



NBGI's

Bobwhite Almanac

State of the Bobwhite 2022

**Influencing
National
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to Benefit
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Symposia | 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.

John L. Seymour

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Bobwhite Almanac

State of the Bobwhite 2022



www.nbgi.org



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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Photo by Lee Metcalf, Missouri Department of Conservation

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Introduction

Turning the Corner



John Morgan

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*National Bobwhite and
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It's been a long and arduous three-year period for the newly coined National Bobwhite and Grassland Initiative (NBGI). From three retirements in key leadership positions, to Office of Inspector General audit findings, to switching homes to Clemson University, few collaboratives could weather that perfect storm. Did I mention COVID-19, by the way?! Solving complex challenges virtually took our technology and resolve to a whole new level. We endeavored to persevere. We have turned a corner and are getting back to the job of tackling one of the profession's greatest challenges—restoring grassland habitat for northern bobwhite and a host of other societal benefits.

Through these trials, we re-evaluated our purpose and function. Our operational model has been largely stagnant for more than 25 years. How can it be improved? What do we need right now to change our current trajectory? We are still watching bobwhite decline, and restoration success stories are the exception, *not the rule*. Our Coordinated Implementation Program (CIP) is nearly a decade old, what have we learned?

Moving forward required a significant reset designed to respond to those questions. We needed to change in a dramatic way. Our Management Board helped begin the process. Phase one was the creation of a new business plan. The diverse leadership team crafted by the Management Board identified key needs from the partnership and built a fair and equitable business model around those requirements. Those products were vetted by the

Technical Committee and the full Management Board, and the business plan was adopted last September.

The new vision reshaped the role of the NBGI. Historically, we generated regional and national products, things like best management practices, promotional materials, national plans, and a heavy emphasis on molding Farm Bill policy. We began creation of the CIP in 2009. Today, states were not finding significant return on investment. Tangible, in-state products were needed. So, the services in the business plan were explicit to meet those criteria: partner coordination and policy, an adaptive management framework (CIP) for restoration, and the innovative Habitat Management Service Center.

Phase two began with our transition to Clemson University. An opportunity for a fresh start with a motivated and enthusiastic new partner opened the door for important improvements. Lessons learned from our prior home were deployed immediately. Integrating our financial specialist within Clemson's administrative infrastructure was paramount. We needed to minimize our administrative "presence." Penny Barnhart operates across several silos within Clemson focused solely on minimizing work for as many Clemson staff as possible. It's likely that no other individual in the university operates in this fashion. We established a fair financial relationship, making our presence a reasonable business venture for the university.

Clemson also strongly encouraged our development as a non-profit, and the Bobwhite and Grassland Foundation was launched this year. Their primary motivation was aimed at keeping our advocacy work independent of the institution. The prompt for creating a non-profit opened a host of our partnership benefits that will immediately pay dividends. Most importantly, we gain full financial flexibility within our partnership. We've leaned heavily on our outstanding conservation partner, SEAFWA, to help us navigate the financial complexity of our transition. Without our own non-profit, we had no mechanism to capture funds from state partners. As many of you have experienced, the legalese among states sometimes makes agreements impossible. The Foundation will give us an important work-around. A non-profit elevates leadership across our partnership. The Management Board has historically functioned well, but the everchanging participation in meetings and larger group size minimizes continuity of vision. A well-established Board will elevate focus on our work. The Foundation Board can also interject new conservation allies that could lead to more

diversified funding and more impactful policy work. The non-profit will play a pivotal role in the Habitat Management Service Center (HMSC).

What is this HMSC? I'm glad you asked! It is a first-of-its-kind contractual service platform designed to help leverage the power of partnerships to put habitat on the ground. The Center is envisioned to offer nearly every conceivable tool needed to install habitat—think manpower, supplies, specialized contractual services (spraying, planting, burning, etc.), equipment lease/rental, training, and more. Not only can we provide up to 25% project match, but we offer significant administrative efficiencies for states through use of subawards or direct grants to Clemson. As federal funds flow to conservation, the NBGI is ready to act. Our Center will be constructed to output TRACS reports to meet USFWS reporting standards guaranteeing data for dollars spent.

Finally, phase three of our re-invention focuses solely on the Technical Committee. The new business plan has separated NBGI staff from our traditional subcommittee structure. A lack of motivation to fund the NBGI staff is a signal the Technical Committee is not working towards products the states value. What needs fixed? How can the Technical Committee help drive the new NBGI service model? At this point in our history, we have accomplished many of the planning and best management practice needs. Quite frankly, we know what we need to do; now we must get it done on the ground. Many of our needs rely on landowner interests/motivations, limitations for public lands management, effective Farm Bill programs, and optimizing public investments at landscape scales. The Technical Committee needs to tackle these kinds of issues.

As we enter our 29th year of multi-state collaboration, our focus must shift to installing and maintaining habitat at scales that matter. It's what brought us together in the first place; it's guided us to this point. Despite some big wins in our history, we've not consistently gotten the job done. As we turn this corner, we must garner the resolve to blaze paths that were never traveled. We've learned that our past efforts were not enough. Restoring bobwhite for the sake of bobwhite cannot get us the results we pursue. Leveraging multi-resource benefits in the form of ecosystems services for soil, air, water, and human health and wellness, as well as wildlife, will afford us our greatest opportunity to achieve our vision of changing how people use and view the land. Anything less would ignore our history and trivialize the reality of our challenge.

Many before us brought this ground-breaking partnership to the national spotlight. Most of those individuals have retired. This moment of turning the corner is the opportunity for you to pick up the torch. Are you up for the challenge? The bobwhite and the grasslands they call home rely upon your energy, enthusiasm, perseverance, and intellect.

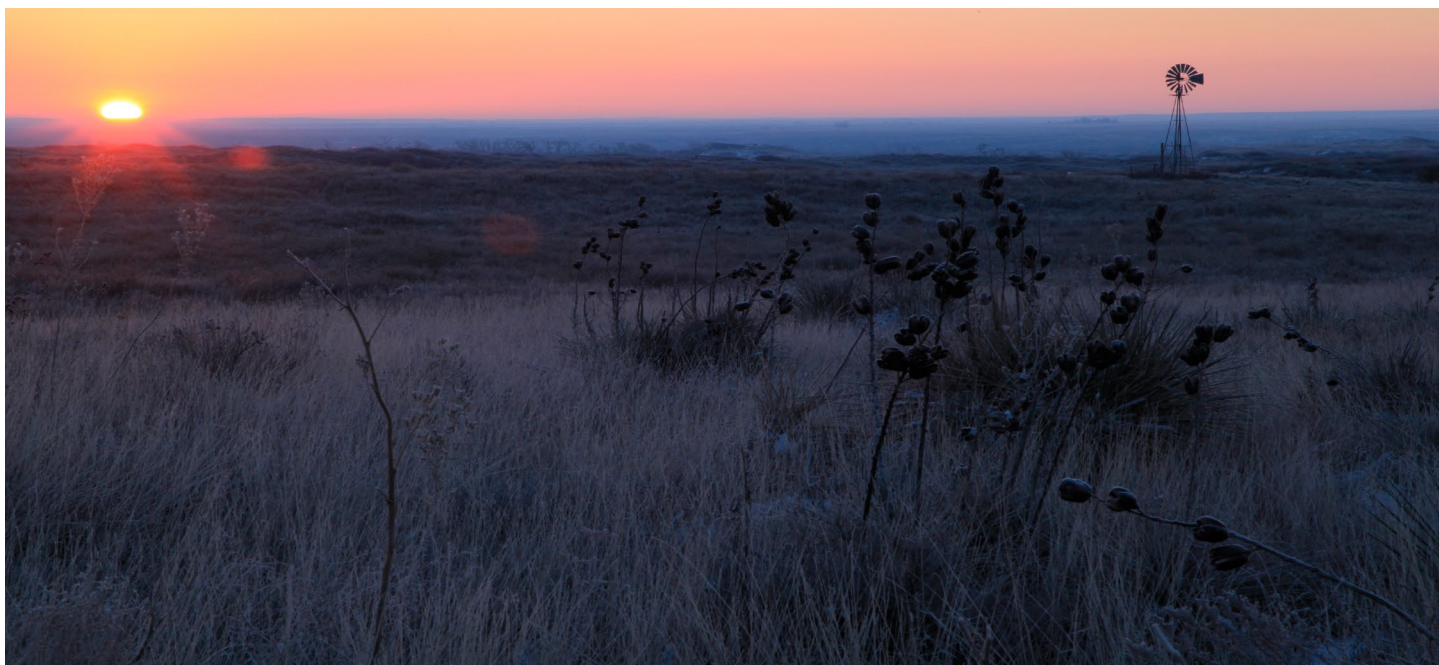
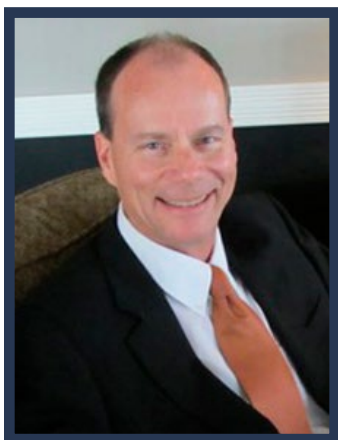


Photo by Jef Hodges.



NBGI News

Partnership to Establish a Distinguished Professorship in Wildlife Conservation at Clemson University



Dr. Greg Yarrow

*Professor, Forestry and
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Clemson University*

Founded by Theodore Roosevelt in 1887, the Boone and Crockett Club (BCC) promotes guardianship and visionary management of big game and associated wildlife in North America. Member accomplishments include enlarging and protecting Yellowstone and establishing Glacier and Denali national parks, founding the US Forest Service, National Park Service and National Wildlife Refuge System, fostering the Pittman-Robertson and Lacey Acts, creating the Federal Duck Stamp program, and developing the cornerstones of modern game laws.

In December 2018, BCC and Clemson University signed an agreement to create and work together to fund a Boone and Crockett Distinguished Professorship in Wildlife Conservation at Clemson University. The effort supports the mission of BCC “to promote the conservation and management of wildlife, especially big game, and its habitat, to preserve and encourage hunting, and to maintain the highest ethical standards of fair chase and sportsmanship in North America.” The effort brings together a wide array of partners to establish an endowment to support a professor, research, and undergraduate and graduate education in wildlife conservation.

In July 2021, the Board of Trustees at Clemson University approved Clemson as the new home for the National Bobwhite and Grassland Initiative (NBGI). Since then, NBGI has smoothly transitioned to Clemson and hit the ground running with new and innovative initiatives. One of the most exciting is that NBGI and BCC will be working closely together

to establish a Distinguished Professorship in Wildlife Conservation at Clemson University. The professor will lead and coordinate outreach, teaching, and applied research efforts to enhance wildlife habitats and promote game species management and wildlife conservation on private lands. Focal wildlife are white-tailed deer, bobwhite quail, and associated wildlife.

This joint effort of the NBGI and BCC is a natural fit. Both organizations have a long history of working together to promote wildlife habitat conservation efforts in the US. The emphasis on habitat, the future of hunting, the application of science-based management on private lands, and the promotion of sound wildlife conservation policymaking is a hallmark of both programs. NBGI and BCC will work closely with Clemson to support the endowed wildlife conservation professorship in the Department of Forestry and Environmental Conservation (FEC) at Clemson University.

The program, led by the professor, will focus on 1) private landowner-focused wildlife research (particularly bobwhite quail and white-tailed deer); 2) wildlife habitat enhancement on private lands; 3) wildlife conservation outreach and educational initiatives for private landowners, youth, and the public; and 4) student development and engagement with private landowners, policymakers, and the public. The program fits well in Clemson’s FEC department, which is recognized for its outstanding teaching, research, and outreach programs in wildlife conservation. Once the endowment is met, Clemson will have a national search to fill the position.

For more information, contact Dr. Greg Yarrow, Professor of Wildlife Ecology at Clemson University (gyarrow@clemson.edu), or visit the Clemson Boone and Crockett University Program website.



Quail Tracks

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

ARKANSAS | Arkansas Game and Fish Commission (AGFC) has a concentrated effort on seven Wildlife Management Areas doing intensive quail habitat work with a goal of huntable quail populations. These focal areas serve as anchors for ongoing and future private lands work on surrounding areas. A recent grant from the USDA Natural Resources Conservation Service (NRCS) through the Regional Conservation Partnership Program will restore over 3,000 acres of grassland plant communities on private lands in three counties, utilizing over \$3 million in funds. A partnership with Quail Forever has placed eight Farm Bill Biologists, two Coordinating Biologists and a five-person habitat team, in addition to 11 AGFC Private Lands Biologists. Statewide, Arkansas burned over 320,000 acres in 2022, an all-time high since records began. The word partnership is a theme in Arkansas, with work done by Arkansas Forestry Division, Quail and Upland Wildlife Federation, Quail Forever, National Wild Turkey Federation, Arkansas Association of Conservation Districts, US Forest Service, NRCS, US Fish and Wildlife Service, National Park Service, Arkansas State Parks, Arkansas Natural Heritage Commission, Ross Foundation, US Army Corps of Engineers, Arkansas Military Department, Potlatch-Deltic, The Nature Conservancy, Audubon Delta and others being vital to quail in the Natural State.

DELAWARE | Cedar Swamp Wildlife Area (WA) in New Castle County was officially designated as Delaware's first NBGI Coordinated Implementation Program focal area in 2016, and Ted Harvey Conservation Area in Kent County has been designated as the accompanying reference area. Since the designations, the Delaware Division of Fish and Wildlife (DFW) has conducted spring breeding bird and fall covey count surveys. Additionally, DFW staff conducted habitat surveys at both areas in 2016 and 2020. The 2022 spring whistle call counts mark the beginning of the seventh year of data collection for Delaware. Habitat restoration efforts at Cedar Swamp WA began in fall 2016 and have continued through 2022. Management practices include: prescribed burns, edge feathering, and the removal of hundreds of acres of agricultural lands and

conversion to native forb/grass mixes. DFW staff continue to reduce the amount of agricultural lands on its public areas and restore them to early successional habitat. They have concluded collecting data for the spring survey period and plan to conduct fall surveys beginning in October.

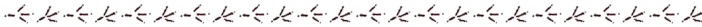
FLORIDA | Due to favorable weather conditions across the state, the Upland Ecosystem Restoration Project and its cooperating partners (Florida Fish and Wildlife Conservation Commission [FWC], Florida Forest Service, Florida Park Service, National Forests in Florida, and Tall Timbers Research Station and Land Conservancy) made steady progress implementing on-the-ground management beneficial to bobwhites and other fire-dependent species on public lands throughout Florida. All partners share a common vision and dedication to managing, enhancing, and restoring early successional habitats. In addition, FWC private lands biologists and USDA Natural Resources Conservation Service provided technical assistance and cost share opportunities to numerous landowners and producers that created or enhanced over 10,000 acres of bobwhite habitat throughout the state.



Photo submitted by Florida Fish and Wildlife Conservation Commission.



GEORGIA | Georgia continues to see population increases thanks to good poult production and overwinter survival. If the weather cooperates, we are in good position for another great year for bobwhites in 2022. Reports of bobwhites returning and/or increasing across the state continue, and monitoring efforts continue to grow. The Georgia Department of Natural Resources continues to work with Quail Forever (QF) chapters to improve quail habitat on public land through QF Chapter donations. QF has three partner biologists that have been a great asset to our private lands program (PLP) and is in the process of hiring two more. Georgia's Bobwhite Quail Initiative was able to host six youth quail hunts on private lands during the 2021-22 season, thanks to the great work being done by our biologists. BQI began a pilot program in a portion of southwest Georgia aimed at improving habitat on agricultural fields. This program works with our QF precision ag specialist to identify areas of a field that have poor productivity and negative returns. The program pays landowners to turn these areas into habitat using practices such as field borders, fallow patches, or hedgerows.



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-



Photo submitted by Iowa Department of Natural Resources.

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 | Kansas established an upland gamebird State Acres for Wildlife Enhancement (SAFE) project in 2007, during the initial establishment of the SAFE program, to target edge habitat in crop fields for pheasant and quail. This practice was designed with a high level of flexibility so that farmers can target the lowest-producing or hardest-to-farm acres with native grass for wildlife while continuing to farm the most productive acres. This was accomplished by allowing up to 20% of any field to be enrolled in the program in any shape including pivot corners, turn rows, playas, riparian buffers, etc. This was a statewide practice to cover the primary range of both pheasant and quail. During a revision in 2019, we were required to remove large portions of our state to make a target area. This impacted more of our bobwhite range than our pheasant range. This year, SAFE went through another revision, and we were able to provide justification to return to the statewide scope of the project with targeting done at the field-level rather than by limiting the area of eligibility. This reincorporates a lot of smaller agricultural fields in areas of less productive soils and will be an important tool for biologists in these areas. As program expirations continue to outpace enrollment, this could be an important tool to maintain portions of the fields in grass.



