitted and was awarded two, paired proposals (MO and OH, GA and MS) requesting \$25 million each. These proposals are presented as alternative funding arrangements where the NBGIF manages the contracting and payments to landowners and state wildlife agencies lead on-the-ground delivery. The model will expedite planning and cost share payments for landowners and producers. What better way to grow state wildlife agency relevancy and deliver vital grassland habitat to the ground?

The NBGIF is focused on diversifying the partnership's funding portfolio. A new sponsorship program is in development. Discussions are well underway to move towards philanthropic fund raising to continue to minimize state wildlife agency cost for the partnership. The initial phase of the non-profit will focus on delivering invaluable services to partners helping to generate capital to ultimately invest in a Development Director in the years ahead.

A new day is upon us! A non-profit whose only aim is to lift the NBGI partnership is ready for business. If you have hit a roadblock, then the NBGIF is just a phone call away! Our new board members are passionate conservationists with a history of success. They all contain an enormous network and resumes worthy of a national leadership. Let's all do our part to take the NBGI to new heights. The Foundation for the future is ready to support the load.



Photo submitted by Alabama Wildlife and Freshwater Fisheries.



Quail Tracks

Brief but Important Snapshots of Quail Activity in NBGI's Partner States

ARKANSAS | AGFC is 6 years into concentrated habitat work on 6 WMAs using the Coordinated Implementation Program monitoring framework, which has been a great tool to track habitat and bird response to management. On three Quail Focal Areas (Jack Mountain, Stone Prairie and Little Bayou WMAs), quail numbers warrant re-opening quail hunting season, which is being explored for 2025. According to spring point counts from 2023, the quail populations on these three WMAs have increased 346%. We are now integrating fall automated recording units into the monitoring protocol on these 6 WMAs to collect higher quality data with less staff time. With the success of the CIP inspired quail focal area concept, we are adding an additional 9 WMAs to the monitoring protocol, which will come with increased habitat work over time. Although these WMAs are not following all of the CIP requirements, this is evidence that the CIP model works and is a valuable tool to track results from habitat restoration.

The news from the other side of the WMA sign is big changes in Arkansas for our new Private Lands Division, which was separated administratively from Wildlife Management at the beginning of 2023. The new division has their own Chief and, as of this writing, is hiring an assistant chief and several program coordinators, including an Agriculture Liaison, which hasn't been filled in nearly 10 years. After administrative staff are brought on board, the next step is to increase field staff levels to better serve the 90% of Arkansas land held by private individuals. We are excited to see this new focus on private lands conservation and look forward to the needle moving for many species in Arkansas, including quail.



DELAWARE | Cedar Swamp Wildlife in New Castle County Delaware managed by the Delaware Division of Fish and Wildlife (DFW) is the first quail focal area and continues to increase in number of quail coveys, up to 44 detections. Recently in the past 3 years efforts have been made to expand habitat and quail to surrounding wildlife areas. The Eagles Nest Wildlife Area to the west of Cedar Swamp has now had 3 years to produce suitable habitat by taking out 402 acres of agriculture and planting early successional

forbs and flowers. This past year the DFW has recorded detections of quail on two Eagle Nest Wildlife Area Tracts, Paddock and Burrows. To the south Kent County has also increased habitat work by taking out over 200 acres of agriculture and planted early successional quail habitat. DFW staff has been reducing nonnative and invasive plants for the past 3 years and habitat quality increased by the increased presence of songbirds and also the first detection of quail during spring counts at Ted Harvey Wildlife Area. Efforts continue to be made to ensure that habitat stays suitable for quail and other early successional species using prescribed fire and fallow discing. In 2023 the DFW was able to burn 218 acres of suitable quail habitat to continue to produce brood and nesting habitat for the species. DFW will continue to manage and expand quail habitat over the next several years.



IOWA | The Iowa Department of Natural Resources is collaborating with Iowa State University (Dr. Adam Janke and graduate student Riggs Wilson) on a quail project to better understand how NRCS programs benefit bobwhite. The research is focused on investigating the occurrence and landscape associations of northern bobwhites in Iowa as part of a larger research project focused on looking at the effects of habitat management practices implemented under the NRCS Working Lands for Wildlife (WLFW) program. Objectives include: determining the habitat characteristics at the landscape-scale that are driving northern bobwhite occupancy within the WLFW eligible counties in Iowa, and looking at the differences between locations where bobwhites occur and locations where bobwhites could potentially occur but are absent. The overall goal is to hopefully help to inform the best areas to implement WLFW practices in Iowa for the most benefit to bobwhite populations. The project will use autonomous recording units to monitor for bobwhite covey calls in the fall. Another portion of the project will look at early successional songbird use during the spring breeding season.



KANSAS | This year the Kansas Department of Wildlife and Parks was able to finalize a 495-acre addition to the Byron Walker Wildlife area. Byron Walker Wildlife Area is largely comprised of upland prairies that are managed for quail through a patch burn grazing system. The addition includes 337 acres of grassland and 148 acres of cropland and encompasses over a mile of the Ninnescah River. This expansion will increase the footprint of the wildlife area for upland birds. The purchase of public lands in Kansas is often a contentious and long process. This purchase was facilitated through a partnership with Ducks Unlimited who held the property over the course of 6 years it took to finalize the purchase. During the time Ducks Unlimited held the property it was open to public access through the Walk-in Hunting Areas program. Restoration efforts on the addition have already begun with tree removal and fencing of the grassland acres to accommodate grazing management. Prescribed fire will be reintroduced into the property in 2024 for the first time in 80 years.



KENTUCKY | The Kentucky Department of Fish and Wildlife Resources (KDFWR) continues to collect monitoring data on two NBGI Quail Focus Areas in the western part of the state. In the central and southern parts of the state, efforts are on-going on two division focus areas on production lands. The University of Tennessee research project on Bluegrass Army Depot has completed. Goals of the research are to determine quail use in a matrix of cool-season and native warm-season grass grazing systems. The Program is working with the Private Lands Program on 3 upcoming Focused Conservation Projects (NRCS) in the state- aimed at promoting wildlife friendly practices on working lands. The division has also worked with NRCS to establish trainings for planners to plan prescribed fire on NRCS contracts which will take place over the next 3 years.



LOUISIANA | With the help of NBGI, Louisiana Department of Wildlife and Fisheries (LDWF) and the United States Forest Service have agreed to develop and monitor a quail focal area in the Kisatchie National Forest (KNF) in western Louisiana. Although this area has been an emphasis area for quail since 2010, the area has been expanded and established as an official NBGI Focal Area that is 5,992 acres in size. Work on the KNF-Vernon Quail Emphasis Area has begun, with the first year of bird monitoring and habitat monitoring conducted in 2017. Bird monitoring continued 2018-22 and is currently ongoing for 2023. Nearly the entire KNF-Vernon Quail Emphasis Area was impacted by

Hurricane Laura in 2020, and much of the area suffered intense storm damage. Habitat restoration efforts are still ongoing throughout the area.

Extensive habitat work for bobwhites also continues on Sandy Hollow Wildlife Management Area (WMA), a 4,000-acre WMA in southeast Louisiana. Many management activities have been implemented in the past five years to improve habitat, including prescribed burns, timber harvests, and herbicide treatments. This year, approximately 1,936 acres were enhanced with prescribed fire. These efforts should continue to improve the bobwhite populations on the WMA as indicated by the surveys conducted each year.



MARYLAND | Habitat management efforts and favorable weather have resulted in large population increases on 2 Wildlife Management Areas (WMAs) in Eastern Maryland. On Nanticoke River WMA, estimated fall densities in 2022 increased 92% from the year prior to a new record high since the survey began in 2003. Fall numbers increased by 168% on E.A. Vaughn WMA. Overwinter survival on both WMAs appeared to be high during the winter of 2022-23. Summer surveys documented similar increases in whistling males of 94% and 211%, respectively.



MISSISSIPPI | Lynn Posey was officially appointed as the new Executive Director of the Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP) in September 2022 after serving in an Acting Executive Director role for much of the year. Mr. Posey has been very supportive of our increased engagement in quail conservation. MDWFP's Wildlife Bureau has surpassed its previous high mark for staffing levels. Our Private Lands Program and Wildlife Management Areas (WMAs) especially have increased capacity to deliver and implement conservation practices, many of which result in quail-friendly habitat management activities. Mississippi's *Fire on the Forty Initiative* was bolstered by multiple grant awards that will significantly increase the impact and extent for prescribed burning cost-share, education, and outreach resources to landowners through a partnership of public and private entities. Over \$5.5 million will be available over the next four years mainly to implement prescribed burning on private lands. As such, the initiative was expanded to include 53 focal counties in Mississippi. MDWFP continues to cooperate with Mississippi State University investigating scale of habitat management and quail population response on five WMAs. We are looking forward to the next few years of this increased capacity to conduct research and management.



MISSOURI | The Missouri Department of Conservation (MDC) is working on rolling out a new Quail Habitat Strategic Initiative. This effort is in the early planning stages, but we are hoping to increase management efforts throughout our Quail Restoration Landscapes which include both public and private lands. The 2023 August Agent Roadside Surveys showed a 30% increase in quail numbers statewide. A mild winter and dry spring and summer likely resulted in good overwinter survival and a productive nesting season. Fall 2022 covey numbers were up slightly (5%) in both the Bee Ridge and the 2C NBGI Focal Areas. I anticipate increases in fall covey counts in 2023.



NEBRASKA | As part of the multi-state Working Lands for Wildlife (WLFW) Initiative, a “Bobwhite Quail Conservation Delivery Specialist” position was added in southeastern Nebraska. With the coordination of this position ten projects have been contracted through the initiative to improve habitat for bobwhites on over 950 acres in southeast Nebraska. Projects mainly consist of tree removal, such as timber stand improvement and brush removal, to create more understory space and promote herbaceous diversity within timber stands for bobwhites. Looking forward the biologist has been working with an additional seven landowners to develop management plans and projects for this upcoming EQIP signup to put an additional 420 acres of bobwhite and other grassland depend wildlife conservation on the ground.



SOUTH CAROLINA | Work has progressed on all of South Carolina’s quail focal areas. Covey counts indicated slight decreases on two focal areas, no change on one, and an increase on one. Small burn blocks and thinning continues to be the focus on the quail focal areas and these concepts continue to gain traction among other public and private properties as the success and visual appearance of these properties improve.

There are two additional focal areas in South Carolina that are still in the beginning stages. The Bordeaux Quail Focal Area, a partnership with US Army Corps of Engineers Savannah District and SC Bobwhite Initiative, and Kings Mountain National Military Park and Kings Mountain State Park, a partnership with National Park Service, SC Parks Recreation and Tourism, SC Department of Natural Resources, and Quail Forever. Other Wildlife Management Areas in South Carolina are also making more efforts to improve early succession habitat on their properties as well.

There has been a very small, but growing interest in

native grazing in South Carolina. Efforts are underway to create grazing demonstration areas in partnership with NRCS, Clemson Extension, NBGI, SCDNR, Spartanburg Area Conservancy, non-profit organizations, and other private operations to develop a native grazing system and determine costs and benefits.

Requests for Quail Initiative funding have remained above one million dollars in South Carolina for the second year in a row. The Quail Management Seminar and Quail Workshop remain a popular attraction among private landowners and managers, various state and federal agencies, and non-profit organizations. Landowners who have begun making habitat improvements are reporting increased quail sightings and broods. One recent report from a “recreational mower” was to report on the 5 broods he found after leaving his bush hog parked for the summer. He was very pleased to know that quail were still on the property.



TENNESSEE | Bobwhite conservation is off and running on the Cumberland Plateau in Tennessee. June whistle counts have increased over 30% for 2 consecutive years at Bridgestone Firestone Centennial Wilderness WMA, one of Tennessee’s 4 anchor areas. Staff have worked diligently to set back an overabundance of rank native grasses and bramble thickets on the 750-acre Farm Unit. An additional 340 acres of harvested loblolly pines were restored to grassland by using a combination of aerial herbicide and prescribed fire. The plant response has been amazing with an abundance of rare prairie remnant species already emerging to recolonize the site. Work continues on the south end of the management area to thin pines, burn, and establish brood fields on 3,000 acres of commercial loblolly stands that have been acquired across the years. A recent land swap added nearly 5000 manageable acres to the WMA.

Just 20 miles to the north, Catoosa WMA is hot on their trail. A savanna restoration project is underway on 1600 acres of oak forest that was impacted by a series of wildfires and tornadoes. Nine hundred acres were burned in March. Seven hundred acres of regenerating hardwoods were sprayed over the summer as well. June whistle counts tripled, a result of explosive recruitment and immigration from the surrounding private lands. An additional 1600 acres was purchased adjacent to the savanna. This new tract contains over 600 acres of fields that are already being restored to a native grassland community. Even with minimal management, almost 1.5 bobs were counted per point on the new tract. This WMA will become Tennessee’s 5th anchor WMA in 2024.



TEXAS | The Blackland Prairie region has been one of the most heavily impacted by land use changes in recent decades, but today Texans are pushing back. On a property seeded to non-natives and with heavy grazing pressure, several landowners decided to make a change. Partnering with Texas Parks and Wildlife Department (TPWD), the Western Navarro Bobwhite Recovery Initiative, Tarrant Regional Water District, Quail Forever, the Natural Resource Conservation Service, and the Oaks and Prairies Joint Venture, the landowners completed several cost-share habitat projects. Beginning in 2021, a 110-acre field was converted from non-native bermudagrass to a suite of native grasses and forbs (Pastures for Upland Game Birds habitat program). In tandem, the landowners and their neighbors worked with TPWD to burn 138-acres of mesquite-encroached pasture and 18-acres of openings to encourage bunchgrass and forb diversity. In 2022 they sculpted 81-acres of heavy mesquite fields surrounding the restoration pasture (Grassland Restoration Incentive Program), and in 2023 a growing season burn was successful in setting back mesquite and encouraging forb diversity, as well as improving grassland structure for wildlife. The goal was to create a mosaic of brush mottes to benefit upland game birds (e.g., by enhancing escape cover for bobwhite quail) and a long-term plan is now in place to continue with brush sculpting, incorporate prescribed fire rotations (every 3-4 years), keep up with non-native vegetation control, and eventually return cattle to provide for habitat management. Most notably, this spring the landowners reported hearing multiple male bobwhite quail calling throughout the project areas (up to 7 at a single location), the first-time birds had been heard on the property in decades.



Photo submitted by Virginia Dept. of Wildlife Resources.

oped for the WMA that will serve as a guideline for the next 75 to 100 years. The plan focuses on increased and heavier timber thinning, establishment of hundreds of acres of long-leaf pine, increased use of prescribed fire, and the incorporation of multiple 4-to-5-acre fields well distributed throughout the area to be managed as quail and turkey brood-rearing and winter-feeding areas. They will also make fine pollinator habitats. The population will be determined by spring and fall surveys conducted by staff and partners as part of Virginia’s participation in the CIP, and with some use of autonomous recording units. Quail hunting will be closed on the area until populations reach levels that staff believe will support harvest. It is envisioned the area will become a premier, lottery style quail hunting experience, serve as a potential source for quail translocation, and act as a demonstration area for quail habitat.



VIRGINIA | This year Virginia DWR began the first steps in what we are calling the Flippo-Gentry Wildlife Management Area Century Project. This relatively new VDWR property in Sussex County forms a complex with Big Woods State Forest (VDOF), Big Woods WMA (VDWR), and Piney Grove Preserve (The Nature Conservancy). Together these areas represent one of the largest areas managed for wildlife on public and private land in Virginia. The overarching focus on all these areas is red-cockaded woodpecker recovery by large scale long-leaf pine ecosystem recovery. This fits perfectly with quail management. And the Flippo-Gentry WMA will become Virginia DWR’s premier quail management property. A long-term management plan has been devel-



WEST VIRGINIA | The West Virginia Division of Natural Resources (WVDNR) continues to address the need for early successional habitat management statewide. Although most efforts focus on creating young forest for grouse, turkey, and songbirds, efforts also include attempts to enhance habitat for bobwhite. Habitat management for bobwhite continues on Tomblin Wildlife Management Area (WMA) and also now includes other areas across the state. In 2022, administration directed the WVDNR to initiate a bobwhite quail release program on select state managed WMAs and state forests. Annually, 21,000 quail are released to provide opportunities for wildlife watching, dog training, and hunting.





2023 NBGI Fire Bird Conservation Awards

ACHIEVEMENTS

NBGI's 2023 National Fire Bird Conservation Awards continued to illustrate the various ways entities, groups, and individuals can contribute on many levels to the landscape-scale revival of wild bobwhite quail. The term "fire bird" was first coined by naturalist Herbert Stoddard, who researched the species in the early 20th century. The award's title is a reminder of the importance of fire required on much of the landscape to create and maintain the habitat that bobwhites, other grassland/shrub land birds, pollinators, and many other organisms require.

Recipients are chosen by the respective state's quail coordinator and are announced at the annual meeting of the National Bobwhite Technical Committee. Award photos by Jef Hodges.

Arkansas

The job of a program coordinator is dependent on motivated, qualified and dedicated field staff. **David Luker** is one of the hardest working and most passionate biologists working for Arkansas Game and Fish Commission. Under David's leadership, Little Bayou Wildlife Management Area in Southeast Arkansas has been transformed from a forgotten pine thicket to one of the state's best examples of Gulf Coastal Plain pine savannas and the highest quail density of any AGFC owned WMA. Anything David does is done

well, including leading prescribed fire operations as a regional burn boss, performing bird surveys, planning moist soil management, feral hog control, fabricating equipment, serving as a mentor for younger biologists, supervising his technicians and sharing his passion for his work with the public that benefits from his dedication. Most importantly, David is a caring family man that greets every challenge with a smile, a belly laugh and a full cup of optimism. The wildlife resources of Southeast Arkansas owe much to David Luker and Arkansas Game and Fish Commission is proud to award him with the 2023 Firebird Award.



Georgia

It is with great enthusiasm that our team would like to nominate **Bryan (Hootie) Crowe** for the Fire Bird award. Bryan has exemplified excellent conservation stewardship for bobwhite and grassland management as the area manager for several of our quail focal WMAs. Bryan is primarily responsible for management on both Elmodel WMA (1,600 acres) and Chickasawhatchee WMA (19,700 acres). Thanks to a lot of hard work, sweat, and prescribed fire we have steadily seen an increased in quail populations as well as hunter success metrics on both WMAs over the last 3 years. Both areas have met and exceeded our population goals. Bryan also provides an outstanding example of leadership mentoring the next generation of wildlife biologists, researchers, and managers. He is the first one to volunteer to host an outreach event and even participates in some of the research projects, such as the collaborative project with University of Georgia, banding and placing telemetry collars on Northern Bobwhite. It is our belief that Bryan exemplifies what it means to be a firebird. Below is just a small list of his recent accomplishments.

- Primarily responsible for completing the prescribed burns on 3,050 acres on Chickasawhatchee WMA and 125 acres on Elmodel WMA in 2023
- Establishing 81 acres of new brood fields and managing hundreds of acres of established fields
- Working numerous manned check station hunts for deer hunters
- Coordinating UGA research projects and technicians as well as assisting in trapping and banding of over 100 northern bobwhite quail on multiple WMAs
- Assisting with spring whistle counts and fall covey counts
- Hosting a Quail Forever Northern Bobwhite bootcamp and demonstrating field techniques to new biologists
- Hosting students from wildlife classes at Abraham Baldwin College and Southern Regional Technical college.
- Training and supervising new wildlife field technicians
- Saving thousands of dollars in operating budget with his knowledge and skillset for operating heavy equipment

Bryan is a tremendous asset to our efforts in quail management on these areas and we are pleased to nominate him for the firebird award.

It is with great enthusiasm that our team would like to nominate **Ryan Meckel** for the Fire Bird Award. Ryan has exemplified excellent conservation stewardship for bobwhite and grassland management as the main manager for one of our quail focal WMAs, Di-Lane Plantation WMA in Waynesboro GA as well as on several other WMAs in Region 3 of Georgia. Ryan is always open to new research in support of management and is willing to implement those ideas on the landscape. The following is a small list of the accomplishments Ryan has achieved in the last several years bettering the ground for our grassland birds in Georgia.

- Accomplished ~2,000 acres of prescribed fire annually, including initiating the first growing season and late growing season fires on Di-Lane to increase pyro-diversity, increase groundcover diversity, and better address hardwood invasion issues.
- Began aggressive invasive species control program to prevent degradation of native habitats and reduction of quail carrying capacity
- Oversees management of ~300 acres of rotationally disked brood fields
- Initiated a hardwood removal program to remove large, off-site hardwoods from the uplands via hack and squirt, girdling and timber harvests to reduce the number of propagules and future hardwood sprout issues
- Helped update Di-Lanes Quail Management Plan and begin planning for long term future of quail management on the property including future timber harvests and longleaf pine planting
- Provides assistance to UGA quail research project designed at increasing understanding of habitat management on quail survival and production
- Hosted a learn-to-burn event for the public to help private landowners learn how to safely utilize prescribed fire on their properties
- Coached a 4H wildlife team and taught them about wildlife and habitat management, taking them to state and regional competitions
- Oversees draw quail hunts, data collection and entry
- Prepares annual field trial courses and coordinates with field trial organizations for numerous field trials on the historic Di-Lane Plantation.





Cody Rhoden (right) presents the Fire Bird Award to James Woods (left).



Beth Emmerich (left) presents the Fire Bird Award to Lisa Potter (right).

Kentucky

Jimmy Woods is the public lands biologist for several WMAs in Northeast Kentucky. Clay WMA is one of the properties he manages for bobwhite. This WMA was a quail focus area from 2008 – 2020 and continues to hold birds for sportspeople to chase on public lands through his tireless efforts not only in the open lands but also in the forest. In the 2023 burn season he fired 2,473 acres. In fall of 2022 he spearheaded the first helicopter spraying of bush honeysuckle on over 600 acres of forestland. He has facilitated outside labor and funding for work on his WMA including Quail Forever chapters and the KY Quail Specialty License Plate.

Missouri

Lisa Potter has worked for the Missouri Department of Conservation since 2007, beginning as a Private Land Technical Assistant. She then promoted to an Area Biologist, and in 2010 she became a Private Land Programs Supervisor, often referred to as our Farm Bill Coordinator. She has been involved in grassland bird and quail research since her graduate school studies at Iowa State University. As part of her responsibilities as the Department’s primary Farm Bill coordinator, she represents MDC on the NRCS State Technical Committee and has been instrumental in ensuring that bobwhite quail are a ranking consideration in EQIP and that Missouri was a participating state in the Working Lands for Wildlife Initiative.

She worked with numerous staff and partners to author Missouri’s USDA Voluntary Access Program grant and its renewal which have been focused on quality habitat and management of that habitat. This program has been a go-to for many quail hunters. Lisa and her staff led the switch in Missouri to using seeds/square foot in wildlife and forb seedings, including the development of a Missouri specific seed calculator which has resulted in better seedings to benefit quail habitat. Lisa also worked with the Missouri Department of Natural Resources to add native warm-season grass being added as a component of their soil and water conservation cost-share program for the first time in 35 years.

Lisa has been a leader in developing Regional Conservation Partnerships Programs or RCPPs working with Department staff and partners to author several of the first successful wildlife RCPP grants in the coun-



try, including the first multi-state wildlife based RCPP, all of which have benefitted bobwhite quail and grassland birds. She also works with USDA staff to coordinate their renewals.

Lisa served as the first female chair of the National Bobwhite and Grasslands Initiative (NBGI) and was a member and chair of the group's subcommittee on Ag Policy. She has chaired numerous Association of Fish and Wildlife Agencies Ag Committee Working Groups and serves on MDC's quail and small game working group.

Pennsylvania

Tom Keller optimizes what it is to be a great biologist. His hunger for knowledge, focus on the task at hand, exceptional interpersonal skills, and ability to share a story puts him in a position to benefit any program he oversees. Luckily for the quail community, he was tasked with the reintroduction of bobwhite to part of their historic range in Pennsylvania before starting the transition into his current role in 2020. In his time at the helm of the quail program, he laid the groundwork for reintroduction of the species in 2024. He played a major role in identifying that bobwhite are extirpated in Pennsylvania, locating a bobwhite quail focus area (BQFA) as the reintroduction site, writing a management plan, and starting on the ground management of the BQFA taking it from low quality forest in 2016 to quail habitat today. Tom is more than deserving of this Firebird Award. We thank him for all he does for wildlife conservation and for being an all-around great person.

South Carolina

Amy Tegeler is the SCDNR Bird Conservation Coordinator. For many years Amy has worked with the small game staff on various projects but it has been her recent work with the SC Bobwhite Initiative that she is being nominated for the 2023 NBGI Fire Bird Conservation Award for SC.

Amy was instrumental in setting up the bobwhite and non-game bird species monitoring for the SCBI monitoring of our 5 focal areas. It was her tireless behind the scenes work that she is being nominated. She led the Monitoring Subcommittee of the SCBI Technical Committee in putting together the monitoring protocol for the SCBI. She didn't



Andrew Ward (right) presents the Fire Bird Award to Tom Keller (left).

stop there though. She has continued to volunteer to work with the group. Most recently she has been assisting with an ARU monitoring project and coordinating a researcher from NY in that endeavor. She has also held several learn to bird courses over the years and this year with several new SCBI biologists on staff that course was once again bobwhite and grassland bird centric.

Amy is one of the often unsung heroes whose work goes on behind the scene but is rarely noticed after the project gets going. But without Amy's continuing contributions to the SCBI we would not be as nearly successful as we have been today. So again I'd like to nominate Amy Tegeler to be the 2023 NBCI Firebird Award Winner.

Tennessee

Aubrey Deck coordinates management on 14 management areas on the Cumberland Plateau. He serves on the TWRA Bobwhite Recovery Team. In 2021, the agency



announced significant habitat projects on management areas to restore savannas and grasslands. These plans came under fire from some in the local community and their state representatives. Aubrey represents TWRA professionally and has defended this sound, science-based management plan numerous times at public meetings, with local media outlets, and to internal detractors. Under his leadership, these work units have improved over 3,000 acres of bobwhite habitat on 2 management areas in the last 2 years with additional projects currently underway. June whistle counts on Catoosa WMA are up 200% from last year with bobs being heard on nearly all monitoring points. Whistle counts on Bridgestone WMA are up over 70% from last year. Bobwhite counts on private lands adjacent to Bridgestone WMA are up nearly 400% from 2020 on the north route and 4 were observed this year on the south route, with none heard there since 2019. Fall covey counts are up 60% on Bridgestone WMA. His leadership, vision, direction, stubbornness, and unfailing optimism have been major reasons for the recovery we are experiencing on the Cumberland Plateau.

Texas

The Gulf Coast Joint Venture (GCJV) and partners began the Coastal Grasslands Restoration Incentive Program (C-GRIP) in 2018. The C-GRIP provides financial incentives to private landowners for conducting management actions that improve suitability of grassland bird habitat on their property. A key component to successful program delivery are the numerous project managers who work with landowners to develop projects, submit proposals, and ensure practices meet the required standards for payment to the landowner. Any biologist from a GCJV partner organization can serve as a C-GRIP project manager.

A standout among C-GRIP project managers is **Shannon Barron**, a wildlife biologist for the Texas Parks and Wildlife Department, District 7 in the Wildlife Division. Shannon has been a C-GRIP project manager since program inception and is responsible for delivering 24 C-GRIP projects, totaling 7,517 acres of improved grassland bird habitat. She has assisted landowners across 3 of the

5 C-GRIP focal areas to implement grassland bird friendly practices including brush management (mechanical and herbicide), prescribed burning, and prescribed grazing. Shannon's wildlife and habitat management knowledge and easy going demeanor make her a great private lands biologist and instill confidence in the landowners she works with to improve habitat on their properties. Her adeptness has also contributed immensely to the success of the C-GRIP in Texas.

Shannon has a B.S. in Range and Wildlife Management (Texas A&M University-Kingsville); M.S. in Wildlife Conservation and Management (University of Arizona). Her previous experience prior to coming to Texas Parks and Wildlife Department, District 7 in the Wildlife Division was work with North Wind Resource Consulting as a Wildlife Biologist, 02/2013-12/2017; Arizona Game and Fish Department, Wildlife Habitat Stewardship Specialist, 02/2012-02/2013; Cochise County, GIS Technician, 01/2008-01/2012.

The Victoria Soil and Water Conservation District awarded Shannon with their Wildlife Conservationist Award in 2021 and Soil and Water Conservation Districts, State District 3 Wildlife Conservationist Award in 2022. She is a Certified Wildlife Biologist by The Wildlife Society.



Steve DeMaso (right) presents the Fire Bird Award to Shannon Barron (left).



Virginia

Andy Rosenberger is long overdue for this Fire Bird Award. Andy has worked as a senior private lands biologist on our Virginia Quail and Private Lands Team since December 15th, 2009. He is the only remaining original PLB. His leadership, good nature, and willingness to help others is phenomenal. Over the years Andy has mentored all our new PLBs in GIS work, USDA conservation programs, USDA computer programs, and habitat management. Andy always brings a good sense of humor to work. His personality is that of a glass half full person. His expertise has become a valued asset to multiple entities and partners in Virginia. To name a few: Virginia Woods and Wildlife planning committee, Va. Dept. of Forestry Stewardship, Hardwood and Forest Management Academy committees, Va. Dept. of Wildlife Resources Small Game and Turkey / Grouse committees, guest lecturer Virginia Tech Conservation Biology Institute, Virginia Prescribed Fire Council member serving on multiple sub-committees, and is a certified WHET trainer for all USDA staff in Virginia. In addition, Andy has been active with NBGI TC for over a decade. He has served on the Forestry Subcommittee for years and has attended and participated in as many NBGI TC meetings as his travel budget has allowed.

More specifically, Andy's relationship with the hundreds of landowners he serves is top notch. His landowners respect and admire him. He maintains open communications with them for years after their original projects. He is always willing to talk with them to make site visits



Marc Puckett (right) presents the Fire Bird Award to Andy Rosenberger (left).

and to continue that relationship that is so important to long term conservation success. He truly sets a wonderful example for all new PLBs to follow. He also has great relationships with his partners such as the NRCS District Conservationists. To meet Andy is to like him. To work with him is to trust him. There is no better person to work with than Andy Rosenberger.



NBGI Technical Committee Awards

Chuck Kowaleski Leadership Award

Each year, the NBGI Technical Committee (NBGI TC) presents an award highlighting exceptional leadership towards national progress for the restoration of bobwhites within the NBGI TC organization. The award was named the Chuck Kowaleski Leadership Award in 2020 in memoriam of 19-year NBGI TC veteran Chuck Kowaleski.



Lisa Potter and Michael Hook present the 2023 NBTC Chuck Kowaleski Award to Cody Rhoden (center).

A facilitator is a person who helps a group of people work together better, find common objectives, and plan how to achieve these objectives. Facilitators are there to make a process easier. They have strong leadership skills, the ability to teach others, they listen well, and can communicate effectively. There are some people for whom these skills seem to come naturally. And **Cody Rhoden**, the Small Game Program Coordinator with the Kentucky Department of Fish and Wildlife Resources happens to be one of these people.

Cody makes it all look deceptively easy, however those of us who have attempted facilitation, know that there is nothing easy about it. It takes a lot of practice and A LOT of prep work to help groups work through tough decisions. Especially decisions about how to restructure an organization as complex as the NBGI. It's been almost 2 years since the steering committee decided to launch an

ad hoc team to complete a critical review of the Technical Committee structure. Cody immediately offered to help lead this effort.

There are no critical review processes that are easy, and helping to find consensus among 25 different state agencies, multiple conservation NGOs, and federal agencies is a monumental task. Cody's calm approach to challenges, his drive to find solutions, his ability to keep others on track are just a few of the reasons the facilitated discussions and processes successfully led to consensus among such a diverse set of members.

Cody spent significant amounts of his time developing facilitated meeting flow documents and

processes to help the committee work our way through the critical review at last year's annual meeting. He led the discussions, he consolidated and summarized the results, he developed the online follow-up survey, summarized those results and finally, worked to develop the breakout structure, objectives, and process of finalizing the working groups for the newly identified subcommittees at this year's meeting.

It has taken hard discussions and a lot of hard work to navigate NBGI through the recent changes and transitions. Following this meeting, the technical committee will have a finalized structure and will be able to get back to focusing on bobwhite and grassland conservation full time. These successes could not have been achieved without Cody's dedication and leadership. Please help me thank Cody for all his hard work and congratulate him on receiving the NBGI TC Chuck Kowaleski Leadership Award.



Hall of Fame Award

The NBGI TC Hall of Fame Award recognizes outstanding, lifetime contributions to the NBGI TC vision. Recipients exemplify a history of service, leadership, and accomplishment within the NBGI TC, and their impact to the group lives beyond their tenure of service.

Donald F. McKenzie

Don started his career as a waterfowl biologist with the South Carolina Waterfowl Association. He then served as a conservation policy liaison for the Wildlife Management Institute, following as the Asst. Chief of Wildlife for the Arkansas Game & Fish Commission. Don was selected as the second National Bobwhite Conservation Initiative Director in 2004 and served 15 years through 2019 when he retired.

Don was involved with the organization beginning with the second meeting of the Southeast Quail Study Group in 1996. Don was one of the three primary co-authors of the first national bobwhite recovery plan (NBCI 2002).

During his time with WMI he was a pioneer in recognizing the potential of Farm Bill conservation programs to achieve multiple fish and wildlife objectives, and in particular habitat restoration for bobwhites and associated early successional wildlife. Don was a key player in deliberations with Congress on several Farm Bills and authored the first written guide to Farm Bill conservation programs for wildlife professionals.

His visionary leadership helped the SEQSG transform to the National Bobwhite Technical Committee in 2009 to officially encompass the 25 states comprising the vast majority of the historic range of bobwhites in the US. Don oversaw the complex process of the NBCI locating at the University of Tennessee - Knoxville as the first administrative home for the partnership. At regional and national fish and wildlife conferences many after-hours deliberations were held (usually in Don's hotel room and over a bottle of good bourbon he provided) to discuss ideas of how to better serve the bobwhite habitat restoration challenge.



Lisa Potter and Michael Hook present the 2023 NBTC Hall of Fame Award to Donald McKenzie (center).

His diligence on moving the NBCI forward helped expand the NBCI staff from one to seven which included an Assistant Director/Science Coordinator, a Grasslands Coordinator, a Forestlands Coordinator, an Agricultural Policy Liaison, a Data Manager, and a Communications Director. The expanded staff enabled NBCI to significantly elevate the influence of bobwhite concerns in diverse conservation arenas. Don's efforts promoting the concept of official "quail focal areas" helped garner the Pea Ridge National Military Park as the first federal government QFA.