KENTUCKY | The Kentucky Department of Fish and Wildlife Resources (KDFWR) continues to collect monitoring data on three NBGI Quail Focus Areas in the western part of the state. In the central and southern parts of the state, efforts are ongoing on two division focus areas on production lands. The University of Tennessee research project on Bluegrass Army Depot is winding down in 2022, whose goal is 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 three upcoming NRCS Focused Conservation Projects



in the state aimed at promoting wildlife-friendly practices on working lands. The division has also hired a new Small Game Program Biologist.



LOUISIANA | With the help of NBGI, the Louisiana Department of Wildlife and Fisheries (LDWF) and USFS 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 Coordinated Implementation Program focal area that is 5,992 acres in size. Work on the KNF-Vernon Quail Emphasis Area began with the first year of bird monitoring and habitat monitoring conducted in 2017. Bird monitoring continued 2018-21 and is currently ongoing for 2022, as well as several prescribed habitat treatments. 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 1,850 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 | Maryland bobwhite populations are doing well on various public and private properties where management efforts are heavily focused on bobwhite habitat. Less common are examples of successful bobwhite restoration in areas where quail are not the primary target species. However, recent management on Pocomoke State Forest is providing some optimism for the future of quail on the 18,000-acre, primarily closed-canopy forested property. A globally rare butterfly, the frosted elfin, and its two host plants, sundial lupine and wild indigo, depend on large forest openings and frequent disturbance to persist. Since 2013, timber harvests and prescribed fire have been used to expand suitable habitat from a remnant 5-acre opening to over 125 acres. As expected, frosted elfins and a suite of disturbance-dependent rare plants and insects responded quickly. But surprisingly, bobwhites also discovered this isolated block of habitat in the summer of



Photo submitted by Kentucky Department of Fish and Wildlife Resources.

2022, when calling was heard frequently. This is the first documented report of bobwhites within several miles of this location in over a decade, demonstrating that quail can respond to habitat management in unlikely areas. Future work on Pocomoke State Forest and surrounding properties will focus on expanding this critical habitat and providing additional dispersal corridors.



MISSISSIPPI | Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP) has experienced some changes during the last year. Dr. Sam Polles, Executive Director for almost 30 years, retired in early 2022. MDWFP continued to implement many quail-friendly habitat management activities on Wildlife Management Areas (WMAs). Private lands technical guidance programs continue to be in demand by landowners, and the Private Lands Program has matched its previous high points in staffing. Mississippi's Fire on the Forty Initiative is now in its tenth year of providing prescribed burning cost-share, education, and outreach resources to landowners through a partnership of public and private entities. MDWFP is funding a new cooperative research project with Mississippi State University investigating scale of habitat management and quail population response on five WMAs. MDWFP was able to provide a new wild quail hunting opportunity on Charles Ray Nix WMA, beginning with the 2022-23 hunting season. This comes after having a closed quail season on the WMA most years since quail habitat management began in 2008. MDWFP is pleased to provide this additional bird hunting opportunity in North Mississippi.



MISSOURI | The Missouri Department of Conservation (MDC) is currently revising our Strategic Quail Plan. We are focusing efforts in our 16 Quail Restoration Landscapes (QRLs) that were identified as having the best potential to restore quail habitat. Frank Loncarich (current NBGI Science Chair) was recently selected as the new Grassland Systems Manager for MDC. Frank is excited to begin his new challenge to conserve, promote, and increase native grasslands in Missouri. The 2021 August Agent Roadside Surveys showed a 33% decrease in quail numbers statewide, which was not surprising given some harsh winter conditions during 2020-21. Fall 2021 covey numbers were down slightly in both the Bee Ridge (5%) and the 2C (17%) NBGI Coordinated Implementation Program focal areas.



Photo submitted by Louisiana Department of Wildlife and Fisheries.

NEBRASKA | As part of the multi-state Working Lands for Wildlife (WLFW) Initiative, a Bobwhite Quail Conservation Delivery Specialist position was recently created in southeastern Nebraska. This position will work in joint capacity with the Nebraska Game and Parks Commission (NGPC), Pheasants Forever (PF), and the USDA Natural Resources Conservation Service (NRCS) to help coordinate the delivery of the USDA Conservation Stewardship Program (CSP), Environmental Quality Incentives Program (EQIP), and other state/federal conservation programs that benefit bobwhite quail. This biologist will provide technical assistance to private landowners and will coordinate with NRCS, NGPC, and PF staff to streamline the implementation of bobwhite management practices and provide recommendations to enhance existing USDA conservation programs to benefit quail and other grassland-dependent wildlife. To complement these efforts, the NGPC recently secured a three-year, \$200,000 federal aid grant to help incentivize quail-specific management practices (e.g., tree removal/edge-feathering, prescribed fire, grass seeding, early-successional habitat management, etc.) on private lands in southeastern Nebraska. These funds are often coupled with other USDA programs (mentioned above) to minimize the landowner's input costs towards the habitat project.

Conservation Service, and Quail Forever, a new Farm Bill Biologist, Abigail McBride, was hired to coordinate and implement habitat-related conservation programs throughout southern New Jersey.

NORTH CAROLINA | The North Carolina Wildlife Resources Commission has created a new private land program called Wild Quail Management Areas (WQMA), which began in July 2022. This program will allow dedicated property managers to implement specific management actions for the benefit of wild bobwhites. Properties eligible for this program must meet specific requirements, including a minimum of 500 acres of contiguous land, intensive habitat management, no pen-reared birds, and record keeping. On WQMAs, landowners and managers will be able to trap the most important nest predators (opossum, raccoon, and striped skunk) during the early nesting season and can also provide supplemental feed without impacting the ability to hunt quail on the property.

OKLAHOMA | Annual fall roadside surveys indicated that Oklahoma's bobwhite population was slightly higher than the 2020-21 season but well below the 10-year average for the state. 2021 brought its share of struggles for ground nesting birds—a late-February winter storm seemed to delay nesting activity, spring rains were timely and nourished an outstanding crop of seeds and insects, but by fall, the majority of the state was experiencing some level of drought. The 2021 October roadside surveys showed increases in the northwest, southwest, and north-central averages. The northwest region remained the best region for hunting in the state. The spring of 2022

NEW JERSEY | During 2020-21, New Jersey Fish and Wildlife continued habitat management on Dix Wildlife Management Area in Cumberland County, an NBGI Coordinated Implementation Program (CIP) Focal Area. NBGI CIP Habitat and Population monitoring were completed. With a great partnership with the National Fish and Wildlife Foundation, USDA Natural Resources



brought much-needed rains across the state, sometimes more rain than necessary, and winter had very few days of extreme cold weather. As fall approaches, head to www.wildlifedepartment.com for the 2022 Quail Season Outlook. Management on wildlife management areas during the past year has consisted of techniques such as seasonal grazing, prescribed burning, disking, mowing, shrub planting, and grassland restoration. The Oklahoma Department of Wildlife Conservation continues its research partnerships with Oklahoma State University monitoring quail movement and habitat use.

SOUTH CAROLINA | South Carolina has continued to work on the existing four quail focal areas in the state. Three of them are responding quite well, with bird surveys indicating all-time-high numbers of bobwhites and nongame birds present on the focal areas. In each of the quail focal areas, the emphasis on smaller burn blocks and thinning timber is being continued with more and more high-quality quail habitat being developed each year.

Additionally, a fifth focal area came online in 2021 through a partnership of the South Carolina Bobwhite Initiative and the US Army Corps of Engineers (USACE) Savannah District. The Bordeaux Quail Focal Area is in McCormick County and is made up of USACE property and is managed by a South Carolina Department of Natural Resources (SCDNR) Wildlife Biologist, Cory Drennan. Assisting Cory with the management of the quail focal area and assisting private landowners in Abbeville, McCormick, and Edgefield counties is a Quail Forever Farm Bill Biologist, Hunter Bridges.

Planning continued for another quail and grassland habitat project at the Kings Mountain National Military Park and Kings Mountain State Park. In 2021, steady progress was made in formalizing a plan, developing a strategy, and securing funding and personnel for the project. Partners on this project include the National Park Service; South Carolina Parks, Recreation, and Tourism; Quail Forever; and SCDNR. The goal of the project is to restore the battlefield to the conditions at the time of the battle, which included open grasslands and piedmont prairie, open mixed hardwood wood lands, and shortleaf pine on the landscape.

TENNESSEE | The Tennessee Wildlife Resources Agency (TWRA) continues to implement our bobwhite restoration plan. We collected summer whistle count data on our anchor and demonstration wildlife management areas, as

well as several additional areas we are creating early successional cover on. We have also established a budget to fund additional habitat work through contractors to accelerate management beyond what current staffing levels permit. We recently held the first Tennessee Quail Summit. It was well attended by 80 people representing state and federal agencies and partner non-profits.

TEXAS | This past year has been all about building capacity and programs for bobwhite conservation in Texas. The Grassland Restoration Incentive Program (GRIP) continues to serve as a flagship habitat program for bobwhites and other grassland bird species, with distinct focal areas in central, southern, and coastal Texas. The partnership and its program offerings are targeted at private landowners and provide technical and financial assistance to address the limiting factors affecting grasslands and wildlife. Recently, Pheasants Forever (PF) and Texas Parks and Wildlife Department (TPWD) received a \$200,000 grant (\$400,000 total) from the National Fish and Wildlife Foundation to increase capacity and technical assistance for grassland conservation on working ranches in west Texas. This grant will be administered using the GRIP model and help support a new PF State Coordinator position, who will assist with their growing network of Texas biologists. TPWD also began a partnership with Tall Timbers Research Station (TTRS) to co-fund a biologist position for their new Western Pineywoods Quail Program; our focus is on assisting private landowners in east Texas in their push to restore bobwhite populations. Notably, this partnership marries the proven TTRS model of regional quail programs with the ongoing restoration successes of the Lower Mississippi Valley Joint Venture's Conservation Delivery Network.



Photo submitted by Mississippi Department of Wildlife, Fisheries, and Parks.



2022 NBGI Fire Bird Conservation Awards

NBGI's 2022 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 NBGI Technical Committee, this year held in Springfield, Missouri.

Arkansas

Courtney Todd started his career with Arkansas State Parks, where he worked for nearly 13 years as an interpreter, park assistant superintendent, and later as a park ranger. He started on the Quail Forever burn crew in 2020 and has since assisted with over 14,500 acres of prescribed fire and over 1,500 acres of other habitat management work on private and public lands. His broad knowledge of prescribed fire and attention to detail instills trust in partners and his fellow crew members. He excels at teaching others and serves as Cadre for Arkansas' Prescribed Fire as a Management Tool workshop. He is straightforward, meticulous, and strives to always put fire on the ground in a safe manner. Courtney is a leader on and off the fireline and a critical part of the team. He is always thinking of novel ways to solve problems, often custom-fabricating solutions. Most importantly, he can fix equipment faster than the rest of the crew can break it!



Clint Johnson (right) presents the Fire Bird Conservation Award to Courtney Todd (left).

Kansas

Vickie Cikanek is a district wildlife biologist for the Kansas Department of Wildlife and Parks (KDWP). For many years, Vickie has been dedicated to improving quail populations and quail habitat in the southern Flint Hills of Kansas. This is the largest intact tract of native tallgrass prairie left in North America, and Vickie has a passion for the region and quail conservation in this grassland region of national and international importance. Over the past year, Vickie has brought on a new Habitat Specialist in a joint effort between Pheasants Forever/Quail Forever and KDWP in the southern Flint Hills. Not only has Vickie gotten the new Habitat Specialist up-to-speed in a short amount of time, but together, they've done a tremendous amount of work in the first year. They've completed and/or begun the implementation of beneficial habitat management practices on 2,460 acres in the southern Flint Hills to benefit quail and other grassland birds.

This past year, Vickie co-wrote a successful grant and received nearly \$10,000 to purchase attachments for a skid steer for invasive tree removal in grassland habitats and was part of a KDWP team that received \$35,000 in another grant for quail habitat work in the southern Flint Hills. Vickie has also worked in partnership with other organizations to further quail and grassland conservation, including working out a cooperative agreement with The Nature Conservancy to supply her with chemicals for spraying invasive species. During the past year, she has been instrumental in working with both the towns of Moline and Sedan, KS, on their city lake properties to improve quail habitat. With the help of partners, she figured out that a boundary fence at one of the lakes had been mistakenly moved in the past due to an incorrect survey. Vickie worked to correct the problem this year and built a new fence along the correct boundary line, which resulted in a

significant increase in additional public hunting access acres. Simply by moving the fence, the state of Kansas gained 150 acres of public access and high-quality quail habitat that is no longer being heavily grazed and is now being managed specifically for quail. Vickie continues to work with numerous private landowners to improve quail habitat in her five-county district in the southern Flint Hills and Osage Cuestas region and is a very deserving recipient of the 2022 Fire Bird Award.

Missouri

District Supervisor **Chris Freeman** has worked for the Missouri Department of Conservation (MDC) since 1995 and currently serves as the northwest region's East District Supervisor, which encompasses nearly 36,000 acres of public land on 48 conservation areas in 10 counties. This includes 2 of Missouri's 16 intensively managed wetlands, one of Missouri's nine Priority Geographies, two Quail Restoration Landscapes, and four Natural Areas. In addition to the normal administrative and personnel duties that come with being a supervisor, Chris is also responsible for coordinating and deploying staff from five sub-districts to ensure priority work is being planned and completed as efficiently as possible.

Outside of the two intensively managed wetlands, the majority of the 36,000 public land acres in the district is comprised of a mixture of grassland, woodland, and cropland habitats, which requires frequent management to remain productive for priority species like northern bobwhite, eastern wild turkey, and many grassland/woodland songbirds. Chris promotes an aggressive management approach among his staff, which includes conversion of cool-season grasslands to diverse native grasslands, renovating tall mature fencerows, aggressive basal area reduction in overstocked woodlands, and a progressive prescribed fire program. In fiscal year 2021, the East District, led by Chris, accomplished 4,330 acres of prescribed fire. This past fiscal year, FY22, they accomplished over 4,800 acres of prescribed fire. If you remove the acres of wetlands, croplands, and forested areas not under a burn schedule, this accounts for 30-35% of the upland acres in the East District. This was accomplished despite some work teams being down 1-2 staff positions. Chris' can-do attitude and leadership was instrumental in the East District accomplishing critical habitat work for northern bobwhite and associated species. "Chris's knowledge, leadership skills, use of prescribed fire, and approach to woody cover management serve as a great example of how to combine purposeful management for northern bobwhite and native habitat restoration," said David Hoover, Resource Management Supervisor for Missouri's northwest region. "I am proud to have him on our team fighting for native grasslands and bobwhite quail."



Beth Emmerich (left) presents the Fire Bird Award to Chris Freeman (right).

Pennsylvania

Tyler Bowers is a Habitat Specialist with Pheasants Forever and Quail Forever who works full time on Pennsylvania's bobwhite reintroduction project. He plays an integral part of creation and maintenance of bobwhite habitat that is essential to the project's success. He handles everything from writing and managing contracts for timber clearing, to throwing on a backpack sprayer or operating equipment himself. He is a hard working self starter and exactly the kind of person you want to work with.



South Carolina

McBee Wildlife Management Area (WMA) is South Carolina's only draw quail hunt opportunity and has become the flagship property for quail management in the state in recent years. McBee WMA's quail population is at an all-time high, thanks to the expertise and dedication of the **South Carolina Department of Natural Resources Region II Unit C Staff**.

The McBee WMA was acquired in the mid 1990s. The quail population there increased for approximately 10 years and then fell on hard times. Unit Biologist Don Cockman took charge and began shaping the landscape, and with years of previous experience under his belt, the quail population on the property began to increase. Their numbers continued to rise after Raleigh Lowder was hired as a technician for the property, thanks to his skills as a farmer and equipment operator and his love of quail and quail hunting. Their success in the Region is all contingent on the buy-in from the Regional Coordinator, Sam Stokes. Sam has bought into bobwhite management as a tool to increase all wildlife habitat, and his leadership provides a means for which everyone in the region is successful. All three of the men involved in managing the property keep abreast of the most up-to-date bobwhite research and habitat management practices. They have been proactive in their management and are willing to experiment with practices to gain a better understanding of the practice's effects on the bird populations. All three of them can routinely be found attending a class, course, or field day within a day's drive.

Their hard work and dedication is evident in the visible transformation of the property; it can be heard all summer long in the near-constant calling of bobwhites across the property, and it can be seen on the smiles on the hunters' faces after a good day in the field. Sam, Don, and Raleigh have done a tremendous amount of work on McBee WMA, and their efforts are paying great dividends for the habitat, birds, and hunters.



Michael Hook (right) presents the Fire Bird Award to Raleigh Lowder (left) and Don Cockman (middle).

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.

Robert Perez, Past Chair of the NBGI TC, presented the 2022 Chuck Kowaleski Leadership Award to **Jay Howell** at the 28th Annual NBGI TC Meeting in Springfield, MO. "With a large group like NBGI TC, individual contributions sometimes go unheralded. The more soft spoken or unassuming members are more likely to fall into this group. Over the course of his career, Jay's contributions have been consistent and numerous. When there was a need or an ask, he was ready to contribute.

"For more than 15 years, Jay has served on the NBGI TC Science Subcommittee. With strong participation from academia, it is imperative to have solid scientists representing state interests. This balance helps us achieve scientific rigor and feasibility in the field. His talents with experimental design, analyses, databases, data management, and willingness to challenge "group think" have been an invaluable asset to the partnership.

"Dating back to the creation of the ad hoc Monitoring Committee, Jay contributed to building the marquee Coordinated Implementation Program (CIP). He helped construct the first quail coordinators' survey designed to assess how willing states were to coordinate and standardize monitoring. He participated in both retreats at Shake Villager to build and design the program, led the piloting of the new program in his state, and participated in the first "Train the Trainer" for CIP habitat assessment. He developed an Access database to manage CIP data before our online infrastructure was created and facilitated the development of a data sharing policy.

"Over the years, he's been called on by the Steering Committee many times to help with survey needs. Most importantly, he developed a critical review of the partnership after the three pilot years of PR funding to determine if the products from the group were valued by the states. Those results were then presented to the membership and the Management Board. He also served on the Steering Committee in 2017 and 2018 as the Northeast Association of Fish and Wildlife Agencies Representative. It is my honor to present Jay with the 2022 Chuck Kowaleski Leadership Award."



Robert Perez (right) presents the 2022 Chuck Kowaleski Leadership Award to Jay Howell (left).



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. Three individuals were recognized with the NBGI TC Hall of Fame Award at the 28th Annual NBGI TC Meeting: Breck Carmichael, Tom Dailey, and Reggie Thackston.

“If there is one name that is indelibly tied to NBGI TC, it has to be **D. Breck Carmichael**,” said Robert Perez, NBGI TC Past Chair. “He was there in the beginning and helped shepherd the Southeast Quail Study Group from its humble beginnings at a meeting at the Webb Center in 1996 through a transition to the Northern Bobwhite Conservation Initiative, through another transition a few years later to the National Bobwhite Conservation Initiative (NBCI), and he even saw the group transition one more time to the National Bobwhite and Grassland Initiative just a few short months ago. He is likely the last man standing from the original Southeast Quail Study Group (SQSG) and thereby one of the longest-tenured people of the entire group. His service to the organization has encompassed nearly 26 years. He has put his heart and soul into this group and has passionately led by example during his whole tenure. He has been a great example of how to be a consummate wildlife professional and a wonderful mentor to many people still active in the group today. His contributions to this group will be felt for many years to come, not only within the confines of this group, but across the entirety of the quail and broader wildlife conservation community as a whole.

“It was Breck who spearheaded and hosted the first meeting of the SQSG at the Webb Center in 1996, and he has been intimately involved ever since. He won the very first leadership award that same year. During his tenure, he helped transition the group to a national organization by serving as a co-author of the National Bobwhite Conservation Initiative. He served as the first Director of the NBCI, and we watched as the group coalesced into what it has become today. Over the years, he was actively engaged in policy work in Washington, DC, where he contributed by putting quail-centric ideas in front of the movers and shakers within the beltway. His efforts, and the efforts of others, led to the creation of CP33 and resulted in numerous other improvements to Farm Bill programs and delivery. He was engaged in the NBCI Management Board for at least six years and was an active participant at the first NBCI Leadership Workshop at Shaker Village in 2016. Then in 2018, he attended the second Leadership Workshop in Nebraska where he continued to help guide the community he was so deeply passionate about. At some point during his tenure, he chaired the Ag Policy Subcommittee and the Forestry Subcommittee for a stint. He also served as the Association of Fish Wildlife Agencies Resident Gamebird Working Group Chair for six years. He represented South Carolina on the Atlantic Coast Joint Venture (ACJV) and served as the ACJV Management Board Chair for two years, where he helped transition that group from a predominately waterfowl group to one focused on all birds, including waterfowl and upland species.

“Outside of his work with the NBGI, he worked tirelessly ‘to bring back the whistle’ in his home state of South Carolina, where he put a great deal of effort into quail conservation with the formation of the South Carolina Bobwhite Initiative. He was a contributor to the South Carolina Quail Plan, Northern Bobwhite Habitat Restoration in South Carolina: Challenges and Opportunities in the 21st Century. Breck founded the South Carolina Quail Council and served in many roles of support, including the South Carolina Quail Council Technical Committee Chair, on South Carolina Quail Council Steering Committee, and he even found a role as a private citizen on the South Carolina Quail Council in his retirement. He and Reggie Thackston created the South Carolina Bobwhite Funding Partnership to provide quail conservation a dedicated funding method, and Breck tirelessly led that group since its inception.

“More important than all of the hard work that Breck has put in over the course of his career, the manner in which he went about it is the reason that this group is as successful as it has been. Breck is a true leader. He leads by example and encourages and emboldens all who have worked with him. He has the vision to see needs where others haven’t, the tenacity to get the job started, and the fortitude to see it completed. Under his leadership, no one worked for Breck. Everyone worked *with* Breck. It is hard to tell how many people have been inspired by Breck’s passion, dedication and thoughtfulness; but make no mistake, all of us here have been influenced by him to a great degree, and we owe him a big thank you for his tireless efforts to keep quail on the landscape.”

"Tom Dailey needs no introduction to this group," said Perez. "He has been involved in the group since the inception of the Southeast Quail Study Group in 1995 and was integral in its transition to the NBGI TC."



Robert Perez (right) presents the 2022 NBGI TC Hall of Fame Award to Tom Dailey (left).

"Tom received a PhD from Colorado State University and worked as a State Agency biologist for over 20 years. During his tenure with the Missouri Department of Conservation, he was instrumental in conducting many research projects on bobwhite ecology ranging from groundbreaking work on use of CRP fields—investigating effects of different harvest levels on bobwhite populations, human dimensions work to understand landowner willingness to manage for quail—the information which led to the development of Missouri's current Quail Focus Areas, and worked on stepping down the original bobwhite recovery plan to the state level. His research efforts have resulted in numerous peer-reviewed and popular articles."

"He worked with other agency staff to write the first statewide Strategic Guidance for Northern Bobwhite Restoration in 2002, brought quail habitat management training to department staff, and investigated the use of using covey call methods to estimate populations on public lands in Missouri, methods still in use today."

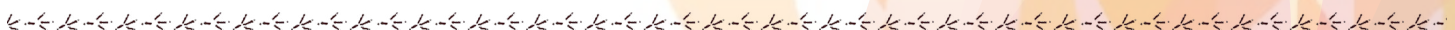
"He was on the team that organized the first Missouri Quail Academy and continued his involvement until the last couple of academies; his input was invaluable in building the science aspect of the program. He presented the topic of bobwhite ecology to the cadets each year. After the first year, seeing how seemingly unexcited the cadets reacted when it was announced they would have a "lesson" about bobwhite ecology, he rebranded the presentation under the name of 'Sex and Death.'

"Tom has served as an adjunct faculty member and a research associate and mentored many graduate and undergraduate students. He has been an active member of the NBGI TC serving in many roles from research committee chair to serving on the steering committee. Upon his retirement from MDC, he began a new chapter as the National Bobwhite Conservation Initiative (NBCI) Science Coordinator and Assistant Director, a role he held for 10 years. During his time as the NBCI Science Coordinator, he was involved with development of the large-scale monitoring efforts known as the Coordinated Implementation Program. This effort demonstrates the importance of providing quality habitat to sustain and increase bobwhite populations over a focal area, region, and landscape-level."

"He has served as a co-editor for Quail III, Quail VII, and Quail 8 conferences. His professionalism and efforts on these conferences have led to high-quality publications and ever higher standards for all Quail Symposia. His work with the NBCI resulted in the National Quail Symposia Proceedings becoming an e-journal hosted by the University of Tennessee's TRACE Open Access repository, allowing all to have free access to the Quail Symposia Proceedings."

"He is always looking to advance bobwhite conservation and never loses sight of the big picture. He has a positive attitude and is well known for bringing folks together who may not see eye-to-eye on certain topics. In his retirement, he has not slowed down a bit, still enjoying mountain biking and hunting all sorts of critters all over the country. He has especially loved sharing his love of hunting with his grandchildren."

"His 30-plus years of dedicated service to bobwhite and the lasting impact his research and leadership have had on all of us make him an ideal recipient of the NBGI TC Hall of Fame award."



“Reggie Thackston has impacted innumerable people over the years,” said Dallas Ingram, Quail Biologist with Georgia Department of Natural Resources. “Reggie was the heart and soul of Georgia’s Bobwhite Quail Initiative (BQI). In the early years, BQI positions were a training ground for regional biologists. You can’t throw a stick across the state now without hitting someone who spent some time under Reggie’s tutelage, and each of them have fond memories.

“His colleagues often remark on his storytelling and communication skills. Reggie can translate university studies into information a layman could understand and implement, all while sounding like an informed neighbor rather than a professional expert. He can mollify an angry client and make anyone proud of their patch of ground.

“His contributions to quail conservation have been too many to count. With his help, we’ve increased the knowledge base of quail ecology in southeastern pine systems; gained a greater understanding of the utility and application of wild quail translocation as an effective conservation action; and began to understand the impacts of introduced pasture grasses on bobwhite chick survival, and began taking effective control of these grasses to renovate the plant community and provide quality nesting and brooding cover. Reggie has long been an advocate for the utilization of Farm Bill policy to achieve large-scale conservation. He had an uncanny ability to identify opportunities that it provided for bobwhite conservation—nationally, regionally, and locally—and collaborated with partners to navigate the complex details of Farm Bill policy that could be applied practically.

“Reggie has made a huge impact on several generations of wildlife biologists across the wildlife management discipline, particularly on those engaged in quail conservation. His leadership, unmatched technical knowledge of bobwhite ecology and habitat management, ability to negotiate and communicate effectively, kindness, and humility are some of the many characteristics that have made him such a great mentor.

“Reggie was and still is passionate about wildlife conservation. Landowners, professionals, politicians, and the general public all respected him and would stop and listen to his booming voice. He could relate to them all and worked effectively with habitat managers from the largest plantation to the smallest family plot. He was involved in every committee and organization that had anything to do with quail habitat. In fact, he did so much that when he retired, two people were hired to replace him! No one can fill his shoes, all we can hope for is to continue what he started and try to pass along some of his passion for quail. I can’t imagine a better legacy.”



Robert Perez (right) presents the 2022 NBGI TC Hall of Fame Award to Reggie Thackston (left).

Influencing National Legislation to Benefit Bobwhite and Grasslands

Jen Mock Schaeffer | *NBGI National Policy Liaison*

Thanks to the financial support and administrative management from the Quail Coalition, the National Bobwhite and Grassland Initiative (NBGI) was able to reinstate the position of National Policy Liaison (liaison). Tom Franklin held the position until 2018, and Jen Mock Schaeffer accepted the role in 2022, initially with voluntary engagement in January and contractual work beginning in March 2022. The role of the liaison is to provide 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.

It takes the unified efforts of the state fish and wildlife agency members and various conservation organization partners—all under the umbrella of the NBGI Technical Committee—working complementary across landscapes to achieve the shared goal of restoring wild northern bobwhite populations to sustainable levels by linking a host of societal benefits to their recovery. Habitat restoration across the bobwhite's range is key, and our successes hinge upon our partnerships; relationships with private landowners and agriculture 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.



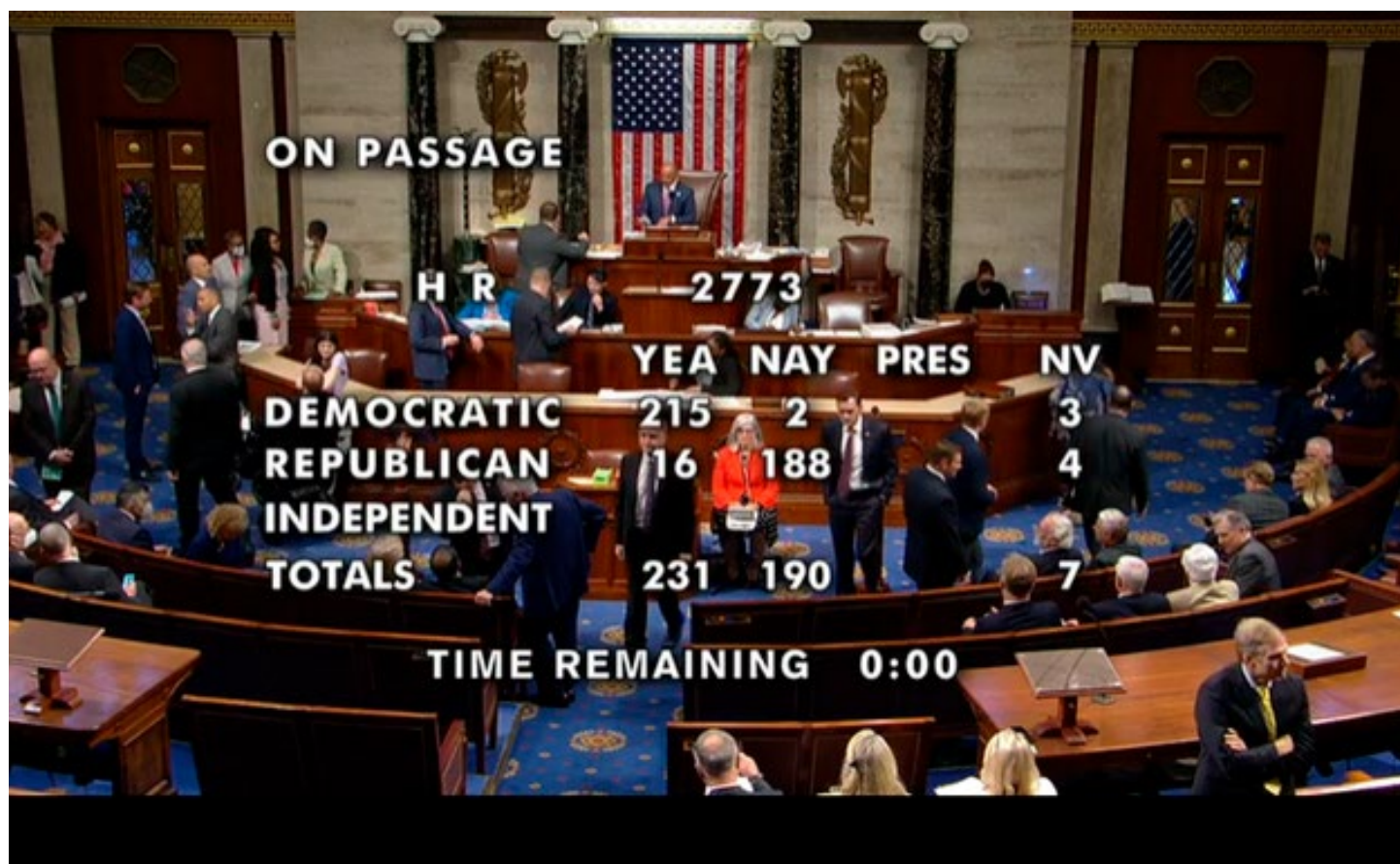
Launching a New Conservation Framework to Drive Actions and Outcomes

In the spring of 2022, the Natural Resources Conservation Service (NRCS) worked with partners and agricultural producers to develop and publish the “Northern Bobwhite, Grasslands, and Savannas Framework for Conservation Action.” It is a new framework for driving conservation actions and outcomes for northern bobwhite and their habitats as part of Working Lands for Wildlife. The framework is a long-term, landscape-level conservation plan to help recover habitats for northern bobwhite and other associated species. Building on the success of the Working Lands for Wildlife initiative that began in 2017, the new framework intends to drive conservation actions at a landscape-scale to benefit northern bobwhite, which serves as a key indicator species, central and eastern grasslands, and other associated species. It provides conservation goals for about 7 million acres of conservation practices in the first five years across 24 NRCS state offices. Priority conservation practices vary and include prescribed fire, prescribed grazing to restore native grasses, brush control, invasive plant management, and

thinning of forest stands to improve understory habitat conditions. Additional outcomes expected include risk mitigation, revenue enhancement, and greenhouse gas mitigation.