During his tenure, NBCI utilized cutting edge landscape technology and data to produce the NBCI 2.0 conservation plan, released in 2011. His vision resulted in the annual Bobwhite Almanac that provides a first-class popularized summary of national bobwhite recovery and management efforts and information.

Based on his long tenure and leadership in the organization, relations with state wildlife agency directors, federal agencies, NGOs and private organizations, and overall contributions to bobwhite and general conservation management, we feel Don is well deserving of this award.





Lisa Potter and Michael Hook present the 2023 NBTC Hall of Fame Award to Marc Puckett (center).

Marc Puckett

There are some individuals whose impact, commitment, and passion transcend the framework of a typical Hall of Fame inductee. Hall of Famers tend to have “left the game”. As you may guess, this individual remains in the fight and has done so for more than 25 years. His impact has left indelible marks on his agency and this partnership.

This individual’s story dates back to the origins of the partnership. He was engaged in the early meetings and efforts of the SE Quail Study Group. He chaired the Outreach Subcommittee from 2000 to 2003, and he served as a co-author of the Northern Bobwhite Conservation Initiative (2002) and the National Bobwhite Conservation Initiative (2010). He also served on the Forestry Subcommittee for many years.

More importantly, he led this partnership through times of peril and opportunity as Chair during 2012 to 2014. Those years were marked by the loss of the National Fish and Wildlife Foundation’s Keystone Initiative putting staff jobs at risk. He helped lead the transition to PR funding to catapult the maturing partnership to the future. He also shepherded the development of the partnership’s Coordinated Implementation Program resulting in 20 states developing a focus area. As chair, he led the annual meeting planning in 2014. For those who have hosted, an incredible commitment of time and energy when not serving as chair!

As a talented field biologist, he was blessed with an

uncanny ability to communicate. He’s a tremendous orator and an even better writer. Shell’s Covert has donned the NBGI’s webpages for years, and he continues to contribute new content monthly. Most recently, he used those talents towards the development of the next generation of private lands and small game coordinators as an inaugural member of the NBGI’s coordinator training cadre. Few more fiercely advocate for the collaborative work of the partners towards this initiative.

His work was equally impressive back home. He led the creation of

his state’s private lands efforts. Leveraging funding and building partners while mentoring his team along the way. He also launched and maintained Virginia’s Quail Council. It’s long standing tenure and evolution is a testament to his vision. He coauthored the state’s Quail Action Plan and it’s subsequent 10-year revision. He has inspired the careers of many employees and peers.

Last but certainly not least, he is an amazing human being. He valiantly served his country in the Army Airborne Division. He prioritizes family and strives for balance in the workplace. Few are more humble, friendly, or approachable. His passion for bird dogs and upland bird hunting is just icing on the cake! It is our most sincere honor and privilege to induct Marc Puckett into the NBGI Hall of Fame.



2023: Shaping National Legislation to Benefit Bobwhite and Grasslands

Jen Mock | NBGI National Policy Liaison
NBGI Foundation

Thank you to the Quail Coalition and our members for providing financial support to continue the National Policy Liaison (liaison) position for the National Bobwhite & Grassland Initiative Foundation (NBGIF). The liaison provides a quail-focused voice to work with partners and inside the beltway of Washington, DC, to shape national wildlife conservation legislation and federal administrative policies and programs to benefit the northern bobwhite, habitats across its range, and other associated wildlife species.

State fish and wildlife agency members and various conservation organization partners work complementary across landscapes through the National Bobwhite Technical Committee to achieve the shared goal of restoring wild northern bobwhite populations to sustainable levels. Linking a host of benefits from habitat restoration is key to their recovery and our successes. Our partnerships, relationships with private landowners and producers, and the collective implementation success of current initiatives and federal policies, programs, funding, and laws that can help restore this iconic American species and the habitats upon which they depend to survive and thrive. Policy efforts in 2023 focused on the farm bill and draft grasslands conservation legislation.

Advancing Conservation Opportunities in the Next Farm Bill

With a better understanding of the political landscape early in 2023, the liaison worked with the NBGI's Policy Committee, the foundation's board members, and community partners to finalize the NBGIF's 2023 Farm Bill policy recommendations. These recommendations were honed,



focusing on the needs of quail and quail habitat through conservation opportunities in the farm bill. The recommendations were delivered to House and Senate Committees on Agriculture staffs and member offices and discussed through many virtual and in-person meetings and conference calls.

The conservation provisions in the US Farm Bill are the single largest investment in voluntary conservation on pri-



Photo by Jen Mock.

vate lands in the country. It is the critical lift producers need to address natural resource concerns on their lands while meeting other conservation goals and sustaining our nation's agricultural production that provides food and fiber for our citizens and others across the globe. While the Agriculture Improvement Act of 2018 expired on September 30, 2023, in October 2023 Congress passed an extension of the law until the end of 2024, giving lawmakers time to draft language, score bills, negotiate provisions, and move the must-do bills through the legislative process. Congress continues to hold hearings and gather important suggestions from Members of Congress and diverse interests from across the country.

Requests from farm bill stakeholders to increase funding for various titles and provisions of the bill are soaring to tens of billions of dollars at a time when an increase in spending is unlikely, even with broad-based support for a new program like the Forest Conservation Enhancement Program and programs with significant levels of economic return but lack baseline funding such as the Voluntary Public Access and Habitat Incentive Program. Conversations continue about proposed program changes and improvements, funding challenges, how conservation program funds from the Inflation Reduction Act will be scored by the Congressional Budget Office and subsequently incorporated into the bill, and where members can find bipartisan support to advance and enact a new law.

The liaison works on select legislative and policy priorities for the NBSI state members with partner coalitions such as the American Wildlife Conservation Partners, Association of Fish and Wildlife Agencies, FECP, Forest in the Farm Bill, National Grasslands Coalition, the Theodore Roosevelt Conservation Partnership.

Restoring North American Grasslands

The wildlife conservation community also has been working on legislation that would take "bold action to conserve and restore grasslands" across the broad and diverse

landscapes of North America. The "North American Grasslands Conservation Act" (S. 4639) was first introduced in the US Senate in the 117th Congress. The wildlife conservation community collaboratively identified some improvements that led to recommended revisions to the draft bill which helped garner bipartisan support in the US House of Representatives (House) this year. These edits are being incorporated into a new version of the bill that is expected to be introduced in the House in 2024. Conversations with Senate offices about reintroduction of the bill are ongoing.

Grasslands are one of the most endangered ecosystems in North America and its conservation and restoration would benefit from the new public-private partnership program proposed to be authorized by Congress and administered by the US Fish and Wildlife Service. The new program would provide private landowners and conservation organizations with needed resources to focus on restoring native grasslands and their associated diverse wildlife species from Canada to Mexico. The bill concept is similar to the incredibly successful *North American Wetlands Conservation Act* (P.L.101-233).

Recovering America's Wildlife

The "Recovering America's Wildlife Act" (RAWA, S.1149), a once-in-a-generation piece of wildlife conservation legislation, was reintroduced this Congress in the US Senate by Senators Heinrich (D-NM) and Tillis (R-NC). It continues to be one of the highest legislative priorities of the wildlife conservation community today. The bill would provide \$1.3 billion per year to the state fish and wildlife agencies (states) to work with private landowners, conservation organizations, and other state and federal agencies to keep common species common, including the bobwhite in 26 states. It also would provide Tribal Nations with \$97.5 million per year for fish and wildlife conservation priorities on Tribal lands and other similar purposes. Programs and projects would implement voluntary, proactive conservation measures that help restore at-risk species before protections of the federal Endangered Species Act are warranted and save industries, businesses, private landowners, and taxpayers countless dollars and regulatory uncertainty. It also will facilitate state-led collaboration to help recover those species already listed as threatened or endangered.

House RAWA bill champion Rep. Debbie Dingell (D-MI) has not introduced a version of the bill this session of Congress, but House Committee on Natural Resources Chairman Bruce Westerman (R-AR) has been discussing various aspects of RAWA with members of the conservation community and working on a draft wildlife habitat bill. Introduction of the Chairman's bill is anticipated in early 2024.





Native Warm-Season Forage Resource Center

Jef Hodges | NBGI Assistant Director



Photo by Jef Hodges.

In the eastern United States (areas of ≥ 30 " average annual rainfall) native warm-season vegetation is not universally recognized as a quality forage. This is likely due to a combination of multiple factors, however a couple of the largest are there are no large retail agricultural businesses promoting and supplying the market and there are only a limited number of academic institutions conducting research and extension outreach on native forages. As a result, native warm-season forages are not widely known in the eastern U. S. and reliable science- and experience-based information is not readily available. The Native Warm-Season Forage Resource Center was created to address the availability of reliable information regarding native forages.

The purpose of the Native Warm-Season Forage Resource Center is to provide science-based information about native warm-season forages along with firsthand experiences from livestock producers who are using native warm-season forages in their grazing systems. By relying on science from research and experience-based information from fellow livestock producers, interested individuals can be confident in the information they are receiving in an online world filled with misinformation about native forages. Not only is the internet filled with misinformation, but there are also examples of human-relayed misinformation, sometimes from trusted sources. We can only speculate why but most assuredly it is rooted in the lack of knowledge and experience specific to native warm-season forages.

The Native Warm-Season Forage Resource Center, which features the Grazing Gone Native podcast and Grazing Gone Native producer video interviews, along with a curated list of online resources is a collaboration between the American Forage and Grassland Council (AFGC) the National Bobwhite and Grassland Initiative (NBGI) and the Central Hardwoods Joint Venture (CHJV). The AFGC's "primary objective is to promote the profitable production and sustainable utilization of quality forage and grasslands and are dedicated to advancing the use of forage as a prime feed resource." Their vision is "to be the leader and voice of economically and environmentally sound forage focused on agriculture." (<https://www.afgc.org/about/>). The Native Warm-Season Forage Resource Center is a logical application of their objective and vision. The information contained therein provides producers with an opportunity to learn about native forages from top experts and experienced graziers. From that information they can make an informed decision about native warm-season forages and their applicability to their grazing operation. The CHJV is a partnership of state, federal and conservation NGO's promoting all bird conservation. NBGI has identified reconnecting cattle and quail as one of their key objectives to recovering bobwhites. Grazing native forages provides an opportunity for all three groups to meet their objectives, creating a rare win-win for both production agriculture and conservation.



Grazing Gone Native producer video interviews are posted in the Native Warm-Season Forage Resource Center on AFGC's website (<https://www.afgc.org/resources/nwsf-resource-center/>). Short, 2- to 5-minute video clips are posted from livestock producers talking about how they use natives in their operations. The Grazing Gone Native podcast features many of the producers from the videos taking a deeper dive, discussing in more detail how they are using natives in their grazing operations. Other episodes are with researchers and others who are intimately familiar with native forages, their application and management. Podcast episodes are approximately 30 minutes long but aren't limited in length and can be found on most of the popular podcast streaming services but have the highest listenership on Spotify. A link to individual podcast episodes, with a short description of the content can be found in the Native Warm-Season Forage Resource Center. The podcast can also be found by searching AFGC—Grazing Gone Native, using your preferred search engine.

Through October of 2024 the most popular Grazing Gone Native podcast episode has been #8 with Dr. Keyser of the Center for Native Grasslands Management talking about establishment. Dr. Keyser has conducted studies on establishment techniques and their success. During Episode #8 he de-

scribes the most reliable method and alternatives. Other popular episodes are with livestock producers Drexel Atkisson (#4) and Jim Grace (#10), who have been utilizing native grasses in their grazing systems for 30 or more years.

The Native Warm-Season Forage Resource Center is the go-to source for reliable, either science- or experience-based information for any level of livestock producer using or interested in using native forages. You are encouraged to visit and share the resource with anyone considering native forages in their operation.



Photo by Jef Hodges.

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Native Warm-season Forage Resource Center

Welcome to the Native Warm-season Forage Resource Center. Native warm-season forages are not widely known in the eastern U. S. As a result, reliable science- and experience-based information is not readily available. The purpose of this Resource Center is to provide science-based information on native warm-season forages and to present firsthand experiences from producers who are using native warm-season forages in their grazing systems. The intent is to provide you with the knowledge necessary to determine if native warm-season forages are a good fit for your grazing operation.

Grazing Gone Native Podcast

Join co-hosts Kyle Brazil and Jef Hodges as they interview producers, researchers, agency and industry personnel, sharing their knowledge about and experiences with native warm-season forages.

AMERICAN FORAGE & GRASSLAND CONFERENCE 2024
January 7-10, 2024, Mobile Alabama. [Get details.](#)

NATIONAL FORAGE WEEK 2024
June 16-22, 2024. [Get details.](#)

WHY ARE FORAGES IMPORTANT?

These resources cover about 55% of the land area in the United States Forage-livestock industry contributes more than \$60 billion annually.





Photo by The Confluence Group.

Integrating Emerging Technologies into the Coordinated Implementation Program to Advance Data Collection and Outcomes

Dr. Jared Elmore | *NBGI Science Coordinator*
Research Assistant Professor, Forestry and
Environmental Conservation, Clemson University

The Coordinated Implementation Program (CIP) has reached its 10-year mark, during which there have been drastic changes and improvements in technologies that can be utilized to monitor bobwhite, early successional songbirds and other related species, and the habitats that they rely on. As the CIP moves from the “focal area” scale to the “landscape” scale, it will be imperative to redesign monitoring approaches to





Photo by Jared Elmore.

take advantage of and rely on these new technologies.

Emerging technologies may be used to refine traditional methods, identify species, estimate occurrence or density, or evaluate habitat conditions, and have become more accurate, faster, and cheaper. Traditional methods of tracking birds (e.g., fall covey counts and breeding bird point counts) and habitat (e.g., habitat surveys) at the focal area scale, while sometimes time consuming and taxing for coordinators and volunteers, has been feasible to collect the data needed to estimate change over time. Transitioning to the landscape scale however will make these traditional methods virtually impossible since they would require countless observers or technicians to cover broad spatial scales. Other surveys at similar broad spatial scales often rely on citizen science datasets such as eBird and the Breeding Bird Survey for bird surveys and remotely sensed land cover such as the National Land Cover Database or the National Agriculture Imagery Program for habitat data.

We will face several challenges as we begin to transition to emerging technologies. New methods are often riddled by a lack of standardization as they have been around less time to stand up to repeated scientific rigor. They often come with expensive startup costs, high levels of operating knowledge or certifications, and extensive post-data processing times. Lack of adequate training can lead to failed data collection or results that are useless.

There are a several technologies that may prove useful to the CIP landscape. Autonomous Recording Units (ARU) have been used extensively over the past several years for



Photo by The Confluence Group.



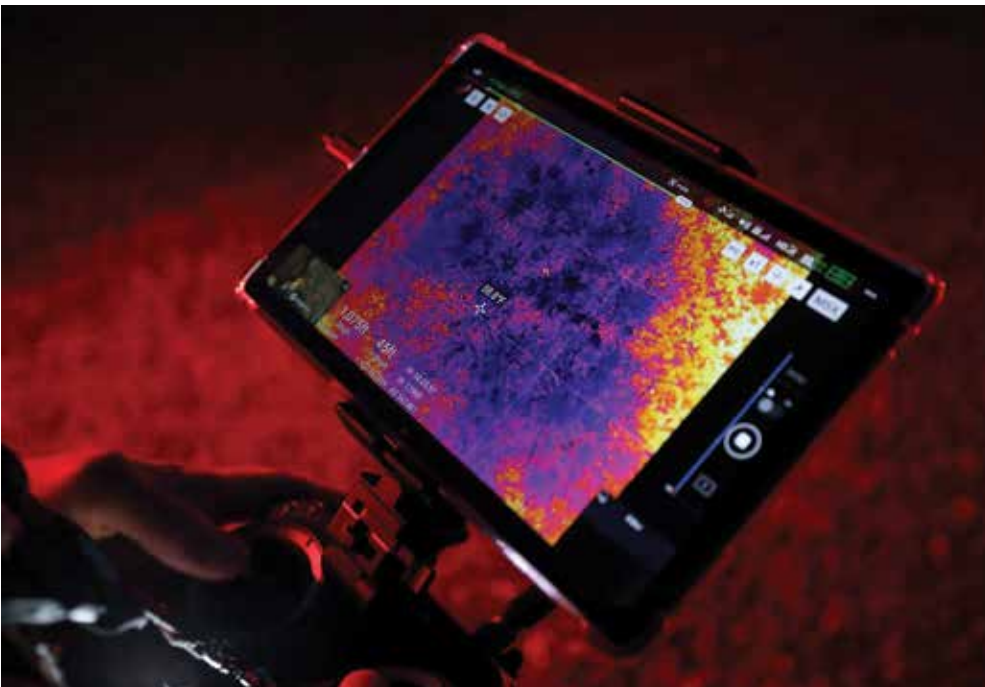


Photo by The Confluence Group.

monitoring bird presence and even densities, including for Northern Bobwhite. Drones have seen a variety of uses, including monitoring bird presence and abundance, vegetation/land cover surveys, and estimating structural composition of vegetation using light detection and ranging (lidar). Finally, while not necessarily an emerging technology, remote sensing via satellite or occupied aircraft has drastically increased in both spatial and temporal resolution, as well as the variety of data being collected.