Recovering America’s Wildlife

Initially, national policy work focused on moving forward once-in-a-generation legislation—the Recovering America’s Wildlife Act (RAWA, H.R.2773/S.2372). This piece of federal legislation has evolved since it was first introduced as a discussion draft bill in the 114th Congress by the late Congressman Don Young of Alaska. Today, the bill provides \$1.3 billion per year to the state fish and wildlife agencies (states) to work with private landowners, conservation organizations, and other state agencies to keep common species common, including the bobwhite in 26 states. It also would provide Indian Tribes with \$97.5 million per year for fish and wildlife conservation priorities on Tribal lands and other similar purposes. Programs and projects will 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



Recovering America’s Wildlife Act (H.R.2773) passed the US House of Representatives with a bipartisan vote on June 14, 2022.

countless dollars and regulatory uncertainty. It also will facilitate state-led collaboration to help recover those species already listed as threatened or endangered. Enacting RAWA provides the states with resources to fully implement their state wildlife action plans by working shoulder-to-shoulder with private landowners, agriculture producers, and conservation organizations.

On April 7, 2022, the Senate Committee on Environment and Public Works passed a bipartisan agreement on RAWA with support from both sides of the aisle, including the committee's chair and ranking member. On behalf of the NBGI, the liaison wrote and sent a letter of support for RAWA to the committee and continues to reach out to individual Senate offices to express support for the bill and encourage passage. Conversations about how to pay for the cost of RAWA—which is about \$14 billion over 10 years according to the Congressional Budget Office—continue among bill champions, committee leaders, and Senate and House leadership. In addition to the work of the liaison, there are strong, ongoing state and national coalition efforts that are pressing the Senate to pass RAWA in September 2022, and to encourage members of Congress in both chambers to come together to enact RAWA as soon as possible this congressional session.

Escalating bipartisan conversations and pressure resulted in passage of RAWA in the US House of Representatives

with bipartisan support on June 14, 2022. The liaison lobbied key Representatives in support of RAWA. Encouraging conversations will continue since the best opportunity to enact RAWA is before the mid-term elections in November, after which there may be little opportunity for passing the bill in its current form before the end of this Congress. President Biden has indicated that if the bill passes Congress, he will sign it into law. If the bill is not enacted this year, the legislative process would start over with the new 118th Congress in January 2023.

Restoring North American Grasslands

Grasslands are one of the most endangered ecosystems in North America, and the wildlife conservation community has been drafting legislation that would take “bold action to conserve and restore grasslands” across the broad and diverse landscapes. The new public-private partnership program would be administered by the US Fish and Wildlife Service and provide resources to private landowners and conservation organizations to focus on restoring native grasslands and their associated, diverse wildlife species across the US and from Canada to Mexico. The bill concept is similar to the successful North American Wetlands Conservation Act (P.L.101-233), and the North American Grasslands Conservation Act was introduced in the Senate on July 27. The NBGI became



Photo by Jef Hodges.





an active participant in legislative strategy, advocacy, and community conversations in March, and will continue to work with our conservation partners in the coming months to raise awareness of the bill.

Reauthorizing Conservation Programs in the 2023 Farm Bill

The liaison is leading NBGI's Policy Committee through multiple conversations to identify recommendations to Congress to improve bobwhite and grassland conservation and restoration opportunities through reauthorization of the next Farm Bill. The Agriculture Improvement Act of 2018 expires on September 30, 2023, and Congress continues to hold oversight hearings and gather important information and improvement suggestions from stakeholders across the country. Titles under discussion include Conservation, Forestry, Energy, Research, Miscellaneous, and others as appropriate. We are confirming desired improvements, identifying additional issues that have not been addressed sufficiently or warrant additional focus, and honing ideas for incentives and opportunities to use native plant materials in conservation programs and practices. Further, extensive conversations on the Conservation Reserve Program (CRP) highlight the need to restore mid-contract management, adjust grazing allowances and limits to support co-equal benefits, reinstitute important landowner enrollment incentives, improve the management of pine stands for wildlife, reinvigorate enrollment, and more. Through these efforts, we are crafting a policy platform that supports quail, grassland, and savanna restoration activities and recognizes the benefits of building additional drought resiliency and water security in the 2023 Farm Bill. After the platform is approved by the Management Board, the liaison will deliver the policy platform to the House and Senate Committees on Agriculture in fall 2022.

Native Grasslands

The Rodney Dangerfield of Biomes

Jef Hodges | NBGI Grasslands Coordinator

“I tell ya, I don’t get no respect!” The signature catchphrase of classic comedian Rodney Dangerfield was always followed by his one-liner style of comedy, “My fan club broke up. The guy died,” or “Last week my house caught on fire. My wife told the kids, ‘Be quiet, you’ll wake up Daddy.’” Dangerfield’s style of self-deprecating humor brought laughs to fans the world over. Here’s the connection—native grasslands are the Rodney Dangerfield of the natural world, they “don’t get no respect,” and unfortunately, there is nothing funny about that.

The National Bobwhite and Grassland Initiative (NBGI) is working to change attitudes and build respect for native grasslands. A focus of that effort started with the development of the Natives First concept in 2011, an attempt to shift the US Department of Agriculture’s (USDA) institutional cultural dogma of using introduced species in their conservation projects to a first and preferred option of using native species. After years of persistent effort, the Managers Report of the 2018 Farm Bill included language encouraging the use of native vegetation. Even though that was a worthwhile outcome, that wasn’t quite what was hoped. However, converse to the phrase, “a means to an end”—a process done to accomplish a goal—the means itself has yielded greater benefit than the “end.” The means has really become the end. All those agency discussions, all those congressional staff meetings, all those partners expressing the same native vegetation mantra, have raised awareness of the value of native grasslands. While those discussions were taking place and folks were becoming more aware about native grasslands, other actions began to happen.

Acting on a 2016 call from the Natural Resources Conservation Service (NRCS) for Working Lands For Wildlife (WLFW) 2.0 proposals, the National Bobwhite Technical Committee (NBTC) spearheaded the development of two separate bobwhite proposals, one focused on grasslands and the other on pine savannas. Both were accepted, and ultimately in 2021 were rolled into one WLFW Northern Bobwhite, Grasslands and Savanna (WLFW-NOBO) project with a new focus and concerted effort being led by NRCS. A Working Lands For Wildlife: Northern Bobwhite, Grasslands and Savannas Framework for Conservation Action was published in 2022, with implementation underway.

The Association of Fish and Wildlife Agencies’ (AFWA)

Bird Conservation Committee formed a Grassland Work Group in 2016 to address bird declines in North American grasslands, and NBGI members have been contributing members to that work group since its formation. In 2019, the American Bird Conservancy, on behalf of the Grassland Work Group, received a Multi-state Conservation Grant to organize grassland conservation workshops in the Central and Mississippi flyways. Central and Mississippi Grassland Roadmaps were developed in 2020 and 2021, respectively, with NBGI staff contributing to the efforts. Those roadmaps are resulting in partnerships, collaborations, and work on the ground.

Probably one of the most significant developments in the last two years has been the creation of a draft North American Grasslands Conservation Act (NAGCA or Act). The Act, as proposed, is a voluntary, incentive-based piece of legislation aimed at directing federal resources to the preservation and restoration of North American grasslands. Whether knowingly or not, many of the concepts in the original Natives First proposal are woven into the language of the NAGCA. At the time of this writing, the Act has been introduced in the Senate with an effort underway to generate support and gather co-sponsors. NBGI is a member of a coalition of groups supporting the Act and has provided input on draft language, recruited additional support for the Act, and met with congressional staff to inform them about the Act.

In addition to the grassland policy and advocacy engagement outlined above, NBGI has, at the grassroots level (pun intended), completed or engaged in a number of projects promoting native grasslands and vegetation in recent months. The NBTC, with the Grassland Coordinator as lead author, published Beef, Grass, and Bobwhites – Quail Management in Eastern Native Warm-Season Grass Pastures. With the Center for Native Grasslands Management, NBGI presented information contained in Beef, Grass, and Bobwhites in an NRCS-sponsored webinar series in support of the WLFW-NOBO project. Over 500 individuals registered for the event. A similar presentation was made in a WLFW webinar sponsored by the Theodore Roosevelt Conservation Partnership. The NBGI Grassland Coordinator provided review for the book, Native Grass Forages for the Eastern US, written by Dr. Patrick Keyser, Director, Center for Native Grasslands Management. NBGI and American Bird Conservancy, working with the



The Time is Now for a Bold New National Policy on Grasslands

We need to act quickly to conserve and restore North America's native grasslands and sagebrush shrub-steppe while supporting ranchers, farmers, Tribal Nations, sportsmen and women, and rural communities. An investment in North America's grassland and sagebrush shrub-steppe ecosystems through a new North American Grasslands Conservation Act will drive voluntary, science-based efforts to conserve these ecosystems while supporting working lands conservation in order to sequester carbon and prevent further loss of grassland and sagebrush wildlife.

Take Action

Follow **#ActForGrasslands** on Social Media for the latest.

American Forage and Grassland Council (AFGC), launched the [Native Warm-season Forage Resource Center](#), hosted on the AFGC webpage, where visitors can find episodes of the Grazing Gone Native podcast, video interviews of producers sharing their experiences using native warm-season forages, and curated web content.

There are several other grassland efforts, such as the regional [JV8](#) and [Southeastern Grasslands Initiative](#), and many state efforts to preserve and/or protect native grasslands. In 2019, NBGI led the formation of the [Native Grasslands Alliance](#) for the purpose of unifying the multitude of grassland advocate groups and amplifying the native grasslands message necessary to elevate native grasslands into national prominence. Unfortunately, due to the COVID-19 pandemic, further growth has been hindered. However, the Native Grassland Alliance, with its established root system, is poised to grow quickly once it receives the necessary attention.

Native grasslands appear to be gaining some attention and momentum with all these recent happenings. NBGI has led the effort in some instances. In other instances, NBGI has been actively engaged in partner-led efforts. Not only are we continually illuminating the value of native grasslands, we are also working to expand the perception of grasslands beyond the wide-open spaces

common in the Great Plains. There are grassland types in the eastern US not traditionally thought of as grasslands, which are important to the definition of grasslands—pine and hardwood savannas, balds, barrens, river scours, and others. Most of these are so highly degraded, only a trained eye can recognize them. Many times, our message has not included bobwhites or wildlife but been focused on the other values of native grasslands. To make native grasslands relevant to a broad audience, we need to appeal to more than those with a keen interest in bobwhites. We need to address things like pollinators (NBGI is a member of the [Monarch Joint Venture](#)), value of native forages on working lands, value of native vegetation in agriculture systems for water quality, value of native grasslands for carbon sequestration (which is on par with forested systems, in many cases), and their benefits to soil health with their deep and massive root systems. These are all reasons why the National Bobwhite Conservation Initiative became the National Bobwhite and Grassland Initiative.

Native grasslands have a much larger role in society than they are currently recognized for. It's time society learns their importance so these native grasslands can finally get their due respect and no longer be the Rodney Dangerfield of biomes.

9th National Quail Symposium

Celebrating Nearly a Half Century of Quail Symposia

John Morgan | NBGI Director

The first week of August marked 45 years of quail symposia surrounding the conservation and management of six species of quail native to the United States. The Missouri Department of Conservation and University of Missouri teamed up to host nearly 300 attendees for the 9th National Quail Symposium (Quail 9, hereafter). Managers and researchers from across the country presented their research efforts, discussed results, and generated the questions to be answered in the future.



Nearly 300 attendees converged on Springfield, MO, to attend Quail 9.

Forty presenters shared their work with the audience during a plenary and series of concurrent sessions. Fifteen posters were on display throughout the three-day event, and most importantly, a total of 61 papers and abstracts were published for permanent access and availability to the professional community. The plenary was highlighted by two presentations demonstrating the importance and purpose of adaptive management in the East and West regions. Dr. Lenny Brennan, Texas A&M Kingsville, shared a western perspective, whereas Dr. James Martin, University of Georgia, presented the eastern perspective. Maintaining with tradition, the meeting was closed by a thought-provoking oration from Dr. Fidel Hernandez, Texas A&M Kingsville. Dr. Hernandez postulated an analogy of the evolution of language compared to the evolution of quail science. He deduced quail research is largely assessing

the same premises established nearly 100 years ago. The message created plenty of critical thinking and reflection for attendees as they traveled home.

Preceding the symposium was the newly renamed National Bobwhite and Grassland Initiative (NBGI) Technical Committee (TC) Meeting. Over the last three years, the NBGI has experienced great challenges followed by bold responses. A new business plan has begun to reshape the partnership to link tangible state benefits more clearly to the partnership's efforts. Two major facilitations were conducted during the meeting which replaced the traditional subcommittee meetings—a hallmark of the group. The goal of the first facilitation was to redesign the partnership structure to better align with tenets of the business plan. Small group discussions of major subcommittee categories and potential working groups were convened. Group decisions were made and collected to be shared with the Steering Committee to help inform the future structural model.

The following day was a critical review and discussion aimed at the future of the Coordinated Implementation Program (CIP). After 10 years, reflection and expansion were long overdue. The same small groups reconvened to identify what was working and what was not in the CIP focal areas. Secondly, they discussed the next level



Attendees broke into small groups to discuss the future of the NBGI CIP.



Quail 9
Joint Quail
Conference



28th Annual NBTC Meeting & 9th National Quail Symposium

August 1-5, 2022 | Springfield, Missouri

of the CIP, the landscape scale. Groups identified what learning could be achieved and what data would be required to accomplish those learning objectives.

Much like the symposia, recognition of significant leadership and accomplishment are mainstays of the NBGI TC Annual Meeting. Six state Fire Bird Awards were presented during the Awards Luncheon (page 12-14). The prestigious Chuck Kowaleski Leadership Award was bestowed upon Virginia's Department of Wildlife Resources Jay Howell (page 15). The luncheon's crescendo was a new lifetime recognition for significant and enduring achievement towards the vision of the NBGI. The inaugural inductees will define the caliber of recipients in the future. Breck Carmichael (South Carolina Department of Natural Resources), Reggie Thacktsen (Georgia Department of Natural Resources), and Tom Dailey (Missouri Department of Conservation) represented the first class of the NBGI

Hall of Fame (pages 16-18). Their image as titans in the wildlife profession can be inspiration to future leaders in the partnership.

The meeting would not have been possible without the generous support of an enormous array of sponsors and donors. An impressive 23 sponsors supported the world's largest gathering of the nation's quail experts. Bass Pro Shop offered a special discount for attendees towards their Wonders of Wildlife exhibit. The aquarium and wildlife exhibits were visited by many attendees, making the meeting just a bit more memorable. With COVID-19 beginning to be behind us, Quail 9 provided a tremendous venue to socially reconnect with colleagues and friends. Springfield did not disappoint!

Advancing the Coordinated Implementation Program

Imagining Phase Two of NBGI's Flagship Program

Molly Foley | NBGI Data Analyst

In 2013, five pilot states started their Coordinated Implementation Program (CIP) journey, one of the largest collaborative efforts to gain ground in the fight for bobwhite restoration. Through the melodious spring and cold stings of fall, these states have produced both successes and puzzlements to celebrate and ponder as the partnership continues to develop phase two of the CIP—developing focal landscapes and regions.

The CIP was designed to tackle complex problems using a deliberate, tiered approach. The first phase of the CIP—designing a focal area—was designed to limit risk and investment when pinpointing habitat management strategies that yield greater bobwhite abundance and persistence over time. Focal areas can be thought of as a proof of concept; they take a seemingly insurmountable problem and break it down into a more manageable, achievable goal. Make no mistake, the majority of states are still in phase one. We are not abandoning focal areas, but bobwhites aren't waiting around to see our success stories. There is no time to waste in planning for the future. As states reach their 10-year milestone and must decide how to move forward, we need a plan in place for taking what we've learned is "possible" on small scales and determine which of those things are "doable" on large scales.

Phase two development poses many different questions; what do we want to learn from a coordinated study at landscape and regional scales? How do we monitor these areas to determine successes and failures? How do we avoid pitfalls that have been identified during phase one of the CIP? How do we ensure that western and eastern states both have their particular needs met? To answer these questions, the Strategic Habitat Conservation (SHC) ad hoc committee has reconvened for a critical review of the CIP and to work on the development of the next phase. The SHC met to discuss these topics in June 2022 and also held a facilitated session at the Joint National Bobwhite and Grassland Initiative (NBGI) Technical Committee (TC) Meeting and the Ninth National Quail Symposium to poll

the membership on their thoughts regarding moving forward with developing focal landscapes and regions. While the results of the facilitated session have not been completely synthesized at the time of this writing, a couple recurring questions appeared when asked what we'd like to learn from focal landscapes:

1. What is the best "bang for your buck" on private lands?
2. How does habitat connectivity and juxtaposition affect quail?
3. What level of resources (manpower, money, time, management acres, etc.) are needed to obtain a population level response?
4. What are the multi-species and ecosystem service benefits of this work?

The SHC is actively working on identifying solutions to current problems with the CIP, refining learning objectives of focal landscapes, and identifying a monitoring protocol to capture successes and failures at the focal landscape scale. Range-wide conservation is no easy feat; it takes many willing partners, sustainable financial investments, and most of all, extreme patience. As we enter the next phase of the CIP, we look forward to discovering "what is doable" at a landscape scale and effectively engaging in those efforts.



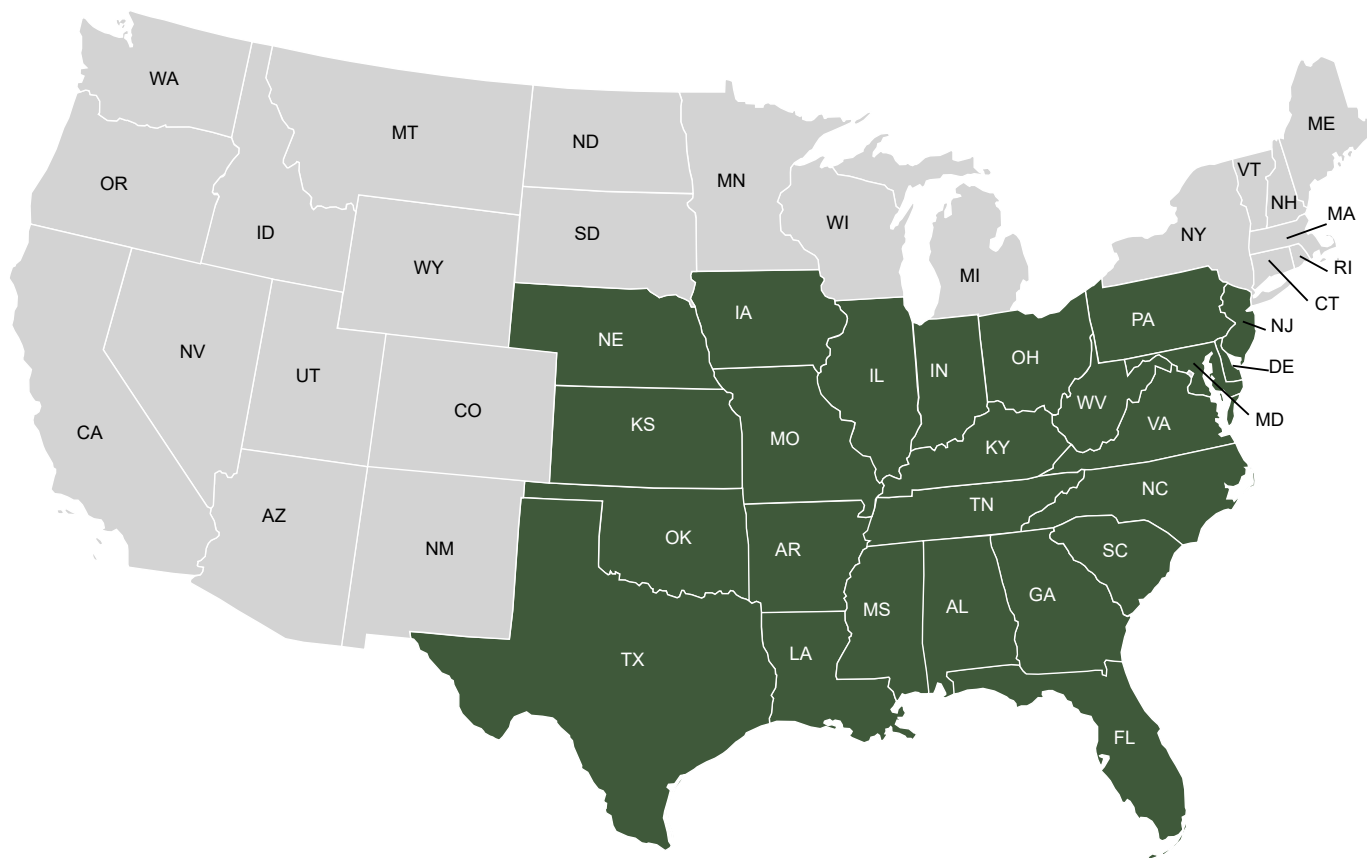
State Conservation Reports

This section contains highlights of bobwhite conservation during 2021 and early 2022, as reported by each state's quail coordinator. The most up-to-date information on 2022 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-19 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 56 for acronyms.



NBGI member states that make up the core historic bobwhite range

Alabama Wildlife and Freshwater Fisheries (AWFF)

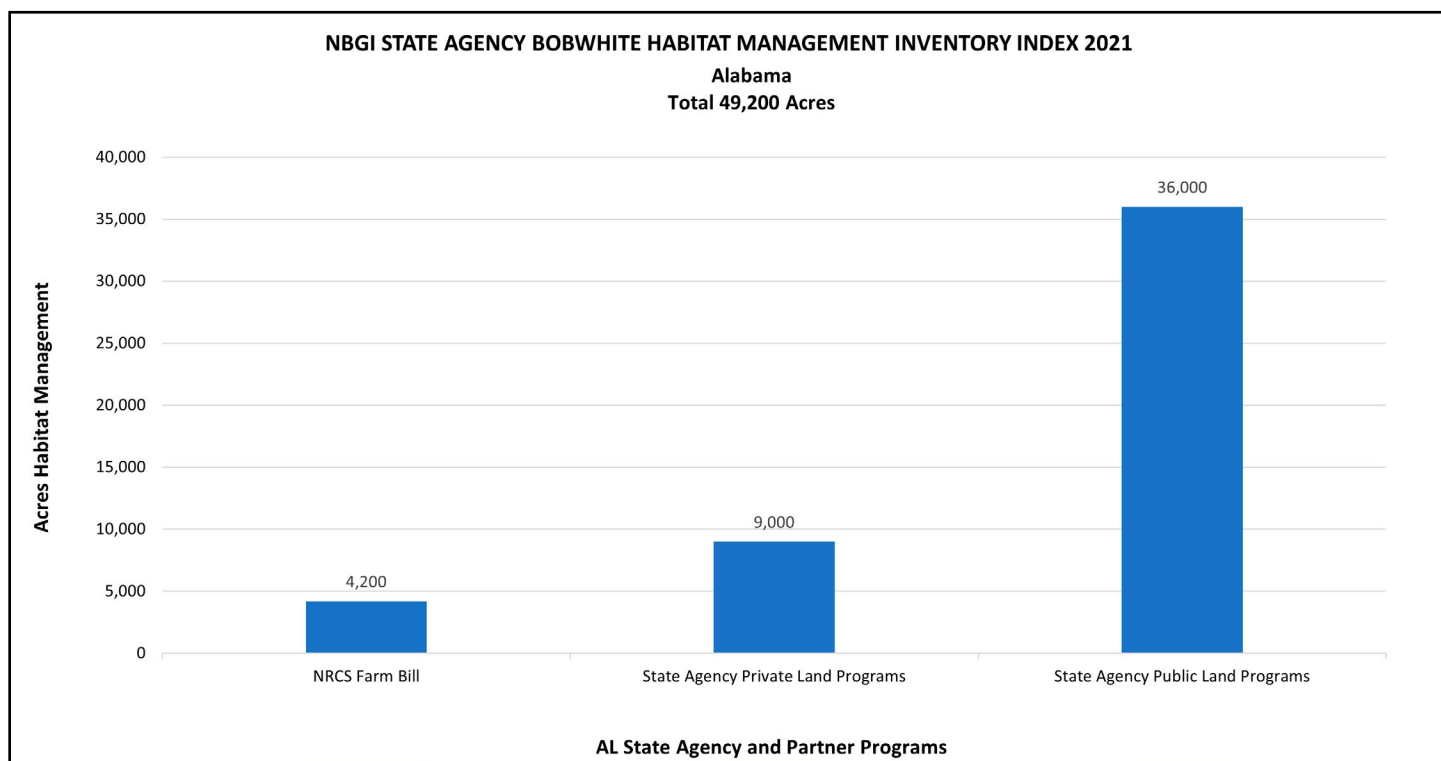
Population: Quail populations across the state have declined dramatically since the 1960s and remain near all-time lows. Huntible populations exist on properties where management efforts are focused on intensive quail habitat improvement and management.

Hunting: The 2020-21 Alabama Hunter Harvest Annual Report conducted by Responsive Management estimated approximately 6,696 hunters spent 40,046 days hunting quail and harvested 253,176. Wild quail hunting accounted for 31% of hunters, 33% of hunter days, and 11% of total harvest.

Management: AWFF partners with various agencies, organizations, and private landowners to improve and restore quail habitat on public and private lands. Management highlights include:

- AWFF continues implementation of quail-focused habitat management activities (timber thinning, fallow field establishment) on identified emphasis areas ($\geq 1,500$ ac) within four WMAs.
- Quail population monitoring in spring and fall on 20 WMAs and 5 Special Opportunity Areas across the state.
- Maintained quail habitat enhancement practices of rotational disking, edge buffers, and unharvested crop strips on approximately 4,000 acres of farm-contracted agricultural fields in the WMA system.
- Restoration of longleaf and shortleaf pine on WMAs where feasible, timber thinning, and prescribed burning programs to restore grassland communities. Approximately 30,000 acres of state and federally controlled land within the WMA system received prescribed fire.
- Continued management efforts on Boggy Hollow WMA in Conecuh National Forest through timber thinning, prescribed fire, and field management. NBGI CIP population monitoring has been ongoing since 2018, and a second season of habitat monitoring was conducted in 2020.
- AWFF, USFS, Alabama Forestry Commission, and Quail Forever continue efforts to improve habitat on the quail emphasis areas of Choccolocco WMA in the Talladega National Forest through timber management, prescribed fire, and field management.
- AWFF continues to partner with the USDA NRCS to provide technical assistance for cost share opportunities to private landowners through the Working Lands for Wildlife: Northern Bobwhite, Grasslands, and Savannas Framework for Conservation Action

NBGI State Quail Coordinator: Steven Mitchell, Upland Game Bird Coordinator, steven.mitchell@dcnr.alabama.gov



Arkansas Game and Fish Commission (AGFC)

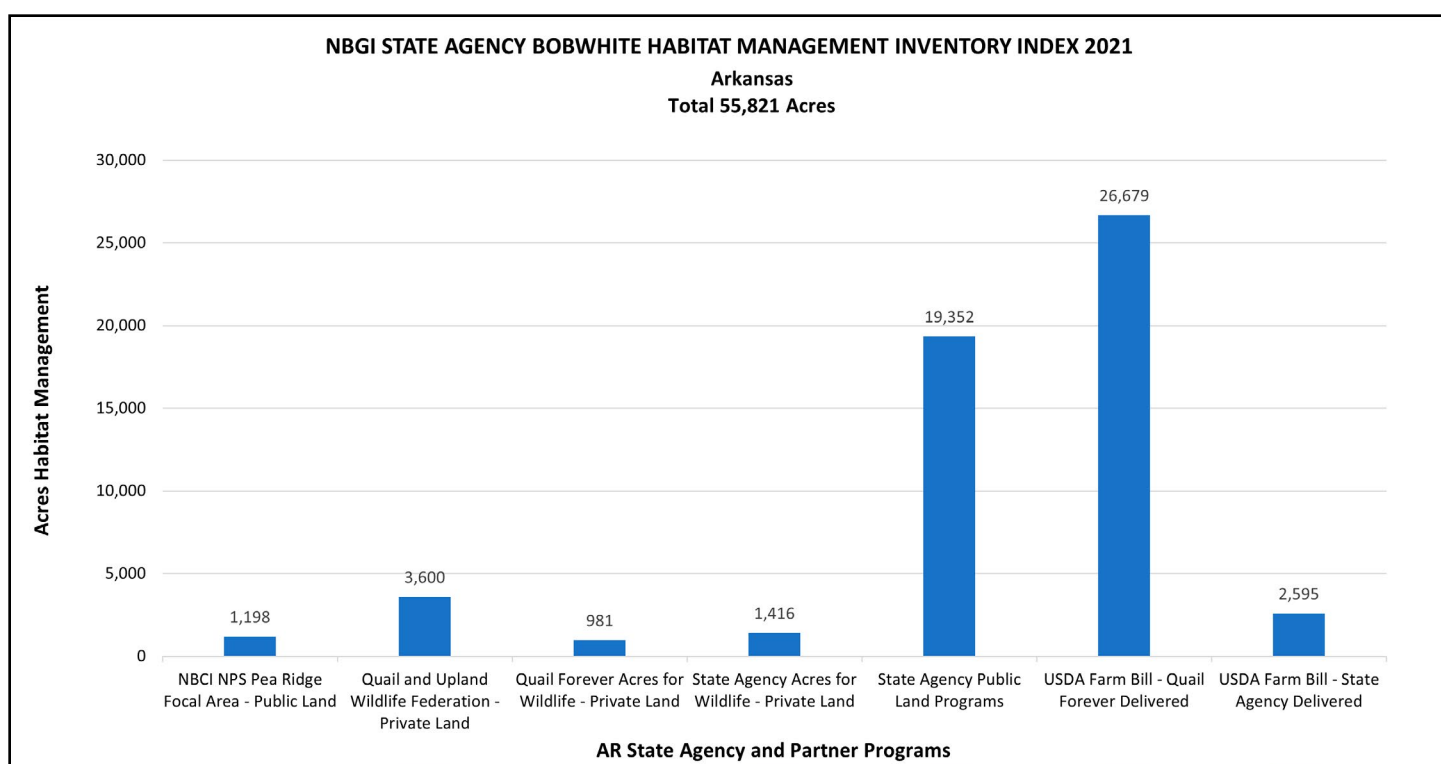
Population: AGFC 2021 call count route data showed a 31% decrease statewide from 2020. Routes in the Ozark Mountain ecoregion saw the steepest decline with an average of 53% less whistling males heard. Brood survey data during 2021 found that the number of chicks observed declined by 16% from the 10-year average, while the number of adult quail observed was up 39% compared to the 10-year average. Spring bird count results from focal areas showed a decline in the numbers of quail and early successional songbirds heard relative to 2020 data.

Hunting: No formal surveys were taken, but overall, fewer coveys were seen during the season and even less were harvested.

Management: Quail management highlights include:

- A total of 4,543 acres of habitat was improved on six focal areas during 2021.
- Habitat restoration on non-focal areas was conducted on 14,810 acres.
- AGFC private lands biologists and Quail Forever Farm Bill biologists contracted 31,671 acres of habitat through state and federal financial assistance programs in Arkansas during 2021.