ARUs record bird vocalizations during preset recording times and have many potential benefits for monitoring birds within the CIP landscape. They are non-intrusive and allow researchers to monitor birds without direct human presence. They can continuously monitor day after day and drastically reduce the time spent in the field by observers; this is particularly useful when monitoring during less-than-ideal times such as during early morning fall covey counts. They offer less bias than observers, especially when monitoring a variety of species, as observer experience and training is negated. They can be spread over broad expanses and set to monitor simultaneously, only limited by funds necessary to purchase units, labor needed to deploy them, and battery life. While startup costs can be substantial, the costs to continually monitor is reduced when spread over time, leading to cost savings in the long run. But, they also easily collect a large amount of data, requiring specialized software and/or technical expertise to process the resulting spectrograms which often take huge amounts of time to process; nevertheless, this processing is becoming easier

with many open access platforms. Another limitation of ARUs is that they only provide auditory data, and lack any visual information to go along with audio; this limits the ability to estimate abundance. Finally, they may have limited recording quality, range, or sensitivity, and may be susceptible to weather conditions such as rain, extreme temperatures, or fog, which could influence accuracy.

Drones, or small unoccupied aircraft systems, have seen a variety of uses in recent years for bird studies, including counting birds using visual and auditory sensors, as well as classifying land cover and vegetation as metrics of habitat. Drones are typically outfitted with high resolution cameras capable of taking images or video but have also been equipped with hyperspectral or thermal imaging sensors, lidar, and even ARUs. They offer a unique vantage point

which enables quick and efficient surveys and are especially useful in locations that are difficult to access. They can monitor large spatial extents in short amounts of time and can be repeated often, while offering reduced disturbance to birds. They are much safer and less expensive than aircraft surveys, and still provide real-time data. However, drones may have a high startup cost, short battery life, and require skilled and licensed pilots. The regulatory restrictions imposed by the Federal Aviation Administration and other agencies are often a hindrance (e.g., limited to line of sight). They can be weather dependent and cannot be flown in strong wind or heavy rain. They also easily collect large amounts of data, which again requires specialized knowledge, software, and technical expertise to process.

While remotely sensed data are not necessarily new technology, advancements have made this data potentially more useful for CIP landscape purposes. Both satellite and aerial data are being collected with better spatial and temporal resolutions, as well as a variety of sensors, including multispectral, hyperspectral, and even lidar. Remotely sensed data has similar limitations on processing as both ARUs and drones; this often requires high performance computers with large amounts of memory, not to mention skilled technical expertise in Geographic Information Systems.

For these technologies, the benefits likely far outweigh the limitations. NBGI will need to account for all of these challenges and limitations when considering or developing these technologies into the CIP landscape monitoring program.



Methods for Estimating NBGI State Northern Bobwhite Density from Fall Covey Counts

Dr. Jared Elmore | *NBGI Science Coordinator*

Research Assistant Professor, Forestry and Environmental Conservation, Clemson University

Northern Bobwhite covey counts can be used to estimate the abundance of northern bobwhite during the fall season. These counts involve measuring early morning 'kio-lee' calls before bobwhite leave their roosting location. However, the value of these abundance counts are limited without using models to correct for detectability which produce an estimate of density.

Northern Bobwhite density estimates were derived from fall covey count data using models in the package "Distance" in program R. Density models used data submitted from all states within a given year to produce density estimates. To produce density estimates, a detection function was first fit using fall covey count data from each year with a uniform key, cosine adjustment, and 5% truncation distance, with states set as "study areas", each Focal/Reference area set as the "region" within each study area, and each sampling point defined as the "sample la-

bel". Effort was defined using the number of distinct dates for submitted data at each sample label within a given year. A conversion factor was defined to convert units from meters (distance estimates from covey counts) to acres (area). The area (acres) was calculated for each focal/reference area and used within the models to calculate the density of coveys per acre. Models were summarized and distance bins were set to every 100 m (range 0-600 m) for cut-points. Summaries of models were used to plot density estimates across years for each focal/reference area within each state.

Figures were produced for Kentucky, Georgia, Louisiana, Mississippi, Missouri, South Carolina, and Tennessee with the number of coveys per acre on the y-axis and year on the x-axis. Different color lines and 95% confidence intervals are displayed for different focal and reference areas within each state. These figures are presented within each state's Conservation Report.



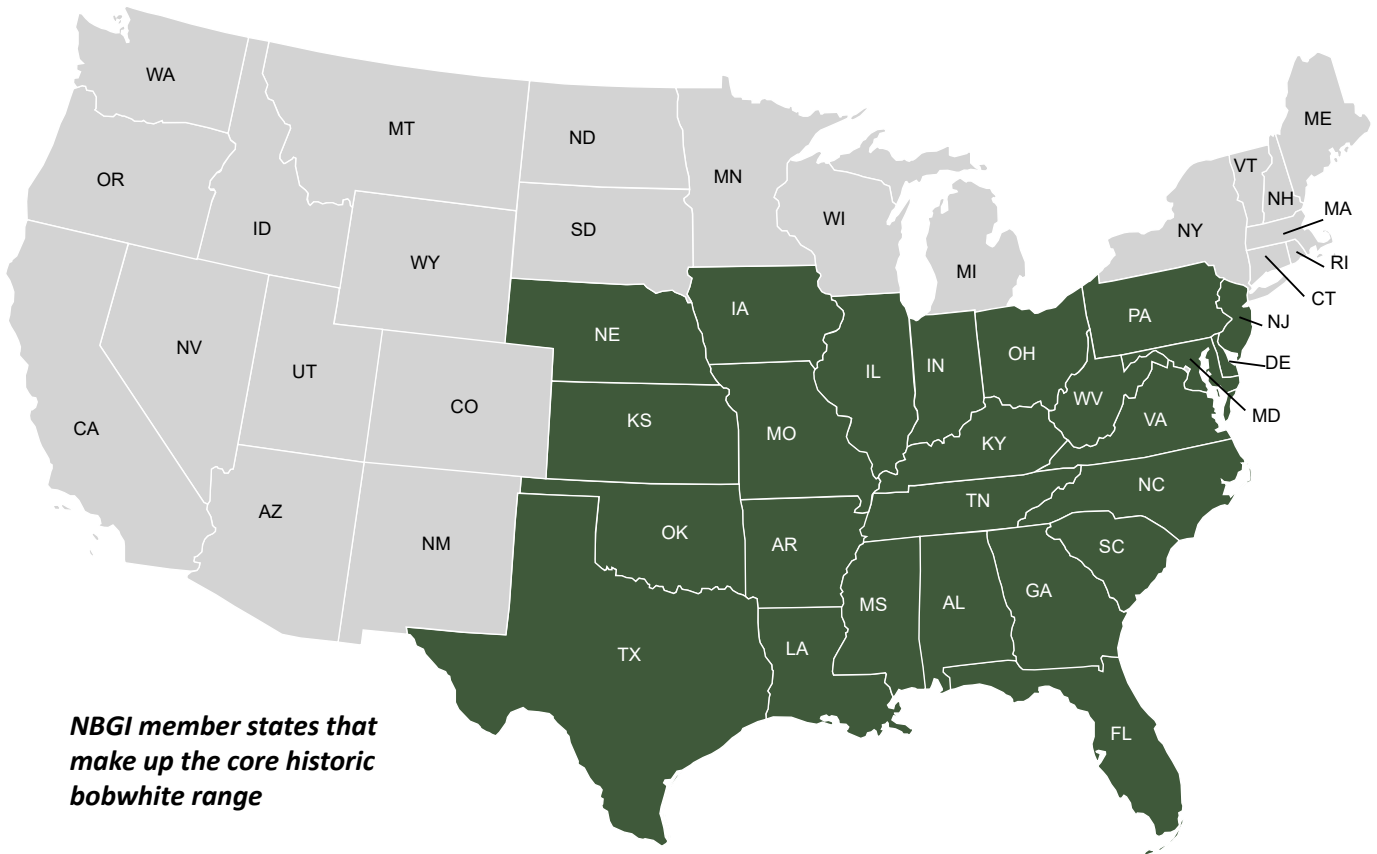
State Conservation Reports

This section contains highlights of bobwhite conservation during 2022 and early 2023, as reported by each state’s quail coordinator. The most up-to-date information on 2023 bobwhite population and hunting information is available on state agency websites. State quail coordinator contact information can be found at the end of each report.

Bobwhite conservationists have rebounded from the COVID era of closed offices and remote work by returning to aggressive and innovative restoration, including millions of acres of habitat management, education programs, monitoring, and research. Private land habitat work continued to climb for many state agencies and hopefully an influx in funding from Recovering America’s Wildlife Act will bolster those efforts for years to come.

State agencies continued to expand quail restoration despite challenging budgets and continued to forage partnerships with public and private land agencies, hunting organizations, research institutes, and non-government organizations. All are needed to bring about the landscape-scale change necessary to restore sustainable bobwhite populations.

See page 46 for acronyms.



Arkansas Game and Fish Commission (AGFC)

Population: 2022-2023 was a year of change for the Quail Program. We shifted away from statewide spring routes, many of which were on land not managed for wildlife, toward monitoring on agency (AGFC and partners) land, where the data are actionable. This change will allow us to track quail population effects of active habitat management. Overall, 2022 was a record year of reproduction on managed lands. Incidental brood observations (mostly on lands managed for wildlife) show 2022 broods numbers (0.48 broods/observer) double that of 2021 (0.24 broods/observer) and nearly double the 10 year average (0.27 broods/observer). Chick per observer levels for 2022 (4.91) were the highest seen since 2004. Over the winter of 2022-2023, adult survival was very good with a new record of 5.3 adults/observer since the survey began in 2002. Reproduction ticked down a bit to 2.42 chicks per observer, down from an all time high of 4.91 in 2022. Production in 2023 is still higher than the 20 year and 10 year average (2.09 and 2.24, respectively) and in line with the 5 year average of 2.48, so this was by no means a bad year for reproduction.

Management: In CY 2022, AGFC’s Private Lands staff developed 125 quail-specific management plans for landowner, resulting in 8,700 ac. of on the ground habitat improvements and hosted 35 workshops to train 510 people in prescribed fire and quail management. Quail Forever, AGFC’s largest private lands partner, made 2,400 landowner contacts, implementing habitat work on 13,500 ac. in FY2023, in addition to hosting 250 workshops, reaching 2,500 landowners. On AGFC managed WMAs, the agency set a new prescribed fire record of over 30,000 acres in FY2023, in addition to assisting partners on over 21,000 ac. Of the 30,000 burned acres, 13,600 ac. were in potential quail habitat.

NBGI State Quail Coordinator: Clint Johnson, Quail Program Coordinator, clint.johnson@agfc.ar.gov

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Delaware Division of Fish and Wildlife (DFW)

Population: For this year population estimates were not collected due to the lack of staff and lack of a quail biologist. Presence and absence surveys of quail were conducted by habitat biologist and have found calling males on Ted Harvey Wildlife Area between May 15, 2023 and July 1, 2023. Fall covey counts were conducted on Cedar Swamp Wildlife Area one day during November where 44 coveys were detected.

Management: The DFW continues to partner with NBGI. Through this partnership, DFW biologists and habitat managers are identifying Wildlife Management Areas within Delaware that would benefit from future habitat management and support a natural or reintroduced bobwhite population. To date in Delaware, accomplishments include:

- Cedar Swamp Wildlife Area, in New Castle County, was designated as the state’s first [NBGI Coordinated Implementation Program](#) (NBGI CIP) bobwhite focal area. Approximately 27.27% (1,500 acres) of the area was identified as habitat that could support bobwhite quail.
- Division biologists completed breeding season (whistle call) surveys from May 15, 2023 – July 1, 2023. At newly established habitat on 2 wildlife areas.
- During November DFW biologists conducted fall covey counts on five plots at Cedar Swamp.
- Habitat management activities on the focal area have been focused on maintenance of the early successional habitat that has been established over the last seven years. The activities include burning 1/3 of the grass wildflower fields on the focal area and discing 1/3 of the burned areas to keep earliest stages of succession on the ground provide brood rearing habitat. Hedge rows have been supplemented with native fruiting trees and shrubs
- Kent County has increased habitat management activities this past year by taking out roughly 200 acres of ag out of production and planting with early successional habitat and burned roughly 50 acres of established quail habitat.
- Reported 6,697 acres of bobwhite management for the NBGI Habitat Management Inventory. These management activities included: planting annual food plots, planting native grass and wildflowers, mechanical and chemical management of vegetation, burning, and timber management.

NBGI State Quail Coordinator: Eric Ludwig, Regional Wildlife Manager, Eric.ludwig@delaware.gov



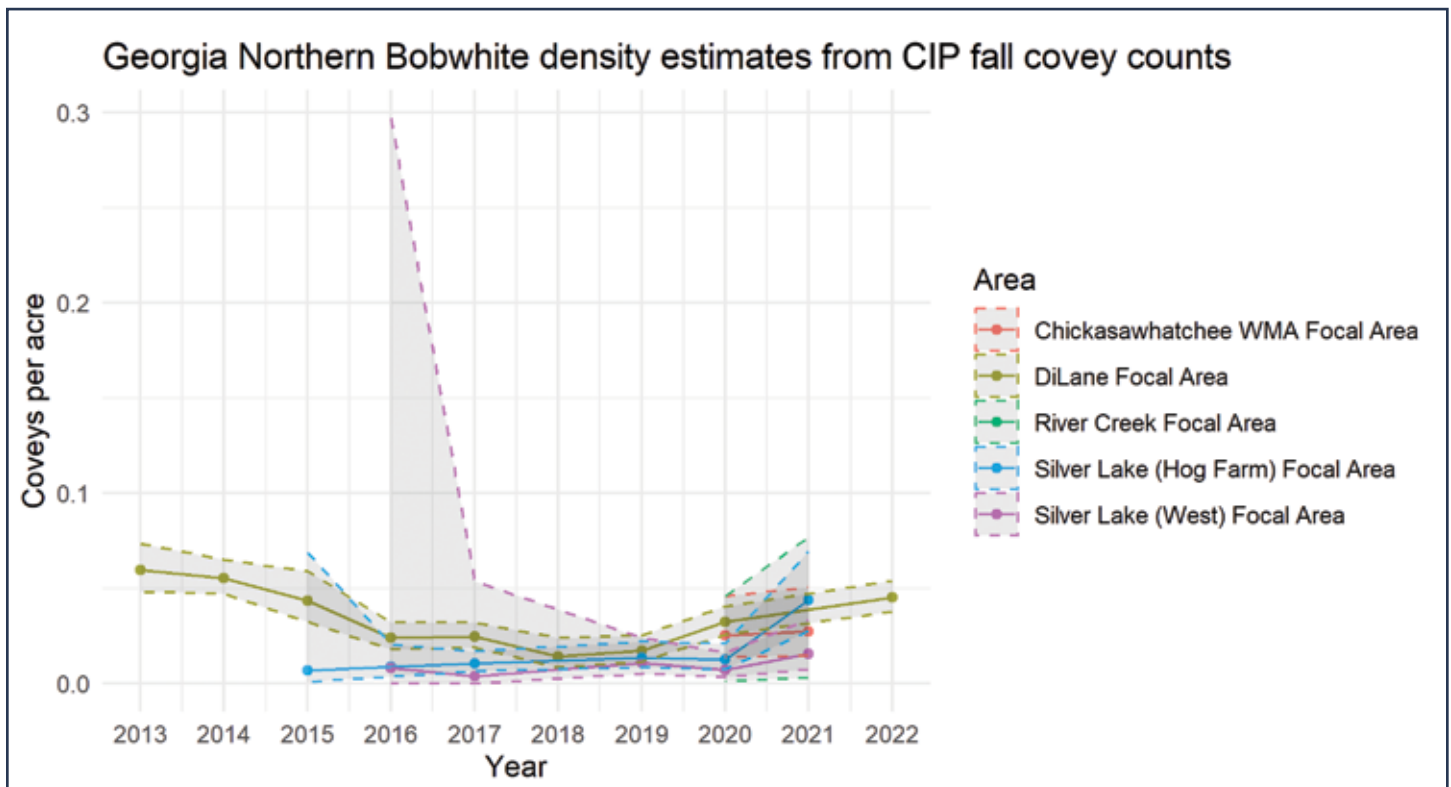
Georgia Department of Natural Resources, Wildlife Resources Division (GADNR)

Population: GADNR statewide bobwhite population index had declined by more than 75% since 1966. However, from 2007-18, USGS Breeding Bird Survey data shows that bobwhite numbers have doubled in recent years and are now similar to numbers seen in the early 1990s.

Hunting: Hunter and harvest estimates are from a 2022 telephone survey. From 2015-22, estimated bobwhite hunter numbers declined by 19% (15,060 hunters for 2015 season; ± 910 : 12,203 hunters for 2022 season; ± 722), and estimated bobwhite harvest decreased by 27% (504,683 harvest for 2015 season; $\pm 12,203$; 373,193 for 2022 season; $\pm 11,761$). Total harvest increased in 2018-22 while hunter numbers decreased. Only 12.6% of quail hunters harvested only wild quail, and 17.1% harvested a combination of pen-reared and wild quail. Average hunting effort was 4.2 days in the 2022 season for all quail hunters.