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

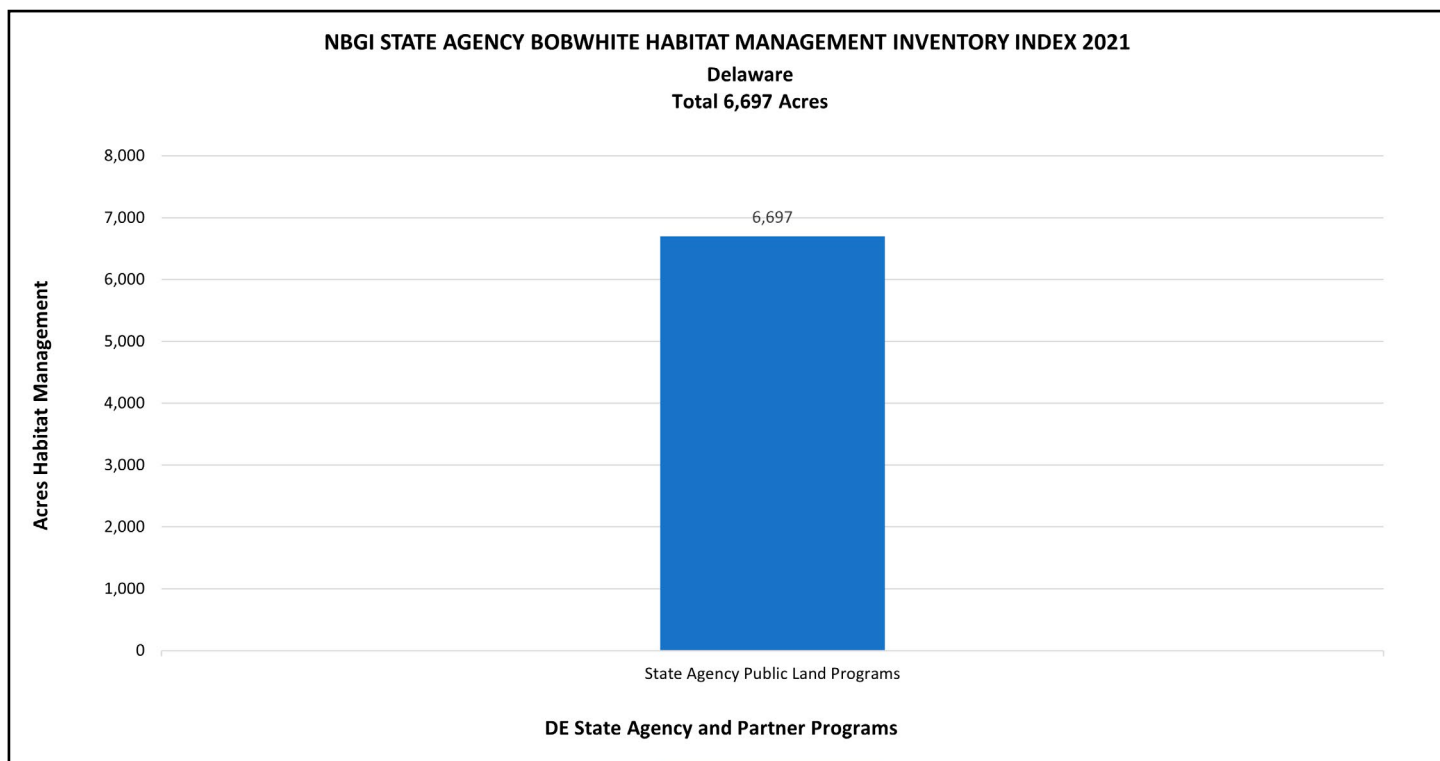


Delaware Division of Fish and Wildlife (DFW)

Population: Spring breeding bird surveys were initiated on June 2, 2021, and were repeated twice monthly through July 28, 2021 (n = 5 rounds). We surveyed 140 points (i.e., 2 sites * 14 points per sites * 5 rounds) over the two-month survey period. Mean calling birds ranged from 0.43 (Standard Error [SE] = 0.227) to 1.35 (SE = 0.357) across rounds at Cedar Swamp Focus Area and 0.0 (Standard Error [SE] = 0.0) to 0.14 (SE = 0.143) across rounds at Ted Harvey Conservation Area. The naïve occupancy rate for bobwhite quail at the Cedar Swamp Focal Area was 0.968, while detection probability was estimated at 0.472. Fall covey counts were initiated on October 19, 2021, and were repeated every two weeks until December 9, 2021, for a total of five rounds. Fifty points were surveyed over the 9-week survey period (i.e., 2 sites * 5 points per sites * 5 rounds). Mean calling coveys ranged from 0.6 (SE = 0.4) to 3.2 (SE = 1.166) across rounds at Cedar Swamp Focus Area, and 0.0 across rounds at Ted Harvey Conservation Area.

Management: DFW continues to partner with NBGI. Through this partnership, DFW biologists and habitat managers are identifying WMAs within Delaware that would benefit from future habitat management and support a natural or





reintroduced bobwhite population. Management highlights and accomplishments include:

- Cedar Swamp Wildlife Area in New Castle County was designated as the state's first 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 June 2, 2021 – July 28, 2021. At both the focal and reference areas, 14 plots were surveyed for presence and distribution of bobwhite.
- From October 19 – December 9, 2021, DFW biologists conducted fall covey counts on five plots at each location.
- Habitat management activities on the focal area have been focused on the gradual removal of agricultural leases and the establishment of hedgerows, field buffers, and native warm season grasses/forbs. Additional management activities include prescribed burning fallow discing, edge feathering, and chemical and mechanical removal of invasive species. Within large open fields, area managers are incorporating hedgerows and expanding field buffers to reduce large open areas and provide additional protective escape cover. These habitat management activities are expected to continue during the next several years.
- 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: Mike Adams, Furbearer and Small game Biologist, mike.adams@delaware.gov

Florida Fish and Wildlife Conservation Commission (FWC)

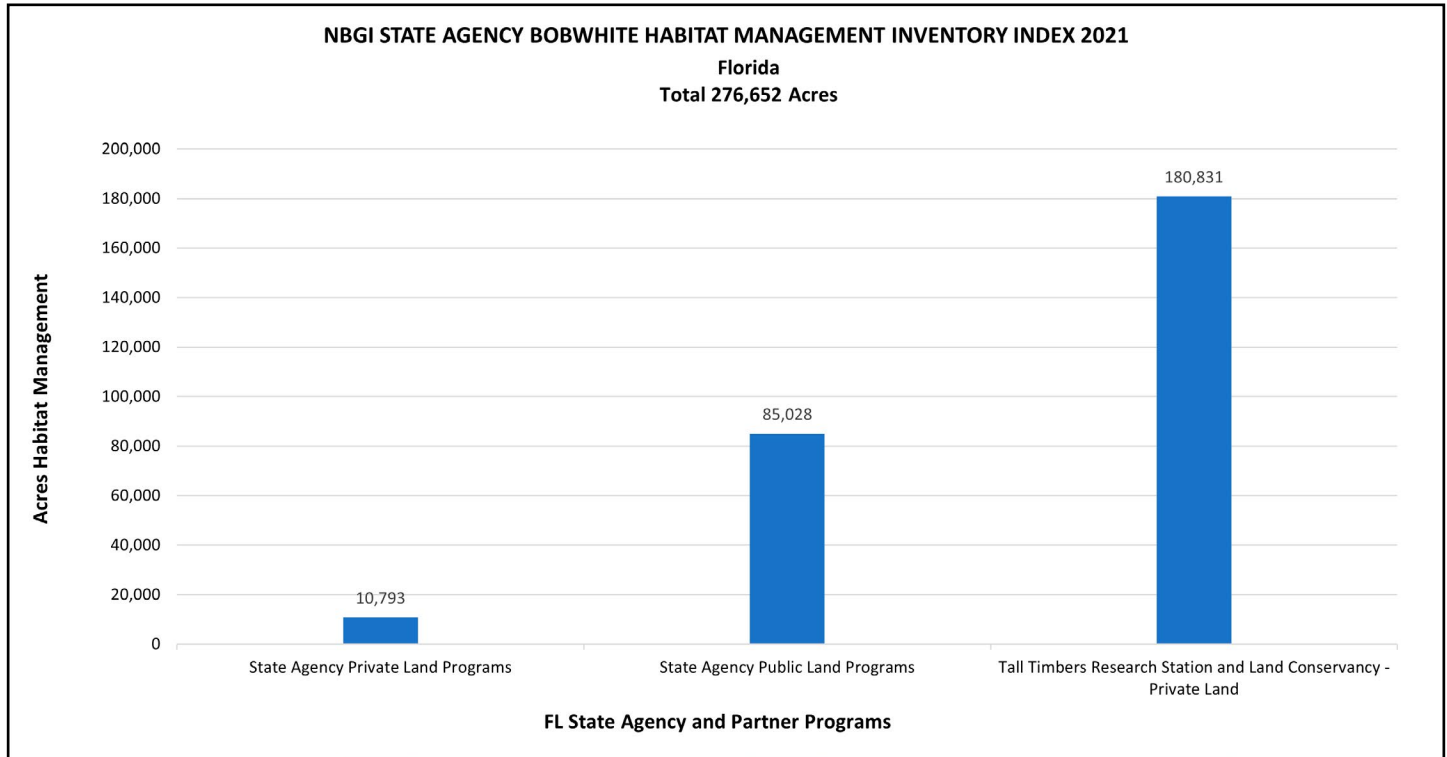
Population: Florida's bobwhite population has declined by approximately 82% since 1966.

Hunting: Hunter and harvest estimates are based on results from a 2019 telephone survey which indicate 5,274 hunters harvested roughly 109,139 bobwhites. For comparison, annual bobwhite harvest was 2.7 million birds in 1970.

Management: Florida's restoration and management of bobwhites continue to operate under a Statewide Strategic Plan for Northern Bobwhite Restoration that is integrated with NBGI. Bobwhite management highlights include:

- The Upland Ecosystem Restoration Project (UERP) was developed in 2006 to advance Florida's strategy as a cooperative effort between the state's four primary land management agencies (FWC, Florida Forest Service, Florida Department of Environmental Protection, and USFS) and Tall Timbers Research Station and Land Conservancy (TTRS). The primary objective of UERP is to prioritize, design, and implement on-the-ground management to improve





populations of northern bobwhite and other grassland species on public lands throughout Florida.

- Collectively, under UERP and other efforts, Florida has over 220,000 acres of total area of quail habitat on public land under favorable management for bobwhites and other grassland species. These public land areas are collectively managed by the four primary land management agencies noted above. In addition, TTRS oversees management and research on 227,461 acres of total area of quail habitat on private land throughout Florida.
- Completed over 250 fall covey call counts on public land bobwhite focal landscapes. In addition, completed species and habitat monitoring for other fire-dependent grassland species on UERP focal landscapes.
- FWC private lands biologists along with NRCS provided technical assistance and cost share opportunities to numerous landowners that created or enhanced approximately 10,793 acres of bobwhite habitat throughout the state.
- Reported 276,652 acres of bobwhite management for the NBGI Habitat Management Inventory.

NBGI State Quail Coordinator: Greg Hagan, Northern Bobwhite Program Coordinator, greg.hagan@myfwc.com

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

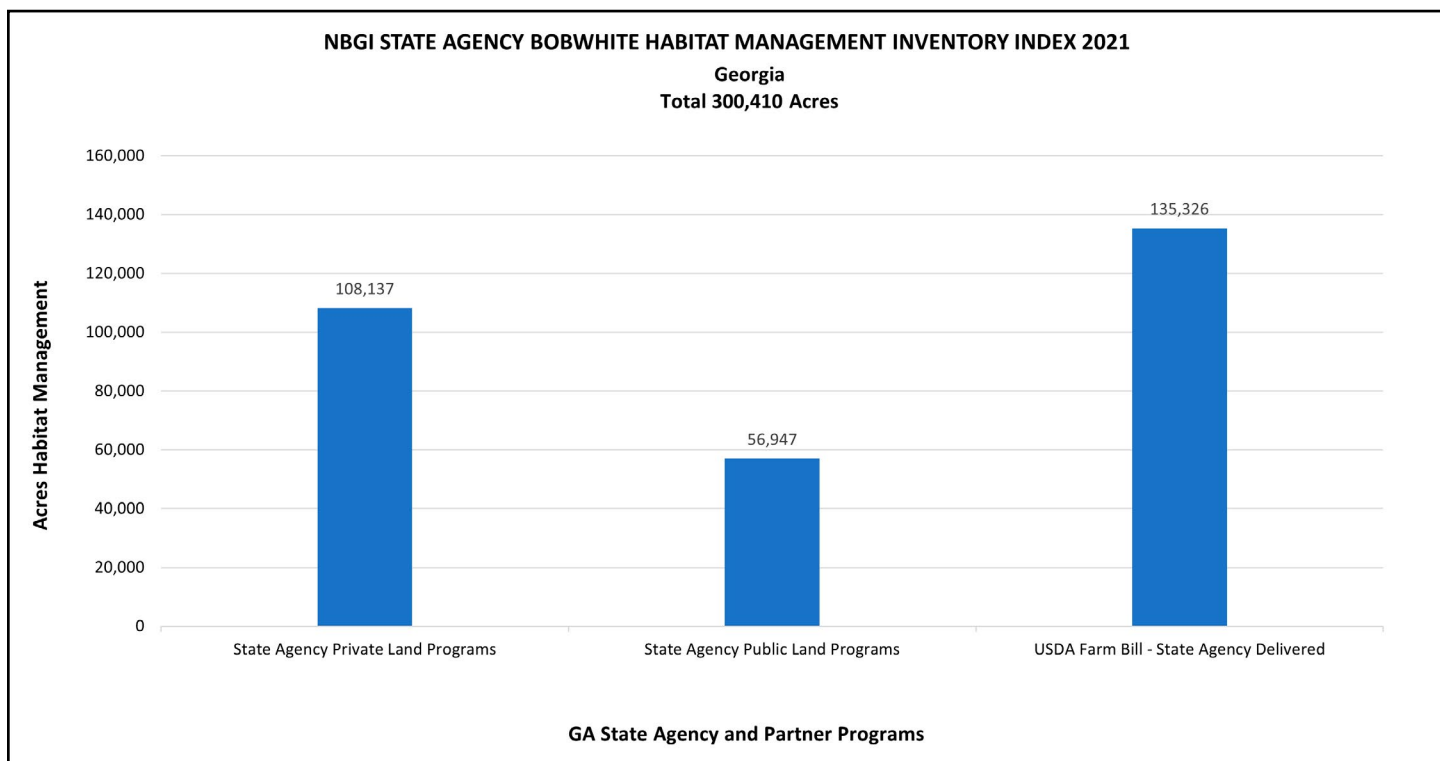
Population: GADNR statewide bobwhite population index had declined by more than 75% since 1966. However, from 2007-18, USGS BBS data shows that bobwhite numbers have doubled and are now similar to numbers seen in the early 1990s.

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: GADNR Wildlife Resources Division (WRD) bobwhite restoration efforts continue to follow the NBGI step-down plan via Georgia's Bobwhite Quail Initiative (BQI): 2013-23 (released November 2014). Other quail management highlights include:

- BQI continued to partner with USDA NRCS to deliver the Working Lands for Wildlife: Gopher Tortoise and general





wildlife funding. In 2022, 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 QF biologists provided technical assistance to landowners throughout the state that impacted approximately 242,463 acres of habitat.
- 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 are also conducting habitat management to benefit bobwhite. In 2020, habitat management was conducted on over 56,000 acres on WMAs across the state.
- 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 30 WMAs, one National Forest and two private land properties.
- The Florida/Georgia Quail Coalition—a partnership between WRD, QF, Florida Fish and Wildlife Commission, and Tall Timbers Research Station and Land Conservancy, directed at supporting bobwhite management on public lands—continues to contribute funds to improve habitat on Georgia BQI Focal Areas including prescribed burning, herbicide application, and brood field maintenance. The funds are donated by QF chapters in Georgia that have an interest in wild quail hunting opportunities on public lands. Chapters also donated funds to support events such as BQI youth quail hunts and landowner field days.

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

Illinois Department of Natural Resources (IDNR)

Population: The IDNR roadside counts for bobwhite are very similar to the USGS North American BBS protocol. In 2021, as reported in the 2021 Quail Annual Status Report, observers across Illinois recorded an average of 0.41 quail per stop during the surveys (a 45% decrease from 2020). Quail were recorded at 21.6% of stops (percent occurrence), down 38%. The number of quail counted and the number of stops where quail were seen or heard in 2021 were both down from 2020 surveys.

Hunting: Harvest estimates are based on results from the 2020-21 Illinois Hunter Harvest Survey. The 2020-21 quail survey estimated that 4,646 hunters shot 31,629 wild quail, compared to 6,749 hunters and 45,270 quail in the 2019-20



survey, a 30% decrease. Despite the decrease in hunters, the number of quail per hunter/day was up in 2020 (1.15 in 2019 to 1.32 in 2020).

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 2022, Illinois had 825,602 acres of CRP (an 8,250-acre decrease), including:
 - USDA CP-33 Habitat Buffers for Upland Birds – 45,604 acres enrolled, a 2,916-acre decrease from 2021.
 - USDA CP-38 SAFE – 37,112 acres enrolled, a 4,789-acre increase from 2021.
 - USDA CP-42 Pollinator Habitat Initiative – 119,328 acres enrolled, a 3,771-acre increase from 2021.
- Dr. Mike Eichholz and Dr. Eric Schaubert (Southern Illinois University) finished their fourth 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

Indiana Division of Fish and Wildlife (IDFW)

Population: Results of the IDFW 2021 statewide bobwhite whistle count index suggested no change in relative bobwhite abundance over 2020.

Hunting: Bobwhite hunting season dates in Indiana are divided by Interstate 74. North Region dates are November 1 – December 15 (daily bag limit: four on private land, two on IDFW Fish and Wildlife Areas); South Region dates are November 1 – January 10 (daily bag limit: eight on private land, four on IDFW Fish and Wildlife Areas).