Management: The GADNR Wildlife Resources Division (WRD) Bobwhite Quail Initiative (BQI) is in the process of updating the [Georgia's Bobwhite Quail Initiative \(BQI\): 2013-23](#) plan (released November 2014). Other quail management highlights include:

- BQI continued to partner with USDA Natural Resources Conservation Service to deliver the [Working Lands for Wildlife: Gopher Tortoise](#) and general wildlife funding through EQIP and CSP. In 2023, they enrolled almost 16,000 new acres on working farms and forests in Georgia. Practices such as thinning timber, prescribed burning, brush management, and disking are being implemented to increase quality quail habitat across the landscape.
- BQI and Quail Forever (QF) biologists provided technical assistance to landowners throughout the state that impacted over 250,000 acres of habitat for FY23.
- Georgia continues to focus intensive quail management efforts on five WMAs, totaling about 24,500 acres that serve as core habitats in the BQI. Several other WMAs also conduct habitat management that benefit bobwhite totaling over 50,000 acres of upland habitat.
- Monitoring efforts include fall covey counts on 11 WMAs, two private focal areas, and Oconee National Forest, covering over 52,000 acres. Spring monitoring for several pine savanna species was conducted on 43 WMAs,



and several private land properties. BQI also placed ARUs on 6 private properties to supplement breeding bird monitoring.

- The Bobwhite Quail Initiative works with Quail Forever chapters across the state to improve habitat on Georgia public lands through donations of funds for contract services including prescribed burning, herbicide application, and brood field maintenance and for needed equipment and supplies. Chapters also donated funds to support events such as BQI youth quail hunts, ladies hunt and learn events and landowner field days.

NBGI State Quail Coordinator: Dallas Ingram, State Quail Biologist, dallas.ingram@dnr.ga.gov

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Illinois Department of Natural Resources (IDNR)

Population: The IDNR roadside counts for bobwhite are very similar to the USGS North American BBS protocol. In 2022, as reported in the 2022 Quail Annual Status Report, observers across Illinois recorded an average of 0.45 quail per stop during the surveys (a 10% increase from 2021). Quail were recorded at 22% of stops (percent occurrence), up 2%. The number of quail counted and the number of stops where quail were seen or heard in 2022 were both up from 2021 surveys.

Hunting: Harvest estimates are based on results from the 2021-22 Illinois Hunter Harvest Survey. The 2021-22 quail survey estimated that 5,431 hunters harvested 28,637 wild quail, compared to 4,646 hunters and 31,629 quail in the 2020-21 survey, a 10% decrease. Bobwhite average daily harvest also decreased 2021-22 (1.32 compared to 0.91).

Management: IDNR continues to operate under a statewide [Wildlife Action Plan](#) (where quail are considered a species in greatest conservation need) and as a partner of NBGI. Bobwhite management highlights include:

- The USDA CRP is by far the greatest source of potential wildlife habitat in Illinois. In February 2023, Illinois had 813,854 acres of CRP (11,748-acre decrease), including:
 - [USDA CP-33 Habitat Buffers for Upland Birds](#) – 44,265 acres enrolled; a 1,339-acre decrease from 2022.
 - [USDA CP-38 SAFE](#) – 41,858 acres enrolled; a 4,746-acre increase from 2022.
 - [USDA CP-42 Pollinator Habitat Initiative](#) – 121,042 acres enrolled; a 1,714-acre increase from 2022.
- Dr. Mike Eichholz and Dr. Eric Schaubert (Southern Illinois University) finished their fifth year on a research project to assess habitat and population dynamics and their effect on bobwhite populations in Illinois. This Pittman- Robertson funded project is intended to help facilitate the monitoring and vegetation surveys for an Illinois bobwhite focus area.
- Dr. Mike Ward and colleagues (University of Illinois) continued research investigating grassland wildlife response to the SAFE program, cover crops, and other agricultural practices.
- Illinois designated their first NBGI CIP focal area at the state-owned Burning Star Mines outside of DeSoto. A habitat team is being established to conduct management on the area in the near future.

NBGI State Quail Coordinator (Acting): Wade Louis, Habitat Team Program Manager, wade.louis@illinois.gov

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Iowa Department of Natural Resources (IDNR)

Population: The IDNR [2022 statewide bobwhite August roadside index](#) of 0.8 quail per 30-mile route represents no change in the quail index over 2022 counts of 0.9 quail per route. This year’s index is 23% below the 10-year average of 1 quail per route and is 42% below the long-term average of 1.3 quail per route. Given the mild winter and lack of snowfall quail numbers were expected to increase in 2023. Good winter survival is crucial for increasing populations in Iowa, as Iowa represents the northern fringe of the quail range in the United States. Anecdotal reports across the region report good numbers of whistling males this spring. Counts showed no statistically significant trend in any Southern region this year. Staff detected fewer broods in 2023 than in 2022, which contributed to no change in populations. The southwest and southcentral regions reported the best overall quail numbers in 2023.

Hunting: Hunter and harvest numbers for the 2022-23 hunting season were not available at press time. The [2021-22 hunting season survey](#) showed approximately 8,676 quail hunters harvested an estimated 24,415 quail during the 2021



quail season a 40% increase over the 2020 estimate. This number seems a bit suspect and is likely an artifact of small sample sizes in the survey. Quail hunters averaged 6.2 days a field and harvested 3 birds for the season. Fifty percent of Iowa quail hunters hunted 4 days or less during the 2021 season. Resident quail hunters accounted for 82% of the total quail harvest.

Management: IDNR manages bobwhite by partnering with multiple agencies, NGOs, and private citizens, as well as the NBI:

- Iowa is an active participant in the NBI CIP, with two officially identified focal areas, plus many other public lands receiving quail management focus.
- The [Iowa Habitat and Access Program](#) cost shares the creation of habitat on private CRP acres statewide. In Iowa’s southern quail range, habitat improvements to benefit quail are a priority. Statewide enrollment is over 40,000 acres. Each area has a habitat management plan and is open to public hunting.
- Iowa has multiple CRP practices that benefit bobwhite quail including CP-33 Habitat Buffers for Upland Birds, with 22,241 acres enrolled, the third-highest enrollment in the nation, with only Illinois and Texas having more enrolled acres.
- Iowa’s other primary CRP practice benefiting bobwhite is the CP-38 [Early Successional Habitat Quail SAFE](#) practice, which creates early successional habitat with native grass seeding using small grain rotations that are disturbed every three years. Enrollment in Iowa’s quail range stands at over 35,000 acres.

NBI State Quail Coordinator: Todd Bogenschutz, Upland Wildlife Research Biologist, todd.bogenschutz@dnr.iowa.gov

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Kansas Department of Wildlife and Parks (KDWP)

Population: 2023 statewide bobwhite breeding abundance index was 3% above the 2022 index, 8% above the 5-year average, and 3% above the 10-year averages.

Hunting: According to the [2021-2022 hunting season statistics](#), 66,544 quail hunters harvested 377,324 bobwhites.

Management: Kansas Department of Wildlife and Parks (KDWP) continues to manage bobwhite throughout the state by partnering with multiple agencies, NGOs, and private citizens, as well as NBI. Quail management highlights include:

- Bobwhites are a species of conservation importance for both State Wildlife Grant and USDA program funding ranking processes.
- QF and KDWP worked with USDA to establish 3 priority areas for the Northern Bobwhite Working Lands for Wildlife Program. Initial fund allotment was expended within weeks of program rollout and program is being expanded in 2023.
- Utilizing a VPA grant of 2.1 million dollars KDWP added 35,861 acres to our access program in long term access agreements. In KDWP’s VPA project, properties include CRP, WRE, or high-quality riparian areas to ensure quality habitat is maintained on these access sites.
- KDWP is partnering with UGA to begin research on landscape characteristics that predict quail occupancy and density and identify motivations for producers to install/maintain these conservation practices.

NBI State Quail Coordinator: Jeff Prendergast, Small Game Specialist, jeff.prendergast@ks.gov



Kentucky Department of Fish and Wildlife Resources (KDFWR)

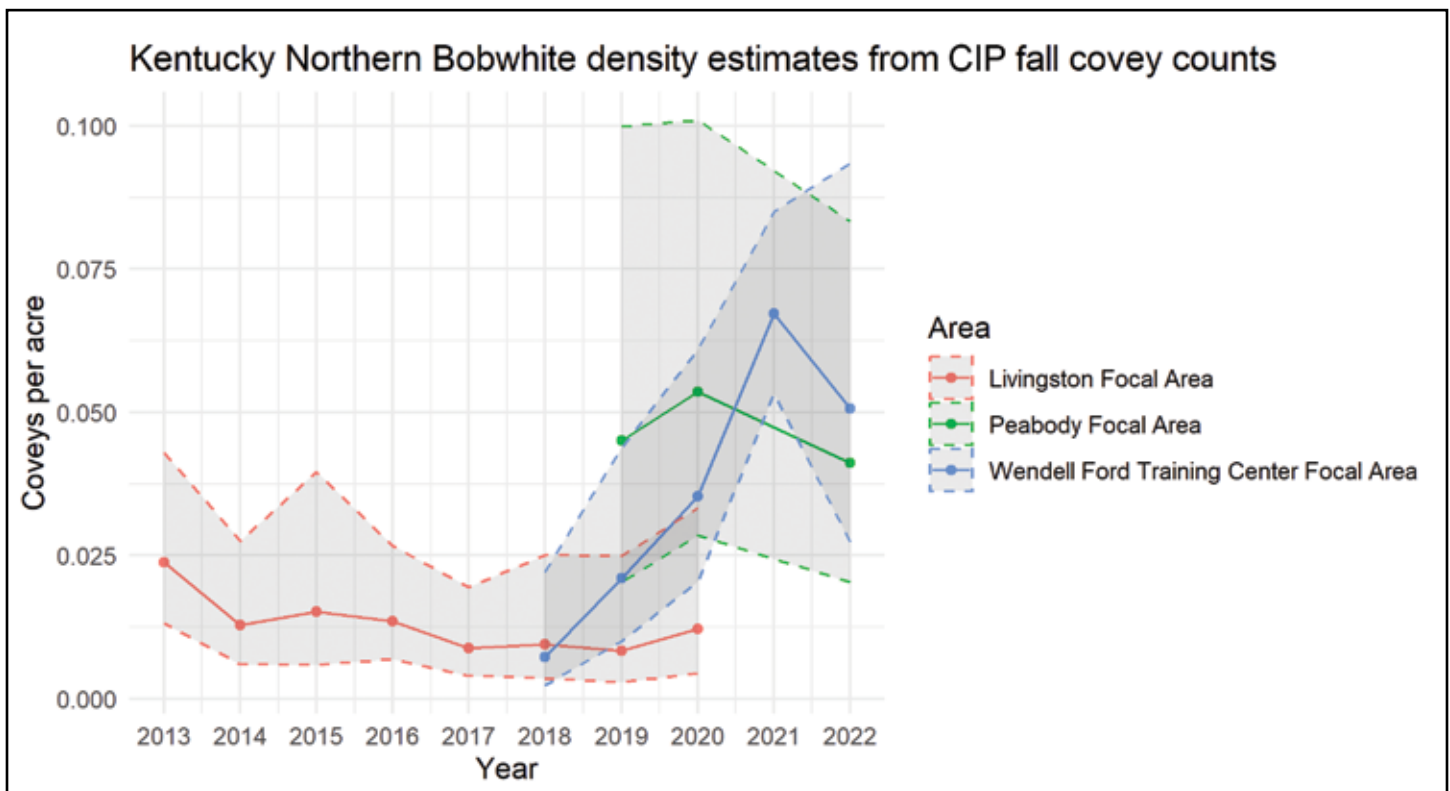
Population: According to the KDFWR statewide mail carrier survey, the bobwhite population has declined by 67% since 1960. The 2023 index is 67% below our 1981 restoration target. Statewide, there was an 8% decrease from 2022 to 2023, however the Bluegrass portion of the state experienced an increase.

Hunting: On average, hunters bagged 0.14 birds/hour in the 2022-23 hunting season and observed 0.24 coveys per hour. The harvest rate is 58% below the 5-year average, and covey detections were 14% below the 5-year average.

Management: The agency continues to utilize the findings of the 10-Year Quail Plans (ending in 2020):

- The Bluegrass Army Depot “Beyond the Fence” Project moves into the fifth growing season after planting for roughly 200 acres of production native grasses in a 10,000-acre focus area. Field staff will work closely with producers to insure establishment.
- KDFWR coordinated a multi-partner conservation team aimed at conserving the legacy of Kentucky’s highly successful Green River Conservation Reserve Enhancement Program (CREP) initiative. The partners identified a 10,000 acre focus area and recruited native grass production plantings totaling 150 acres. Planting and bird monitoring take place every spring.
- KDFWR and The University of Tennessee finished collecting data on the Bluegrass Army Depot quail study, in which researchers are determining the use of cool and NWSG forage by cows and bobwhite. Project reports are forthcoming.
- The Small Game Program is working closely with the Private Lands Program on 3 Focused Conservation (NRCS) Projects on working lands within the state.
- Membership of the Kentucky Bobwhite Battalion Facebook page (www.facebook.com/KentuckyQuail) stayed around 3,900 members.

NBGI State Quail Coordinator: Cody Rhoden, Small Game Coordinator, cody.rhoden@ky.gov



Louisiana Department of Wildlife and Fisheries (LDWF)

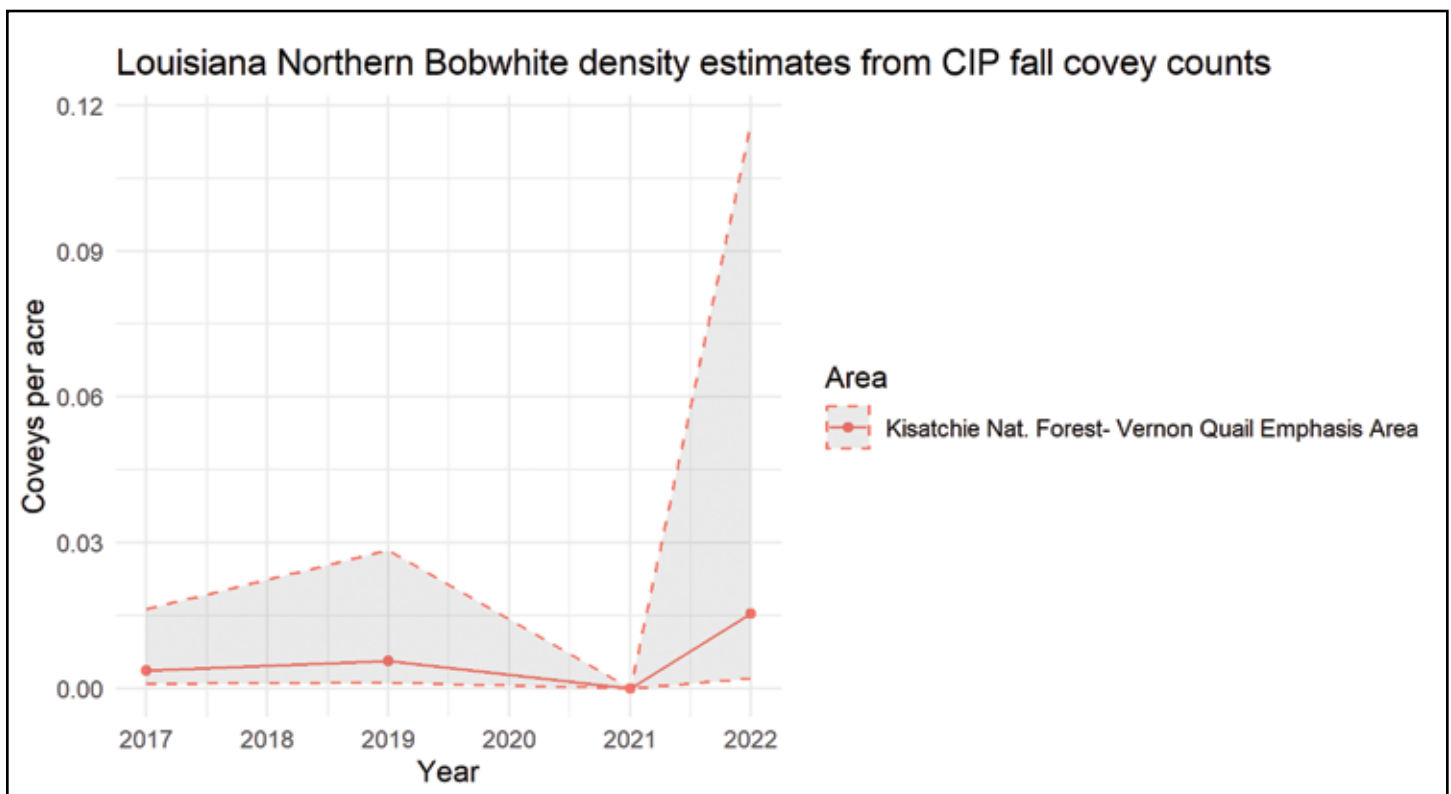
Population: The LDWF annual 2022 Bobwhite Whistle Survey combined results were not significantly different from 2021. Quail whistles heard were lower and continue to be near the lowest numbers across Louisiana since the survey began in 1983.

Hunting: The Big and Small Game Harvest Survey for 2022-23 estimated that 500 hunters did not harvest any wild quail. Note: low survey response.

Management: LDWF continues to work with private, corporate, and government landowners and partners to improve quail habitat.

- USDA Natural Resource Conservation Service (NRCS) programs in 2022: 740 acres of longleaf pine were planted and 3,702 acres burned.
- An additional 3,046 acres were burned by private and NGO funding on private lands in LA in 2022.
- Worked with the NRCS, National Wild Turkey Federation, and other agencies to hold longleaf pine workshops for private landowners and land managers.
- LDWF, Quail Forever, and other partners initiated the establishment of Prescribed Burn Associations in Northwest and Southwest Louisiana
- Bird and Habitat monitoring on the Kisatchie National Forest- Vernon Quail Emphasis Area- 5,992 Acres and accompanying Reference Area on Peason Ridge WMA- 7,806 Acres.
- Continued quail habitat improvements at Sandy Hollow Wildlife Management Area (WMA) conducting approximately 1,936 Acres of prescribed burning in 2022/2023.

NBGI State Quail Coordinator: Cody Cedotal, Resident Small Game/Wild Turkey Program Manager, ccedotal@wlf.la.gov



Maryland Department of Natural Resources (MDNR)

Population: Maryland's statewide bobwhite population has declined by more than 95% over the past 50 years according to Breeding Bird Survey data. The highest densities occur in the eastern part of the state, but isolated pockets also remain in the southern region. Some local populations have increased significantly in recent years where habitat management efforts have occurred.

Hunting: The 2021-22 annual hunter mail survey estimated 40 bobwhite hunters harvested about 400 wild birds, but small sample sizes limit reliability. The survey only requests data on wild quail hunts, but hunting of pen-raised quail remains popular.

Management: MDNR continues to partner with various agencies and organizations, focusing bobwhite restoration efforts on suitable public and private lands within the current range. Management highlights include:

- Four MDNR Wildlife Management Areas (WMAs) encompassing about 11,000 acres continue to be managed with a focus on bobwhite and other early-successional species. Monitoring via summer and/or fall surveys indicates stable or increasing populations on most areas. On Nanticoke River WMA, record high densities have been documented in recent years.
- Additional emphasis on active forest management and prescribed burning within the current quail range has led to many acres of new habitat. The Delmarva Woodlands Stewards Project received significant funding and will focus efforts on bobwhite management in forested landscapes in future years.
- USDA Natural Resources Conservation Service, Quail Forever, and MDNR have partnered to hire a farm bill biologist to provide technical assistance within the Working Lands for Wildlife bobwhite focus area. Three local priority areas have been identified and outreach efforts have been increased.
- MDNR has partnered with Tall Timbers Research Station to hire a biologist to provide technical assistance and prescribed fire outreach in the MD/DE region.
- Approximately 20,000 acres are currently enrolled in quail-friendly practices under various USDA Farm Bill programs.
- MDNR staff continues to provide technical assistance, outreach, and monitoring efforts on public and private lands in regions of the state where significant potential for population restoration exists.
- Washington College, with funding from MDNR and other partners, continued a regional habitat initiative to restore bobwhite habitat and protect water quality in the upper Chesapeake Bay watershed.
- Reported 5,312 acres of bobwhite management for the NBCI Habitat Management Inventory.

NBGI State Quail Coordinator: Bob Long, Upland Game Bird Project Manager, bob.long@maryland.gov



Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP)

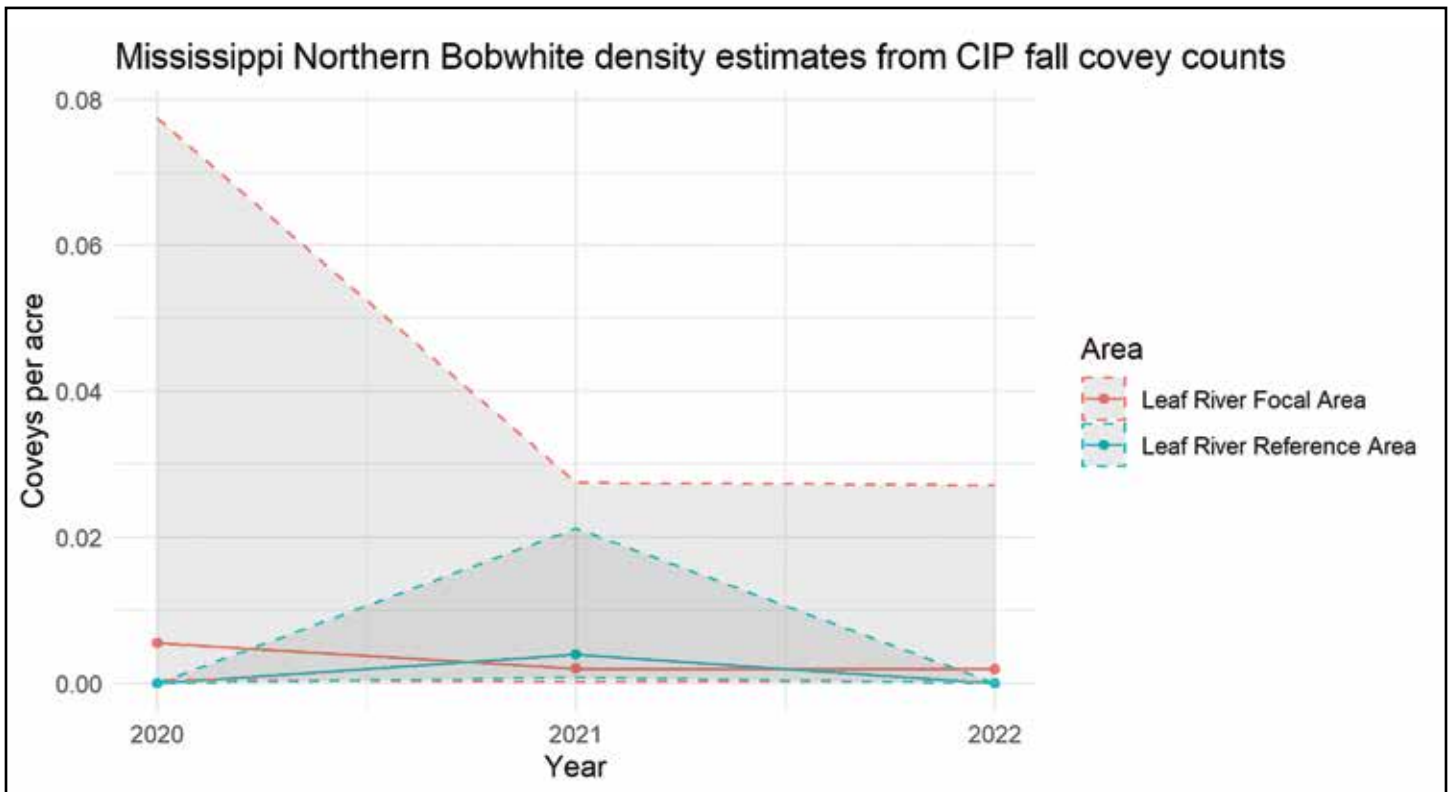
Population: The MDWFP 2023 Wildlife Management Area [bobwhite abundance index](#) was 5% below the 2022 index.

Hunting: [2022-23 hunting season statistics](#) were similar to the previous year, and below the previous 5- and 10-year averages. These estimates are derived from surveys of a sample of licensed hunters (residents and non-residents). Due to small sample sizes, estimates can vary significantly annually, and our survey does not distinguish between hunters taking wild and pen-reared quail.

Management: Quail management highlights include:

- Cooperated with conservation partners to promote prescribed burning through [Fire on the Forty Initiative](#); provided cost-share assistance to landowners and conducted four prescribed burning educational workshops.
- Provided early successional habitat management technical guidance to private landowners statewide.
- Continued education and outreach via public contacts and website.
- Cooperated with DeSoto National Forest (DeSoto Ranger District) on implementation of Leaf River Focal Area.
- Conducted quail-friendly forest and field management (prescribed burning, disking, selective herbicide, and other practices) on nine Wildlife Management Areas.
- Continued cooperative research project with Mississippi State University to measure scale of habitat management effects on quail populations within landscapes around five Wildlife Management Areas.
- Reported 12,618 acres of bobwhite management for the NBCI Habitat Management Inventory.
- Developed two [video segments](#) about quail populations and habitat management in Mississippi.

NBGI State Quail Coordinator: Rick Hamrick, Small Game Program Coordinator, rick.hamrick@wfp.ms.gov



Missouri Department of Conservation (MDC)

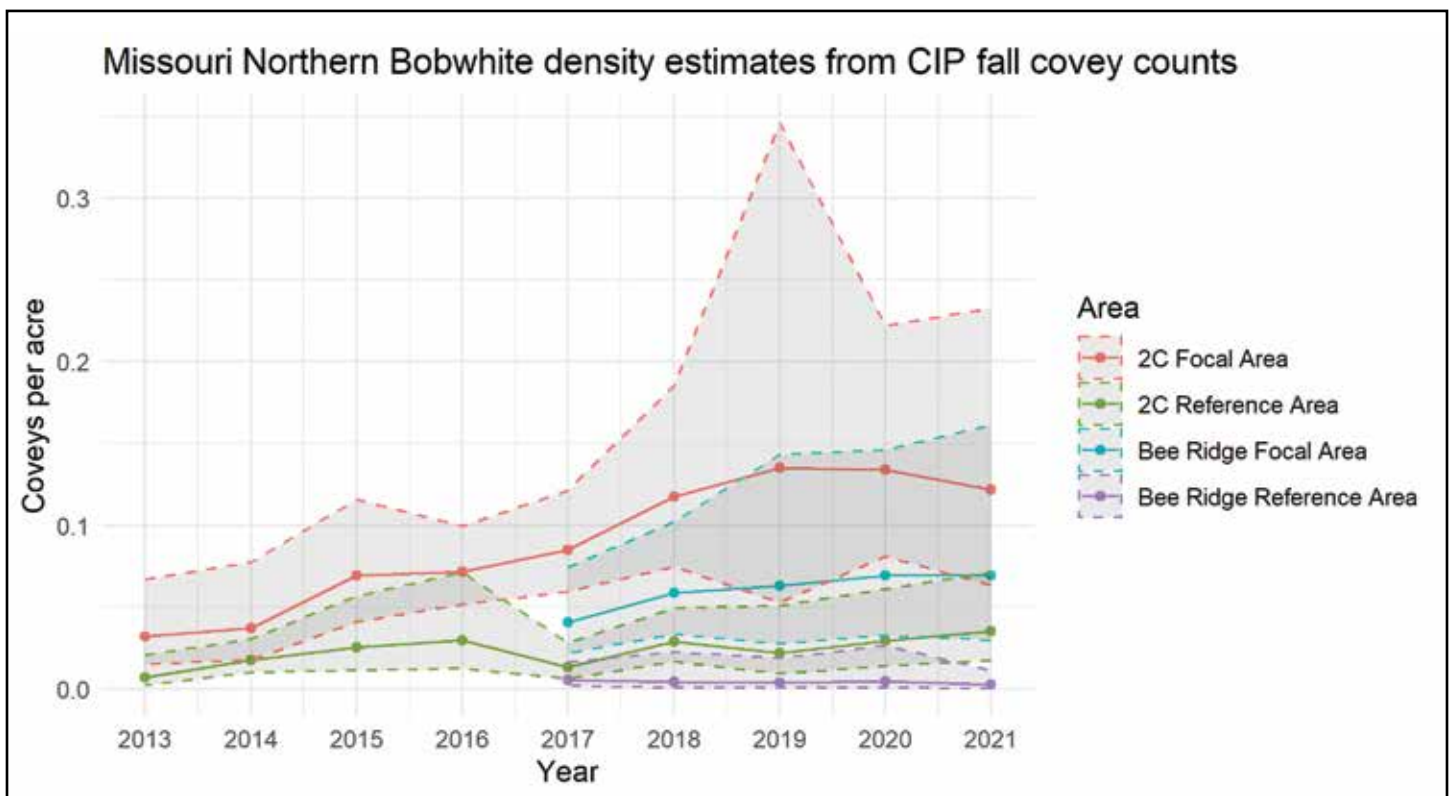
A new program of note for Missouri is the EQIP Climate Smart Agriculture-Native Forages Initiative. This program is targeted towards producers interested in addressing drought susceptibility and other resource concerns by converting non-native forages to native forages for haying or grazing or converting cropland to native forages.

So far in Missouri, over \$4.5 million was obligated on over 290 Native Forage Initiative contracts. There is also a backlog of applications waiting on funding in FY 24. These practices are a combination of annual summer forages and native grass and native grass/forb practices. Currently over 9,600 acres have been contracted. There are plans to hold a similar signup in FY 24 once Federal budget commitments are known.

Quail Forever staff in Missouri have been reporting better bird numbers overall this year. A few have stated that they've never seen this many birds before. We currently have 30 Quail Forever staff positions in the state with 2 vacancies and 2 more new positions coming by the end of the calendar year.

Quail and Upland Wildlife Federation staff have also noted with the 2-year ongoing drought conditions over most of the state, lots of landowners in Missouri are seeing more quail broods in conjunction with intensive habitat work, especially brood rearing habitat projects. Landowners are putting in increased effort on nest predator trapping and seeing the benefits show up in bird numbers. They are very excited for upcoming quail covey counts this fall. Many of the landowners feel like the puzzle pieces are starting to finally fall into place with cooperation from the weather factors as well.

NBGI State Quail Coordinator: Beth Emmerich, Research Scientist, beth.emmerich@mdc.mo.gov



Nebraska Game and Parks Commission (NGPC)

Population: The NGPC statewide abundance index from the 2023 Bobwhite Whistle Count Survey was equivalent to 2022, but increased in comparison to the 5-year average (6%). Regional indices of relative abundance were lower in four out of five management regions compared to 2022, with the Southeast increasing 25%. Statewide indices from the 2023 July Rural Mail Carrier Survey (RMCS) were 9% lower than in 2022 and 15% below the 5-year average. Results from summer surveys were somewhat mixed across the state but, along with field reports, suggest that good winter survival carried over more birds into this year’s breeding population. The core bobwhite range in south-central and southeastern Nebraska continues to support some of the highest densities in the state according to survey reports.

Hunting: During the 2022-23 bobwhite hunting season (29 October 2022 - 31 January 2023), an estimated 48,535 hunters harvested 58,180 bobwhites during 109,115 days afield. Based on this survey 43.2% of small game permit holders reported that they pursued bobwhites during the 2022-23 season. Individual hunter effort (i.e., days per hunter) in 2022-23 (2.25) decreased from 2021-22 (6.55) and was below the 10-year average (6.11). Harvest success (i.e., harvest per day) was up this season (0.53) compared to 2021-22 (0.37) but below the 10-year average (0.61).

Management: NGPC continues to implement early successional habitat management on both public and private lands for the benefit of bobwhites and other wildlife species. A summary of these efforts includes:

- As part of the Early Successional Habitat Initiative, over 87,500 acres of state-owned lands were improved for the benefit of quail, pheasants, and other upland game.
- In partnership with Nebraska Pheasants/Quail Forever, an additional 2,850 acres of habitat on public lands were positively impacted through the “Habitat Share” initiative.
- NGPC Partners Section staff continue to work cooperatively with landowners and partner agencies/ organizations to enhance wildlife habitat on privately-owned lands. This year, private lands programs collectively impacted over 60,000 acres of upland habitat within the state’s quail range.
- Public hunting access opportunities on privately-owned lands have increased consecutively during each of the last six years. Since 2016, over 137,000 acres have been added to the agency’s Open Fields and Waters (OFW) program, which provides financial incentives to landowners willing to allow walk-in access for hunting and fishing. Statewide enrollment during the 2022-23 season was more than 372,000 acres, and the vast majority of these acres fall within Nebraska’s bobwhite range.

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North Carolina Wildlife Resources Commission (NCWRC)

Population: Quail populations across the state have declined for many years and remain near all-time lows, with quail particularly scarce in the piedmont and mountains. The USGS North American Breeding Bird Survey serves as the state’s primary quail monitoring reference for regional and statewide trends. Populations are stable or increasing in a few areas where landowners are committed to intensive habitat restoration and management.

Hunting: Each year, the NCWRC uses a post-season survey to estimate the number of hunters, days hunted, and harvest of all game species in the state. During the 2021-22 season, approximately 5,700 hunters spent 33,000 days hunting quail and harvested 37,000 birds. The bulk of quail hunting and harvest occurs in the coastal plain of eastern North Carolina, with very little quail hunting taking place in the piedmont and almost none in the mountains. The agency’s Avid Hunter Survey captures additional important information about quail hunting in the state and points to higher success rates on private lands as compared to game lands.

Management:

- The NCWRC continues to implement Wild Quail Management Areas program that will allow dedicated property managers to implement specific management actions (nest predator trapping and supplemental feeding) for the benefit of wild bobwhites.
- Continued outreach via The Upland Gazette, covering early successional species and habitats. The Upland Gazette is included each year in spring and fall guides of Wildlife in North Carolina, the agency’s magazine, which has more than 55,000 subscribers.
- Reported 36,300 acres of management for the NBCI Habitat Management Inventory.



Ohio Department of Natural Resources, Division of Wildlife (ODNR)

Population: Ohio’s bobwhite population estimate, based on recent annual roadside surveys, is less than 2,500 quail. Rates of change among population indices since 1984 indicate a population half-life of about seven years (i.e., population will decline 50% in seven years). Recent development of Integrated Population Models by The Ohio State University (OSU) suggests that some sub-populations are declining at a rate of 50% annually. Using integrated population models, researchers at OSU predicted that the probability of extinction was 40% annually for a southern Ohio bobwhite population.