Management: The IDFW Private Lands, Public Lands, and Wildlife Science programs are working to improve quail habitat and management. Management highlights include:

- IDFW staff have completed the third year of bobwhite population and habitat monitoring for the state's first NBGI CIP, incorporating both public and private lands. In summer 2022, they began collecting their fourth field season of data.
- IDFW continues collaborating with the University of Georgia on a study of effects of hunter harvest rates and effort on bobwhite survival, movement, and reproduction at Goose Pond Fish and Wildlife Area. Researchers have started the third year of the project which will culminate the pretreatment monitoring period of the Before-After-Control-Impact designed study. Harvest rates in some areas of the property will be reduced this fall to determine the impact of the change.
- IDFW has also funded a project to monitor bobwhite and grassland bird abundance on private land conservation contracts. This study is examining the feasibility of using autonomous recording units (song meters) for monitoring focal species' occupancy and abundance. In summer 2022, they began collecting their second field season of data.
- The Grasslands for Gamebirds and Songbirds Initiative, a RCPP-funded conservation initiative with 32 partners, continues to find success in developing habitat for northern bobwhite quail and other grassland-dependent species in focal regions of the state. To date, 265 landowners have developed 3,403 acres of new habitat. The success and innovation of this program has led to submission of another RCPP that could facilitate the expansion and continuation of this program into the future.
- Indiana maintains four Conservation Reserve Program-SAFE agreements targeting northern bobwhite quail (as well as ring-necked pheasants, Henslow's sparrow, and the Indiana bat). To date, approximately 60,000 acres of grassland habitat have been established to benefit northern bobwhite quail and other grassland birds. An effort is underway to update the Northern Bobwhite Quail SAFE by including an early successional habitat component which could have significant positive impacts on bobwhite populations in Indiana.

NBGI State Quail Coordinator: *Vacant*

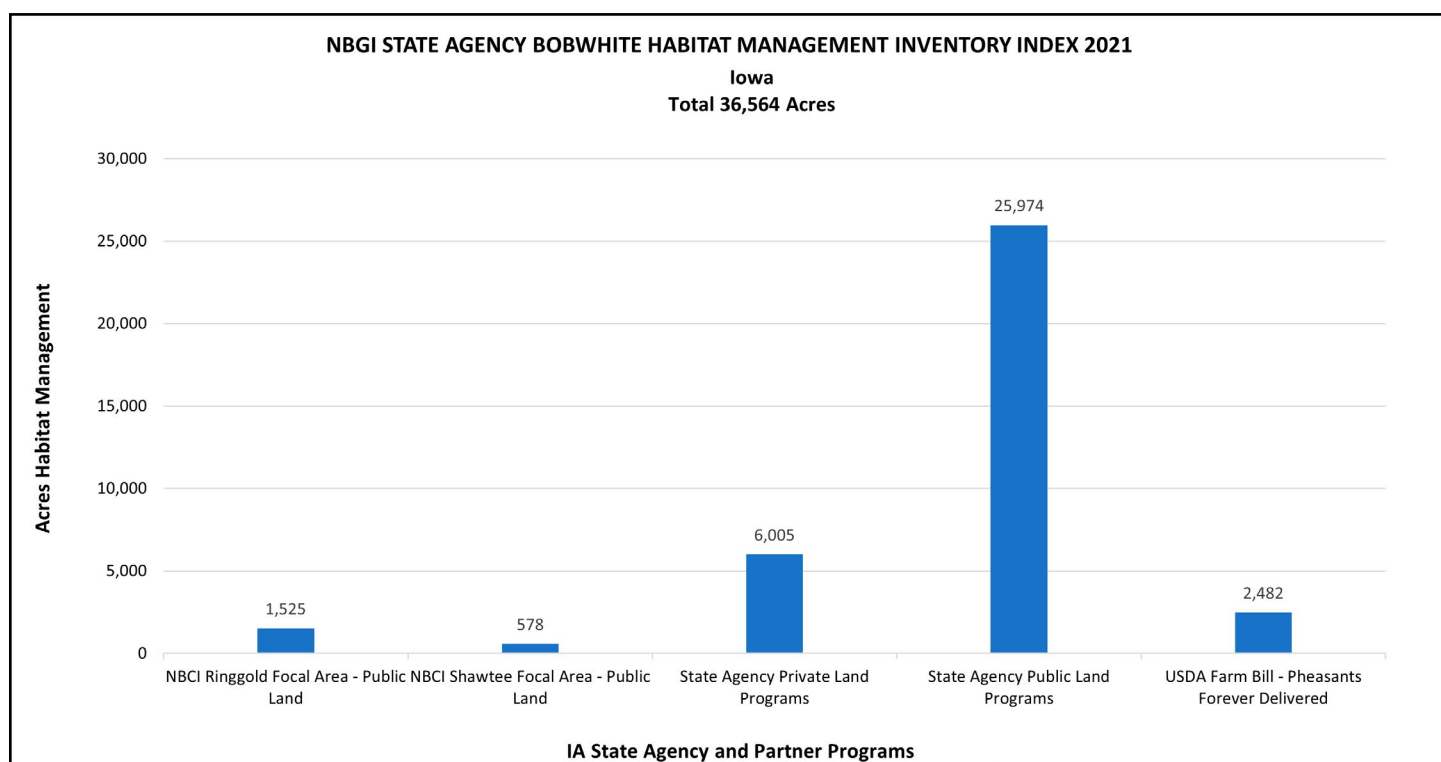
Iowa Department of Natural Resources (IDNR)

Population: The IDNR 2021 statewide bobwhite August roadside index of 0.38 quail per 30-mile route represents a significant decrease (-50%) in the quail index over 2020 counts. This year's index is 58% below the 10-year average of 0.9 quail per route and is 71% below the long-term average of 1.3 quail per route. Quail numbers from 2015-18 were the highest Iowa has seen in the last 23 years. Iowa's decline this past year was not unexpected, given multiple layers of snow, ice, and subzero temperatures across Iowa's quail range during the winter of 2020-21, which greatly reduced overwinter adult survival. The winter of 2021-22 has been much better, and Iowa's quail enthusiasts are hoping for a rebound in bird numbers in 2022.

Hunting: Hunter and harvest numbers for the 2021-22 hunting season were not available at press time. The 2020-21 hunting season survey showed approximately 7,904 quail hunters harvested 17,475 quail during the season. Hunter numbers decreased 3%, while harvest decreased 16% compared to 2019 estimates. Quail hunters averaged 7.8 days afield and harvested two birds for the season. The 2020-21 quail harvest was 17% below the 10-year average and 95% below the long-term average. Hunting and harvest numbers for the 2021-22 hunting season are expected to be much lower than the 2020 season, given the large decline seen in roadside population counts (0.74 birds/route in 2020 vs 0.38 birds/route in 2021).

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

- Iowa is an active participant in the NBGI CIP, with two officially identified focal areas, plus many other public lands receiving quail management focus.
- In early 2020, Iowa received another \$1.5 million USDA Voluntary Public Access grant to expand the Iowa Habitat and Access Program. This 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 30,000 acres, and this new grant will allow IDNR to increase the program. 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 22,449 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.

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

Kansas Department of Wildlife, Parks and Tourism (KDWP)

Population: 2021 statewide bobwhite breeding abundance index was 2% above the 2020 index, 6% below the 5-year average, and 4% above the 10-year average.

Hunting: According to the [2020-21 hunting season statistics](#), 61,381 quail hunters harvested 369,519 bobwhites.

Management: KDWP continues to manage bobwhite throughout the state by partnering with multiple agencies, NGOs, and private citizens, as well as NBGI. 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 are collaboratively working to establish four priority areas for the WLFW program.
- In 2021, KDWP added a fourth habitat specialist through a partnership agreement with Habitat Forever for performing habitat work on private lands in the southern Flint Hills targeting invasive trees. All habitat work for these positions is prioritized for properties with hunting access.
- Utilizing a Voluntary Public Access (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, Wetland Reserve Easements, or high-quality riparian areas to ensure quality habitat is maintained on these access sites.

NBGI 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 61% since 1960. The 2021 index is 65% below our 1981 restoration target. Statewide, there was a 19% increase from 2020 to 2021; however, the eastern portion of the state experienced a decline.

Hunting: On average, hunters bagged 0.26 birds/hour in the 2021-22 hunting season and observed 0.27 coveys per hour. The harvest rate is 20% below the 5-year average, and covey detections were 7% above the 5-year average.

Management: The agency continues to utilize the findings of the [10-Year Restoration Report](#) (ending in 2020):

- The Bluegrass Army Depot "Beyond the Fence" Project moves into the fourth 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 ensure establishment. New acreage has been added every year; however, COVID-19 and the subsequent staff reductions have slowed adoption.
- KDFWR coordinated a multi-partner conservation team aimed at conserving the legacy of Kentucky's highly successful Green River CREP initiative. The partners identified a 10,000-acre focus area and recruited native grass production plantings totaling 150 acres. Planting and bird monitoring will continue to take place this spring.
- KDFWR and the University of Tennessee continue to collect data on the Bluegrass Army Depot quail study, in which researchers are determining the use of cool- and native warm-season grass forage by cows and bobwhite. The project will conclude in 2022.
- The Working Lands for Wildlife Bobwhite 2.0 push by NBGI/QF and partners has resulted in the creation of three [NRCS Focused Conservation Projects](#) in the working lands of the central, eastern, and south-central parts of the Commonwealth.
- Membership of the [Kentucky Bobwhite Battalion Facebook page](#) increased to over 3,900 members.
- All three NBGI Focal Areas will be monitored for the vegetation survey and spring points counts this growing season.

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



Louisiana Department of Wildlife and Fisheries (LDWF)

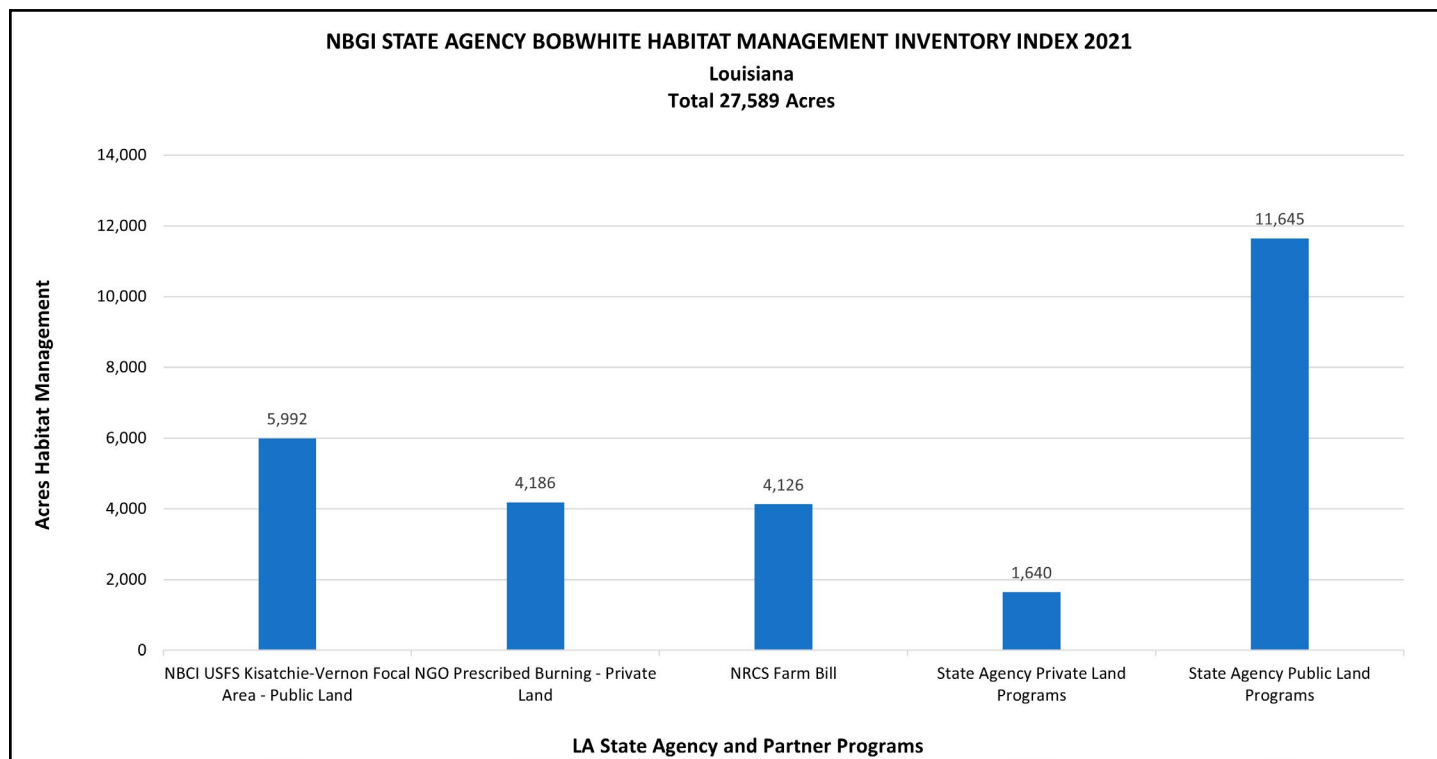
Population: The LDWF annual 2021 Bobwhite Whistle Survey combined results were not significantly different from 2020. The number of quail whistles heard was lower and continue to be near the lowest numbers across Louisiana since the survey began in 1983.

Hunting: The Big and Small Game Harvest Survey for 2020-21 estimated that 900 hunters harvested 3,400 wild quail.

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

- LDWF East and West Gulf Coastal Plain Prescribed Burn Initiatives, NFWF Grant LDWF Natural Heritage Program: 699 acres were burned in 2020-21.
- USDA NRCS programs in 2021: 696 acres of longleaf pine were planted and 3,430 acres burned.
- An additional 4,522 acres were burned by private and NGO funding on private lands in Louisiana in 2020-21.
- LDWF worked with the NRCS, NWTF, and other agencies to hold longleaf pine workshops for private landowners and land managers.
- LDWF, QF, 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; accompanying Reference Area on Peason Ridge WMA: 7,806 Acres.
- Continued quail habitat improvements at Sandy Hollow WMA, conducting approximately 300 acres of timber harvest and approximately 2,133 Acres of prescribed burning.

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 90% over the past 50 years. 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.

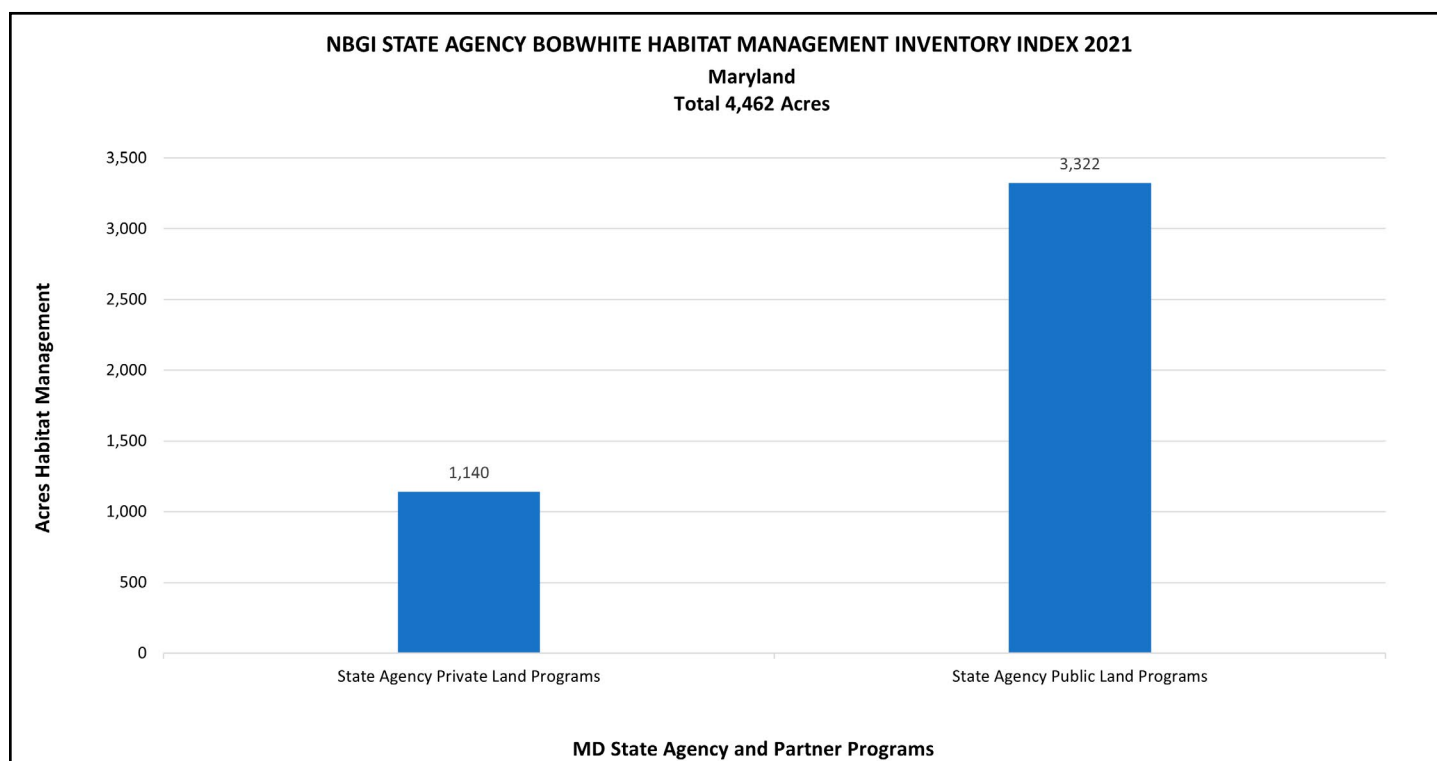
Hunting: The MDNR 2020-21 Annual Hunter Mail Survey estimated 240 bobwhite hunters harvested 2,200 wild birds. The survey only requests data on wild quail hunts, but hunting of pen-raised quail remains popular.