Hunting: Results of ODNR Division of Wildlife hunter harvest surveys over the last two years show that quail hunting participation has declined significantly in Ohio. In 2011-12, approximately 3,000 hunters pursued wild quail in Ohio. Recent estimates are that there are less than 750 quail hunters in Ohio, making it difficult to acquire harvest data on a consistent basis from general surveys. Average hunting effort remains at about 1 day out of Ohio’s 24-day season with a daily bag average of 1-2 birds. Ohio offers a 2-bird daily bag limit. Hunting on public lands is closed except for special hunts on two areas.

Management: We’ve just announced our “Birds of a Feather” program to promote EQIP in support of upland game bird habitat.

NBGI State Quail Coordinator: Nathan Stricker, Wildlife Biology Supervisor, nathan.stricker@dnr.state.oh.us

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Pennsylvania Game Commission (PGC)

Population: Between 1966 and 2012, bobwhite populations declined by 9.1% annually. Between 2001-12, the decline continued at 9.5% annually. The relative abundance index in 2002-12 was 0.27, compared to 20.7 for the eastern US (USGS North American BBS data 1966-2012). PGC and partners completed a detailed Breeding Bird Atlas in 2012.

Northern bobwhites were determined to be breeding in only 18 of over 4,000 survey blocks. In 2014, a detailed analysis of all existing population data (e-bird, Breeding Bird Atlas, BBS, Christmas Bird Count, and survey of land managers throughout the state) was conducted by the Department of Ecosystem Science and Management at The Pennsylvania State University (PSU). No locations in the state showed persistence of bobwhites in every decade since 1960. The PGC conducted intensive surveys in the last-known locations of bobwhites using a playback caller in June-July 2014; no bobwhites were detected. As a result of these studies, researchers at PSU and the PGC have concluded that wild northern bobwhite have been extirpated in Pennsylvania.

Hunting: The PGC does not raise and release bobwhites, but many sportsman clubs and shooting preserves do for the purposes of training and hunting. Based on a survey of game bird propagators, we estimate that over 60,000 pen-reared bobwhites were released in 2013, primarily for dog training. Bobwhites harvested in Pennsylvania are from pen-reared and released birds. The state is now open to put-and-take quail hunting, with a split season running from the beginning of September through the end of March, without a bag or possession limit.

In 2022, regulation was passed to prohibit bobwhite hunting and release of pen raised bobwhite in the Bobwhite Quail Recovery Area (BQRA). The BQRA buffers the area where bobwhite will be reintroduced in 2024 to protect that population from mixing genetics with pen raised birds and direct harvest while the population becomes established.

Management: PGC has been managing habitat on the Bobwhite Quail Focus Area (BQFA) with the intent to reintroduce bobwhites in the spring of 2024. Management highlights include:

- Habitat management to date has included approximately 3,138 acres of prescribed fire treatment, 1,927 acres of overstory removal, 2,618 acres of herbicide treatment, and planting over 5,000 shrubs.
- Pennsylvania is working closely with Fort Barfoot and the Virginia DWR, Fort Knox and Kentucky DFWR, and Tall Timbers Research Station to secure sources of wild bobwhite for the reintroduction.
- Reported 3,632 acres of bobwhite management for the NBGI Habitat Management Inventory in 2022.

NBGI State Quail Coordinator: Andrew Ward, Quail, Dove and Pheasant Biologist, andward@pa.gov



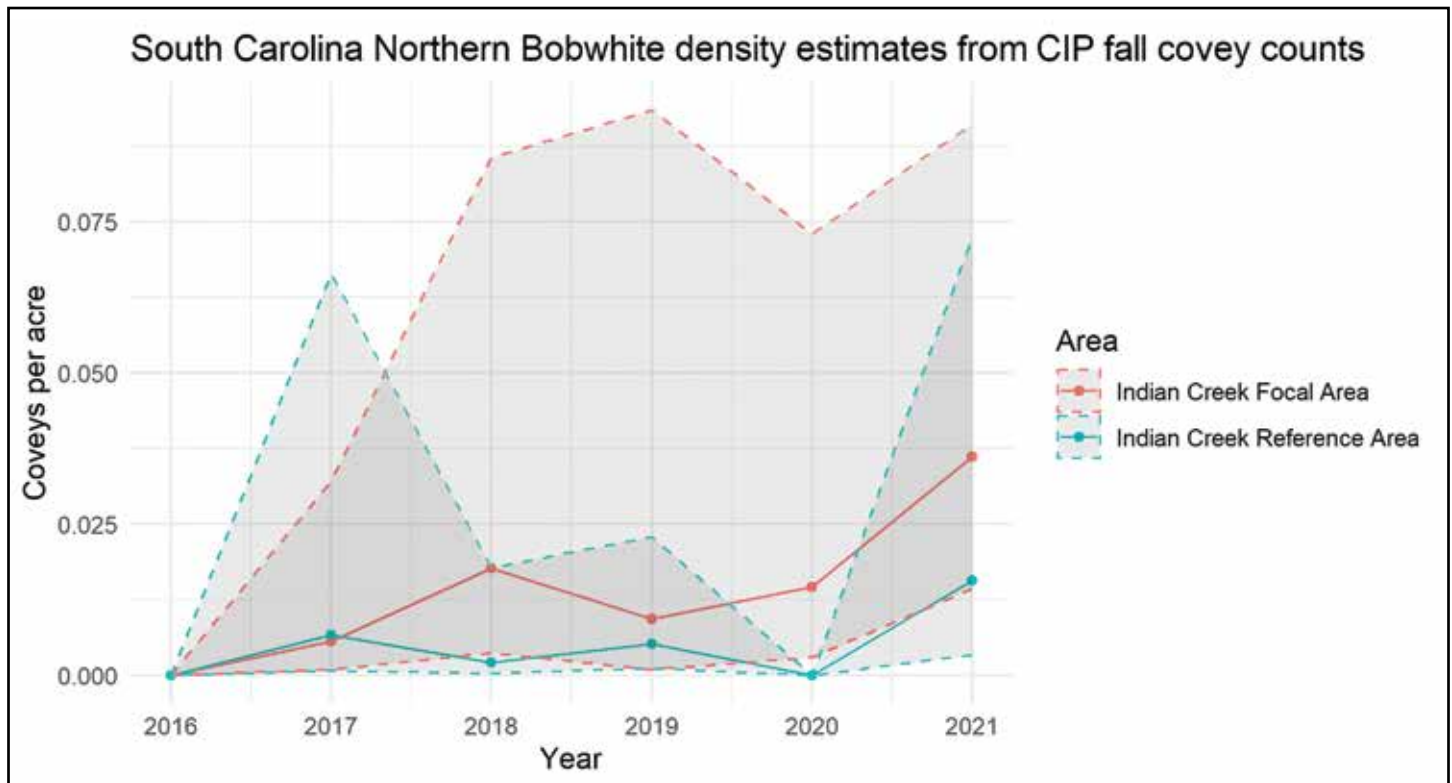
South Carolina Department of Natural Resources (SCDNR)

Population: The 2022 Summer Turkey and Quail Brood Survey reported an average brood size of 8.1 birds and an age ratio of 1.74 juveniles per adults, a decrease of 16.9% and 12.9% respectively. The 2022 Fall Covey Counts produced a 28.1% decrease in the average covey count estimate for surveyed properties. Covey count comparison between non-managed and managed quail survey sites revealed a 92.3% increase in the average covey count estimate for quail managed properties over non-managed properties. The SCDNR 2023 [statewide bobwhite whistling cock census](#) was 0.5% below the 2022 index, 67.2% below the long-term average (1979-2023), and 7.3% higher than the 10-year average (2014-2023).

Hunting: The 2022-23 Quail Hunter Survey for wild quail hunts, compared to the 2021-22 Survey, reported a 5.27% decrease in average covey size. The 2022-23 survey produced a juvenile harvest percentage of 72.7%. Average hunter success decreased over the prior year in the annual [Quail Hunter Survey](#). The 2022-23 hunting season indicated 0.15 coveys per hour of hunting.

Management: Quail management highlights include:

- Monitoring and habitat manipulation continued in 2023 with many projects being completed, new projects being started, and habitat has been reformed on all four focal areas in the state. Spring bird counts, fall covey counts, and habitat surveys were also completed on all four focal areas.
- There have been changes in the staffing of Farm Bill Biologist. There are 4 Quail Forever, NRCS, and SCDNR vacancies that should be filled soon.
- There will be a Burn/Habitat Crew Leader position created and filled as well with a team selected in the future to assist with prescribed burning and other habitat projects in the state.
- A CRP Biologist, Caden Klanderman, was hired this year and will assist with State Acres for Wildlife Enhancement (SAFE) applications and contracts.
- The Bobwhite Quail Whistling Cock Census was conducted for the 45th year, the Annual Summer Bobwhite Quail Brood Survey was conducted for the 30th year, and the Annual Fall Covey Count Survey was conducted for the 23rd year.
- Maintained the quail page on the SCDNR web site. Visitors can also find out more about SCBI on our webpage, on Instagram (@scbobwhites), or at www.facebook.com/scbobwhites.



Tennessee Wildlife Resources Agency (TWRA)

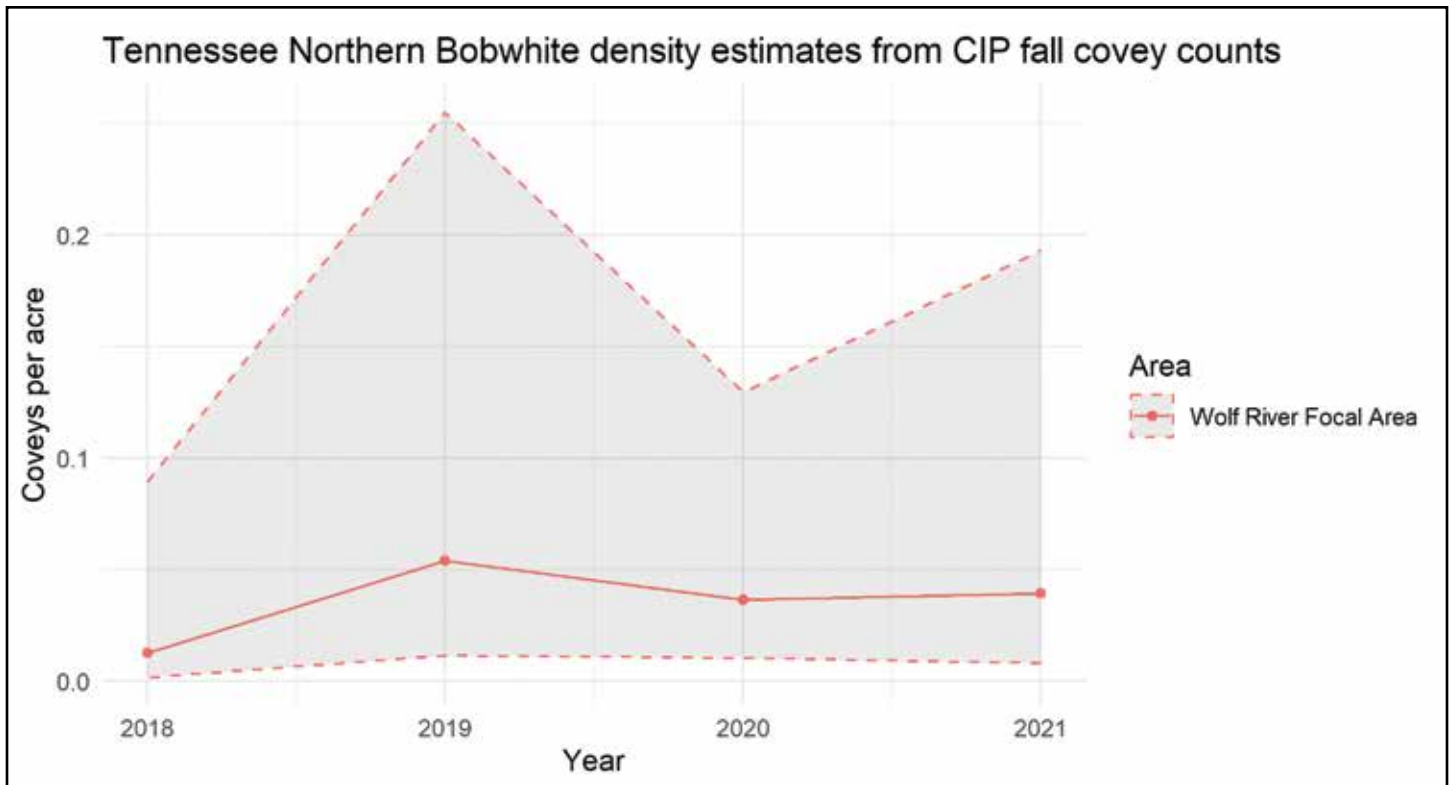
Population: TWRA historically has not monitored bobwhite populations but breeding bird surveys indicate a decline of >90% since the 1960s. However, some management areas are seeing ~40% annual population growth due to habitat improvements.

Hunting: Our most recent small game survey found ~7,000 hunters hunted 4 days and bagged 1.1 birds/day.

Management: TWRA is implementing our 2021-26 Northern Bobwhite Management Plan. Highlights from those efforts are as follows:

- TWRA WMA staff undertook new bobwhite habitat projects on 11 WMAs across the state. Spring whistle counts indicated an increase of 30-40% from the previous year on some WMAs in response to management.
- Tennessee continues to intensively manage its 4 anchor bobwhite WMAs, bobwhite demonstration area, and other WMAs.
- Five TWRA Private Lands Program prepared 473 habitat plans with 12,000 acres of practices and burned 519 acres.
- Eleven Quail Forever (QF) biologists provided technical assistance to over 200 landowners throughout the state.
- A new partnership with Quail Forever established a 4-person habitat strike team for public and private lands on the Cumberland Plateau.
- TWRA added ~5000 acres with bobwhite habitat potential under our WMA system.
- Monitoring efforts include spring whistle counts on anchor WMAs, demonstration WMAs, and miscellaneous WMAs undertaking bobwhite projects.
- TWRA hosted the first Tennessee Quail Summit held at Ellington Agriculture Center in Nashville. It was attended by about 80.

NBGI State Quail Coordinator: Michael McCord, Small Game/Furbearer Coordinator, michael.mccord@tn.gov



Texas Parks and Wildlife Department (TPWD)

Population: Since 1976, TPWD has monitored bobwhite populations via annual roadside counts. In 2023, we observed [incremental gains](#) across the state as a result of good habitat conditions and timely spring rainfall; the largest increases were in South Texas and the Gulf Coast Prairies. Long-term [declines](#) have been observed in almost all regions, with the Rolling Plains and South Texas Plains the largest remaining strongholds. The [Breeding Bird Survey](#) (BBS) estimates a 2% statewide annual decline in Texas since 1966.

Hunting: TPWD estimates and tracks hunters and harvest via our [Small Game Harvest Survey](#). In 2022-23, 26,130 hunters head afield, harvesting 192,741 bobwhites. The former represented a 15% decline in hunters from the previous season and was 37% below our 15-year average (total = 41,495). The latter represented a 46.5% decline in harvest from the previous season and was 63% below our 15-year average (total = 523,381). We anticipate an increase in hunting opportunities this upcoming season (2023-24) as bobwhite numbers across the state have improved, indicative of a productive nesting season, especially in South Texas.

Management: Most bobwhite management in Texas is focused on and aligns with complementary grassland bird habitat programs and initiatives, all of which allow for well-established conservation practices to be implemented on private and public lands. Over the last decade the suite of program offerings has grown to cover most regions in the state, including the newest frontier in East Texas.

- **Habitat Programs:** Grassland Restoration Incentive Program (Central Texas, Gulf Coast, South Texas, West Texas, Southern Great Plains), Pastures for Upland Birds, and the Northeast Texas Habitat Incentive Program, among others.
- **Funding Sources:** Natural Resources Conservation Service, National Fish and Wildlife Foundation, U.S. Fish and Wildlife Service (e.g., Partners Program, Pittman-Robertson), and TPWD’s Upland Game Bird Stamp fund (i.e., hunter generated state revenue), among others.
- **Research:** grassland bird (to include bobwhites) monitoring to assess grassland habitat restoration efforts (Playa Lakes Joint Venture); investigating landowner attitudes toward bobwhite declines and diverse management approaches (Texas A&M University-Kingsville).
- **Relevant Partner Publications:** Texas A&M Natural Resources Institute’s, “[Texas Ecosystem Services: A Statewide Assessment](#),” and, “[Conserving Texas: Quantifying Ecological Return on Investment](#),” both have relevance for bobwhite conservation in Texas and beyond.

NBGI State Quail Coordinator: John McLaughlin, Upland Game Bird Program Leader, john.mclaughlin@tpwd.texas.gov

Virginia Department of Wildlife Resources (VDWR)

Population: The annual quail call and rabbit survey is performed by agency staff and volunteers throughout the month of June. Observers are assigned routes designated along secondary roads throughout Virginia. Each route consists of two sections. During the first 9-mile section, observers stop every mile to perform two-minute counts of singing male bobwhites. Although estimates from this survey have declined greatly since its inception in 1980, the number of individuals heard in the last two years have been the highest recorded since 2010.

Hunting: VDWR conducted the annual 2022 - 2023 quail hunter cooperator survey (mailed to a list of about 80 remaining participating quail hunters – down from its peak of approximately 250 in the 1980s). This year 21 hunter cooperators sent in a seasonal report, 3 fewer than last season. Hunters reported on 328 hunts and found 432 quail coveys, or 1.3 coveys per hunt. On average hunting parties found one covey per 2.4 hours of hunting. Hunters killed 455 quail and averaged killing only one quail per covey flushed. Hunters found an average of 0.42 coveys per hour and averaged killing 1.4 quail per hunt. Compared to averages for the period from the 2009 – 2010 season to the 2020 – 2021 season of 0.40 coveys per hour, 1.39 coveys per hunt, and 2.64 hours per covey find, hunter success appears stable.

Management: VDWR completed the 14th year of the Quail and Early-Successional Species Recovery Initiative (www.dwr.virginia.gov/quail) as of June 30th, 2023. During this entire 14-year period, the Private Lands Wildlife Biologists (PLWBs) made a total of 6,176 site visits and wrote 3,354 management plans for landowners who own over 582,750 acres. During the most recent reporting period, the PLWBs continued to do great work making 416 landowner site visits and 283 new



contacts, writing 158 management plans, and working with landowners who own over 18,027 acres. They helped establish or maintain approximately 13,200 acres of early-succession private lands habitat.

Private lands wildlife biologists also continued to promote “Beyond the Bonfire: A Primer on Prescribed Fire for Virginia’s Private Landowners.” This 51-page booklet has been well received by the prescribed fire community with over 750 copies distributed in hardcopy. An eVersion is available at this link: <https://dwr.virginia.gov/wp-content/uploads/media/Beyond-the-Bonfire.pdf>.

In cooperation with the Pennsylvania Game Commission VDWR is working to help establish a source population of wild quail on Letter Kenny Army Depot near Chambersburg, Pennsylvania. As part of the project, quail will be provided by Tall Timbers Research Station, but also by other states including Virginia to bolster genetic diversity. Beginning this winter, Virginia DWR staff, Pennsylvania Game Commission staff and staff from Virginia’s Ft. Barfoot, will trap 20 to 25 wild quail on Ft. Barfoot to be immediately translocated to the Letter Kenny Army Depot release sites. This will occur for three consecutive years. We will be reaching out to Virginia quail hunters on Ft. Barfoot this fall asking for their help in testing some quail for diseases, which is required before out of state translocation.

VDWR completed our 11th year of participation in the NBGI Coordinated implementation Program (CIP) on the Big Woods/Piney Grove complex. This year the Flippo-Gentry WMA was added to the complex and will serve as the primary quail focal area. This project helps us work towards achieving the population recovery goals outlined in our State Wildlife Action Plan for bobwhite quail and 19 other species of early-succession dependent songbirds, as well as numerous pollinating insects. Approximately 2,495 acres of habitat management were completed on the CIP Focal Areas.

Staff also maintain their own Facebook page (www.facebook.com/VirginiaBobwhiteBulletin).

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West Virginia Division of Natural Resources (WVDNR)

Population: The current extent and population size of bobwhite in West Virginia is unknown. In 2022, administration directed the WVDNR to initiate a bobwhite quail release program on select state managed WMAs and state forests. Reports of quail are common on these select WMAs and forests, and it is typical to see quail venturing outside of release areas, too. West Virginia Division of Natural Resources (WVDNR) Wildlife Resources employees track turkey and grouse broods statewide and are asked to record northern bobwhites seen or heard. Reports of quail are rare, except for areas near quail releases. It is assumed outside of those designated release areas that observations were of pen-reared and/or escaped/released birds, as it is legal in West Virginia to utilize bobwhite quail for dog training or shoot-to-retrieve field trials. Given the rapid decline, distribution, and type of observations between the current West Virginia Breeding Bird Atlas (unpublished) and the prior atlas ([West Virginia Breeding Bird Atlas, 1984-89](#)), it is believed that populations are extremely low and have been extirpated in the vast majority of the state.

Hunting: This species remains a game bird in West Virginia with no annual harvest limit, a bag limit of three and possession limit of nine. The continued open season assumes that most, if not all, harvested birds are captive-raised released birds. Hunting remains closed on the Tomblin Wildlife Management Area (WMA) in the Southwestern coal fields.

Management: West Virginia has a statewide bobwhite operational plan and state management guidelines, but they are opportunistic in nature (i.e., in conjunction with creating early successional habitat for grouse and turkey). The Tomblin Wildlife Management Area in the southern coal fields of the state is still the focal area for quail habitat enhancement. For the past 2 years, 21,000 quail have been released annually on select state managed WMAs and state forests. The releases occur from August through October to provide wildlife viewing, dog training, and hunting opportunities. In addition, habitat manipulation to support quail is being conducted on these select WMAs and state forests.

NBGI State Quail Coordinator: Holly Morris, Furbearer and Small Game Project Leader, holly.n.morris@wv.gov



NBGI State Agency Habitat Management Inventory

Dr. Jared Elmore | NBGI Science Coordinator

Research Assistant Professor, Forestry and Environmental Conservation, Clemson University

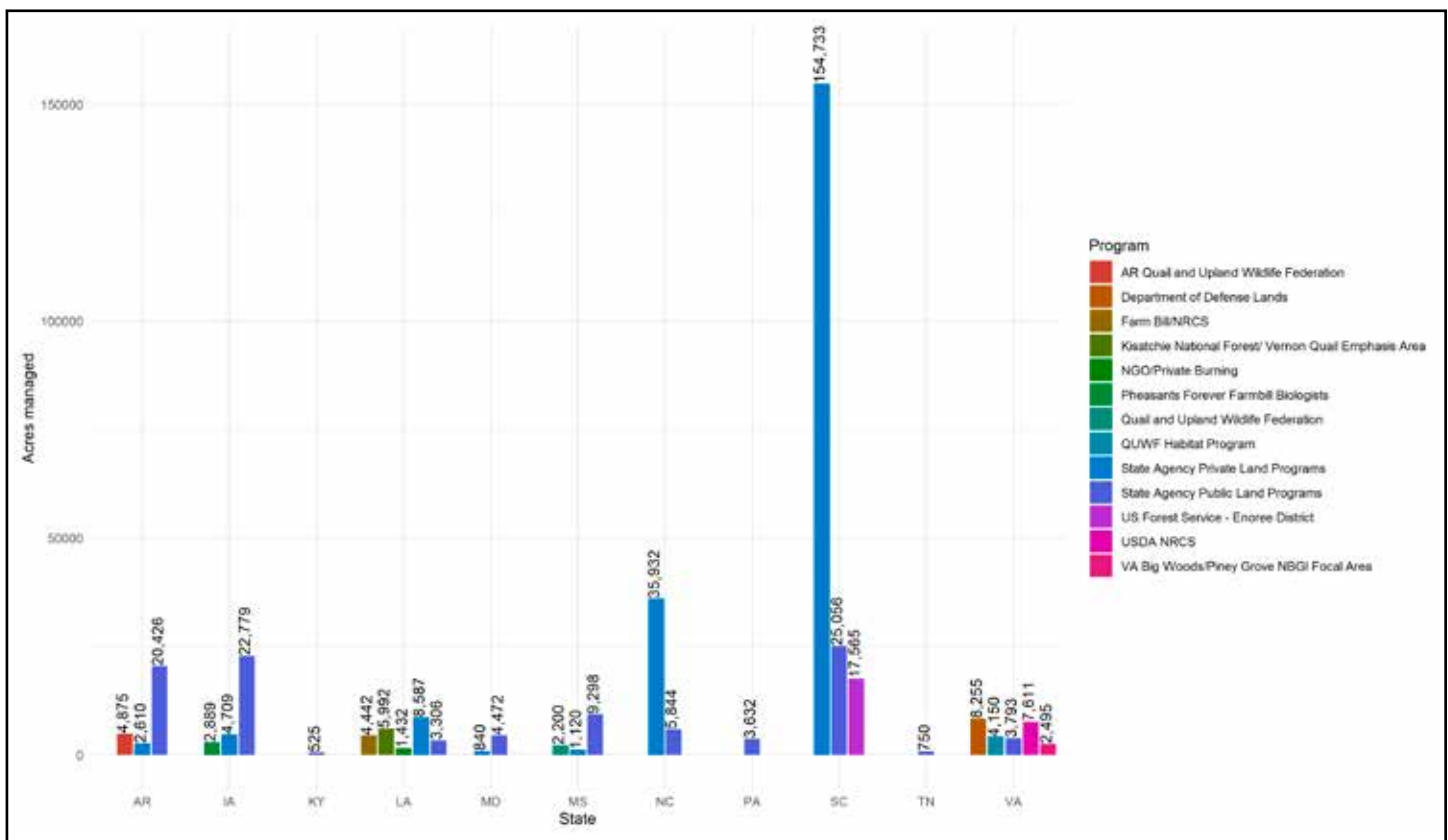
The habitat management inventory documents habitat management conducted over the past year as reported by the state agency quail program coordinators, and fulfills part of the 2010 charge of the NBGI management board to document “all things being done to benefit bobwhite within each state”. The inventory includes area of management activities (acres) such as prescribed fire, disking, grazing, cutting, herbicide application, planting vegetation, deferring haying, leaving standing crops, etc. Data presented here is rounded to the nearest whole number, is as descriptive as reported by each state coordinator, and is for the 2022 reporting year (which varies among states with fiscal year).

The inventory is divided into “Programs” depending on how each state coordinator enters data, which are based on a combination of land ownership, leadership, and funding source. The two primary categories are: (1) State Agency

Public Land which includes wildlife agency lands and (2) State Agency Private Land which includes private lands funded, led, or made possible by the wildlife agency. Some states coordinators report US Department of Agriculture funded, partner private or public lands, or NBGI CIP focal areas.

A total of 12 state agency coordinators reported 370,318 acres managed, including 134,188 on public lands and 236,130 on private lands. Habitat management inventory are further divided out into the number of acres per program area within each state in Figure 1. Several states reported 0 acres managed for various programs and many states failed to report habitat management data altogether. Total acres for each of 12 states that reported data are:

TOTAL ACRES	
AR	27,911
IA	30,377
KY	525
LA	23,759
MD	5,312
MS	12,618
NC	41,776
PA	3,632
SC	197,354
TN	750
VA	26,304
WV	0



NBGI State Agencies

Alabama Department of Conservation and Natural Resources (ADCNR)
Arkansas Game and Fish Commission (AGFC)
Delaware Division of Fish and Wildlife (DFW)
Florida Fish and Wildlife Conservation Commission (FWC)
Georgia Department of Natural Resources (GADNR)
Illinois Department of Natural Resources (IDNR)
Indiana Division of Fish and Wildlife (IDWF)
Iowa Department of Natural Resources (IDNR)
Kansas Department of Wildlife, Parks, and Tourism (KDWP)
Kentucky Department of Fish and Wildlife Resources (KDWFR)
Louisiana Department of Wildlife and Fisheries (LDWF)
Maryland Department of Natural Resources (MDNR)

Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP)
Missouri Department of Conservation (MDC)
Nebraska Game and Parks Commission (NGPC)
New Jersey Division of Fish and Wildlife (NJDFW)
North Carolina Wildlife Resources Commission (NCWRC)
Ohio Department of Natural Resources (ODNR)
Oklahoma Department of Wildlife Conservation (ODWC)
Pennsylvania Game Commission (PGC)
South Carolina Department of Natural Resources (SCDNR)
Tennessee Wildlife Resources Agency (TWRA)
Texas Parks and Wildlife Department (TPWD)
Virginia Department of Wildlife Resources (VDWR)
West Virginia Division of Natural Resources (WVDNR)

Acronyms

ALPFC – Alabama Prescribed Fire Council
BBS – USGS North American Breeding Bird Survey
BMP – Best Management Practices
BQFA – Bobwhite Quail Focus Areas
BQI – Bobwhite Quail Initiative
CIP – Coordinated Implementation Plan (NBGI CIP)
CNF – Conecuh National Forest
CP – Conservation Practice (as used in the Conservation Reserve Program)
CP-33 – Habitat Buffers for Upland Birds
CP-38 – State Acres for Wildlife Enhancement, SAFE
CP-42 – Pollinator Habitat
CCRP – Continuous Conservation Reserve Program
CLAP – Collaborative Landowner Assistance Program
CNGM – Center for Native Grasslands Management
CRP – Conservation Reserve Program
CS – Cost share
DNR – Department of Natural Resources
ESH – Early Successional Habitat
FB – Farm Bill (CCRP, CRP, EQIP, GRP, etc.)
FFA – Future Farmers of America
FSA – Farm Service Agency
FWA – Fish and Wildlife Area
EQIP – Environmental Quality Incentives Program
FSA – Farm Service Agency
GRIP – Grassland Restoration Incentive Program
JQC – Joint Quail Conference
KNF – Kisatchie National Forest
LEAD – Letterkenny Army Depot
MOU – Memorandum of Understanding
NBCI – National Bobwhite Conservation Initiative
NBGI – National Bobwhite and Grassland Initiative
NBTC – National Bobwhite Technical Committee
NFWF – National Fish and Wildlife Foundation
NGO – Non-Governmental Organization

NPS – National Park Service
NRCS – Natural Resources Conservation Service
OPIV – Oaks and Prairie Joint Venture
OSU – Oklahoma State University
P-R – Pittman-Robertson
PCQ – Park Cities Quail
PF – Pheasants Forever
PLP – Private Lands Program
PSU – Pennsylvania State University
QF – Quail Forever
QRL – Quail Restoration Landscape
RCPP – Regional Conservation Partnership Program
RS – Research Station
SAFE – State Acres for Wildlife Enhancement, CP-38
SCBI – South Carolina Bobwhite Initiative
SCBFP – South Carolina Bobwhite Funding Partnership
SE – Standard Error
SHC – Strategic Habitat Conservation
SWAP – State Wildlife Action Planning
TTRS – Tall Timbers Research Station and Land Conservancy
UDEL – University of Delaware
UERP – Upland Ecosystem Restoration Project
USFS – United States Forest Service
USFWS – United States Fish and Wildlife Service
USDA – United States Department of Agriculture
USGS – United States Geological Survey
UT – University of Tennessee
UTIA – University of Tennessee Institute of Agriculture
VWL – Virginia Working Landscapes
WA – Wildlife Area
WLFW – Working Lands For Wildlife
WMA – Wildlife Management Area
WRD – Wildlife Resources Division
WSFW – Wildlife and Sport Fish Restoration





Members



FY24 NBGI Membership and CIP States



Clemson University and NBGI'S Fiscal Year begins July 1 and ends June 30 each year.

FY23: July 01, 2022 – June 30, 2023 ◆ FY24: July 01, 2023 – June 30, 2024

Total Actual FY23 Expenses and Received Funds



FY23 Type of Expense	Total Actual FY23 Expenses	Total Actual FY23 Federal Allowable Expense	Total Actual FY23 State Allowable Expenses
Salaries	\$ 254,595	\$ 227,087	\$ 27,508
Benefits	\$ 111,002	\$ 101,165	\$ 9,837
Travel	\$ 41,855	\$ 41,855	\$ -
Printing (flyers/publication)	\$ 3,537	\$ 3,537	\$ -
Website hosting/CCIT servers	\$ 1,475	\$ 1,426	\$ 49
Postage/Freight/Shipping	\$ 139	\$ -	\$ 139
Dues/Memship fees	\$ 325	\$ 325	\$ -
Office supplies	\$ 243	\$ -	\$ 243
Subcontractor (Policy)	\$ 60,000	\$ -	\$ 60,000
Subcontractor (HMSC iLab refund)	\$ (6,852)	\$ (6,852)	\$ -
Contractor (QF/TWRA)	\$ 3,721	\$ 3,721	\$ -
Total Actual NBGI FY23 Expenses	\$ 470,040	\$ 372,264	\$ 97,776

Total Projected FY24 Expenses and Received Funds



FY24 Type of Expense	Projected FY24 Expenses	Projected FY23 Federal Allowable Expense	Projected FY23 State Allowable Expenses
Salaries	\$ 315,481	\$ 276,609	\$ 38,872
Benefits	\$ 132,187	\$ 115,899	\$ 16,288
Travel	\$ 60,000	\$ 60,000	\$ -
Printing (flyers/publication)	\$ 4,000	\$ 4,000	\$ -
Website hosting/CCIT servers	\$ 4,000	\$ 4,000	\$ -
Postage/Freight/Shipping	\$ 200	\$ -	\$ 200
Dues/Memship fees	\$ 1,000	\$ 1,000	\$ -
Office Digital devices	\$ 200	\$ -	\$ 200
Project supplies	\$ 1,000	\$ -	\$ 1,000
Office supplies	\$ 200	\$ -	\$ 200
UGA/Clemson (data analysis AR)	\$ 10,000	\$ 10,000	\$ -
Subcontractor (Policy/JMS Ntrl)	\$ 110,000	\$ -	\$ 110,000
Subcontractor (Striven/NBGI)	\$ 25,000	\$ -	\$ 25,000
Contractor (SOTB/AYancy)	\$ 2,800	\$ -	\$ 2,800
Total Actual NBGI FY23 Expenses	\$ 666,068	\$ 471,508	\$ 194,560



NBGI Benefactors



This publication was funded in part by the Federal Aid in Wildlife Restoration Program, a user-pay, public-benefit conservation mechanism funded by sportsmen since 1937.





Department of
**FORESTRY AND ENVIRONMENTAL
CONSERVATION**
Clemson University



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Photo by Ben Robinson

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