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 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.
- MDNR has partnered with USDA NRCS to hire a Farm Bill biologist to provide technical assistance within the WLFW bobwhite focus area. Three local priority areas have been identified, and outreach efforts have been increased.
- Approximately 20,000 acres are currently enrolled in quail-friendly practices under various USDA Farm Bill programs.
- MDNR staff continue 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 4,462 acres of bobwhite management for the NBGI 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)

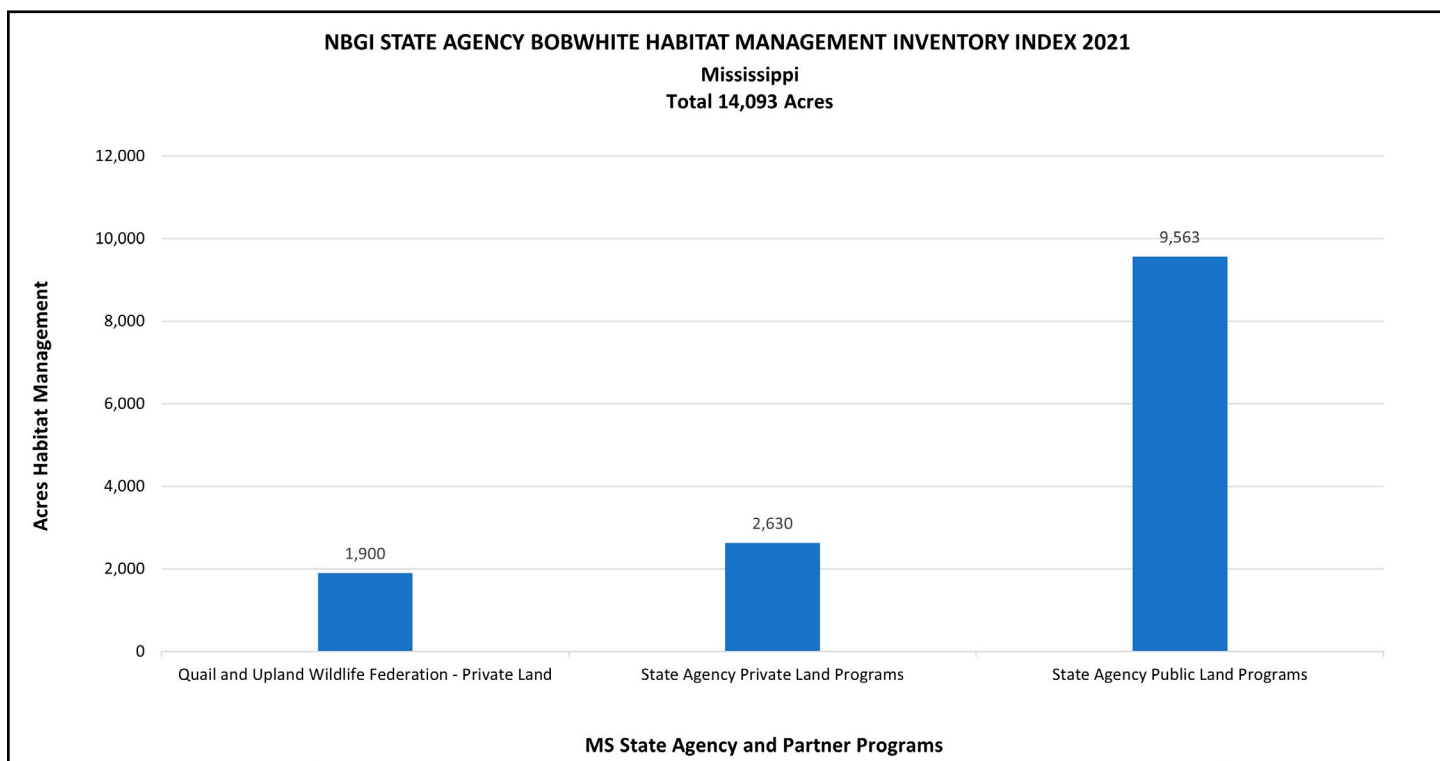
Population: The MDWFP 2021 WMA bobwhite abundance index was 3% below the 2020 index.

Hunting: 2020-21 hunting season statistics were similar to the previous year and above the previous 5- and 10-year averages.

Management: Quail management highlights include:

- Cooperated with conservation partners to promote prescribed burning through Fire on the Forty Initiative.
- 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 11 WMAs.
- Initiated cooperative research project with Mississippi State University to measure scale of habitat management effects on quail populations within landscapes around five WMAs.
- Reported 14,093 acres of bobwhite management for the NBGI Habitat Management Inventory.

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

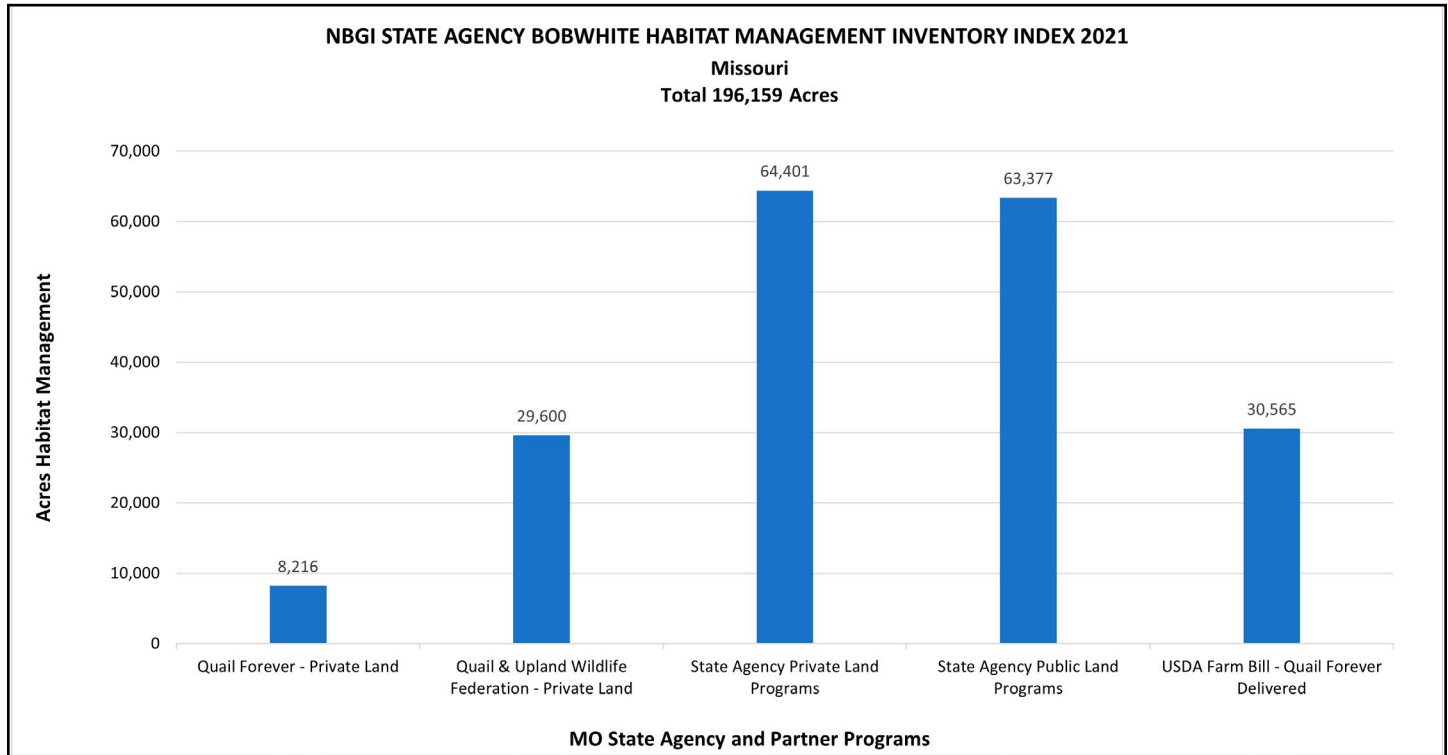
Missouri Department of Conservation (MDC)

MDC, working with partners QF, University of Missouri and The Xerces Society, has analyzed results of the 2021 Missouri Bumble Bee ATLAS plant use data. Four of the eight bumble bee species found in Missouri are considered Species of Greatest Conservation Need (SGCN) in our state SWAP Plan. All four of those species were found almost exclusively on native plants. In addition, the sites where the four SGCN were collected had at least the additional native plants in bloom, pointing to the need for diverse native flowering plant communities for declining bumble bee species. Good for bees, pollinators, and quail!

MDC has teamed up with several agriculture organizations to advance the use of precision agriculture to identify unprofitable acres in a field. MFA, the largest farmer cooperative in Missouri, and the Missouri Corn and Soybean Associations are working with MDC to promote pollinator buffers on these unprofitable acres and are exploring the concept of ecosystem credit trading to reward producers for creating habitat. This partnership has also teamed up with Ecosystem Service Management Consortium and QF to pilot a first-of-its-kind in the nation Biodiversity Credit. This again targets unprofitable field edges with additional payments to producers. The pilot is developing the diversity parameters and testing protocols with the hopes of finding a corporate buyer of the credits. The goal is to enroll 1,000 acres in the pilot over two years, planted to a high diversity of native flowering plants.

The annual migration of the monarch butterfly is a unique and amazing phenomenon. In North America, the Rocky Mountains separate monarch butterflies into two general populations; Western and Eastern. The Western population migrates along the California coast, and the Eastern population migrates from Mexico to Canada and back. Monarchs are the only butterfly with such an advanced, two-way migration up to 3,000 miles long. Since the 1990s, there has been a significant decline in the monarch butterfly population due to many factors, with habitat loss being the leading cause. Missouri serves as critical habitat for the Eastern population from spring through fall. One of their primary migration





routes bisects northwest Missouri and is referred to as the I-35 Monarch Migration Corridor. For this reason, PRIME is being offered in Missouri NRCS' administrative Area 1.

PRIME is a partner project funded through the USDA's RCPP, led by PF/QF with support from the MDC and the Saint Louis Zoo. This project aims to increase monarch and pollinator habitat in Northwest Missouri through land management practices and short-term land rental payments. PRIME will target lands currently enrolled in and expiring from the CRP, enhancing monarch habitat by maintaining and restoring diverse native plant communities.

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

Nebraska Game and Parks Commission (NGPC)

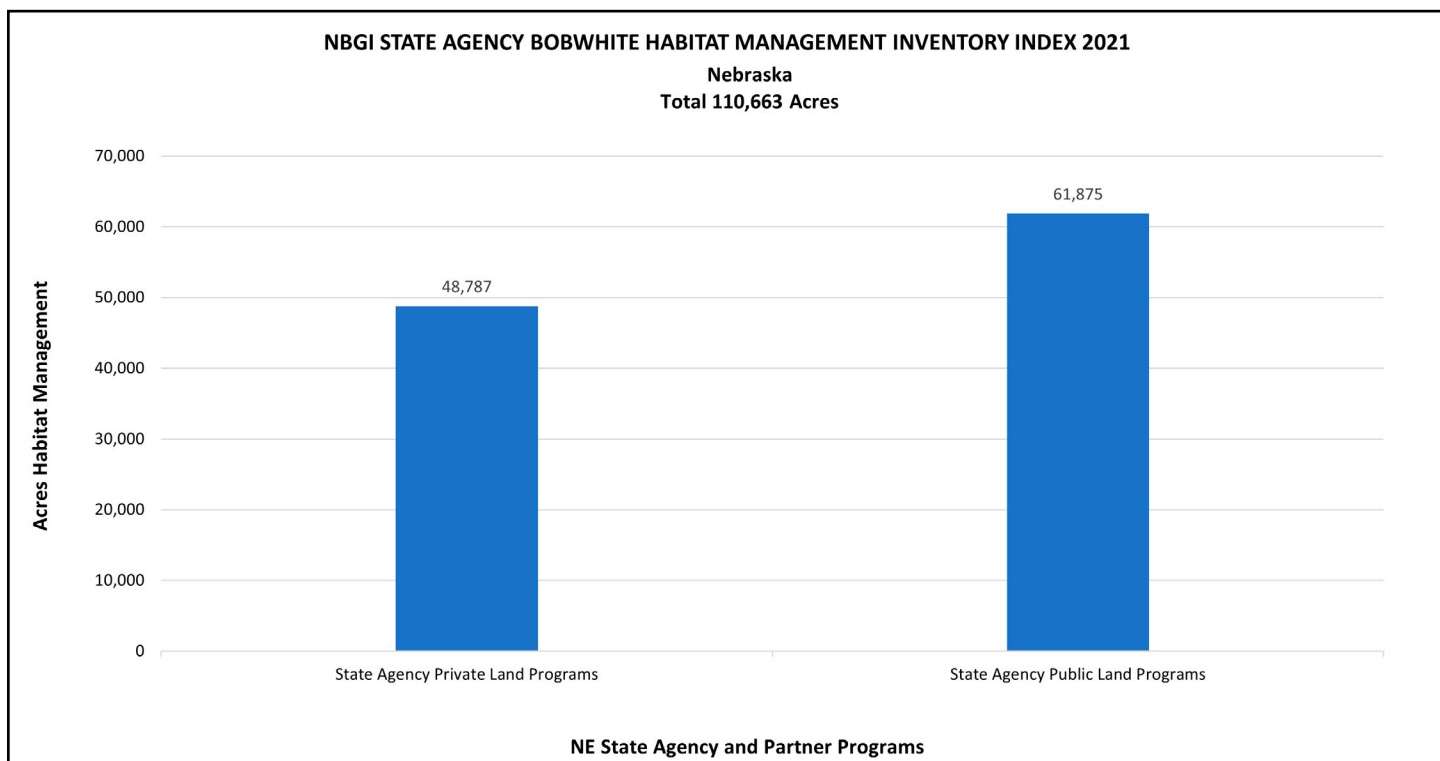
Population: The NGPC statewide abundance index from the 2021 Bobwhite Whistle Count Survey was down 10% compared to 2020 and was also lower than the 5-year average (-35%). Regional indices of relative abundance were also lower in all management regions compared to 2020. Likewise, statewide indices from the 2021 July Rural Mail Carrier Survey (RMCS) were 22% lower than in 2020 and 47% below the 5-year average. Declines were observed in all regions except the southeast (+78%). Severe winter weather events (and continued habitat loss) have negatively impacted Nebraska's bobwhite populations in recent years. 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 2021-22 bobwhite hunting season (30 October 2021 - 31 January 2022), an estimated 32,530 hunters harvested 79,796 bobwhites during 213,217 days afield. The sampling methodology associated with NGPC's Hunter Success Survey (HSS) was modified in 2021-22. This resulted in more hunter responses that likely inflated estimates of quail hunter participation and harvest. Based on this survey, 42.2% of small game permit holders reported that they pursued bobwhites during the 2021-22 season. Individual hunter effort (i.e., days per hunter) in 2021-22 was identical to the 10-year average (6.55), but harvest success (i.e., harvest per day) was lower this season (0.37) compared to the 10-year mean (0.60).

Management: NGPC continues to implement early successional habitat management on both public and private lands for the benefit of bobwhites and other wildlife species. Management highlights include:

- As part of the Early Successional Habitat Initiative, over 56,000 acres of state-owned lands were improved for the benefit of quail, pheasants, and other upland game.





- In partnership with Nebraska PF/QF, an additional 5,000 acres of habitat on public lands were positively impacted through the Habitat Share initiative.
- NGPC Partners Section staff continue to work cooperatively with landowners, partner agencies, and NGOs to enhance wildlife habitat on privately-owned lands. This year, private lands programs collectively impacted over 48,000 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 147,000 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 2021-22 season (>381,000 acres) was at an all-time high, and the vast majority of these acres fall within Nebraska's bobwhite range.
- NGPC reported 110,663 acres of habitat management on public and private lands for the NBGI Habitat Management Inventory.

NBGI State Quail Coordinator: John Laux, Upland Game Program Manager, john.laux@nebraska.gov

New Jersey Department of Environmental Protection, Division of Fish and Wildlife (NJDEP, NJDFW)

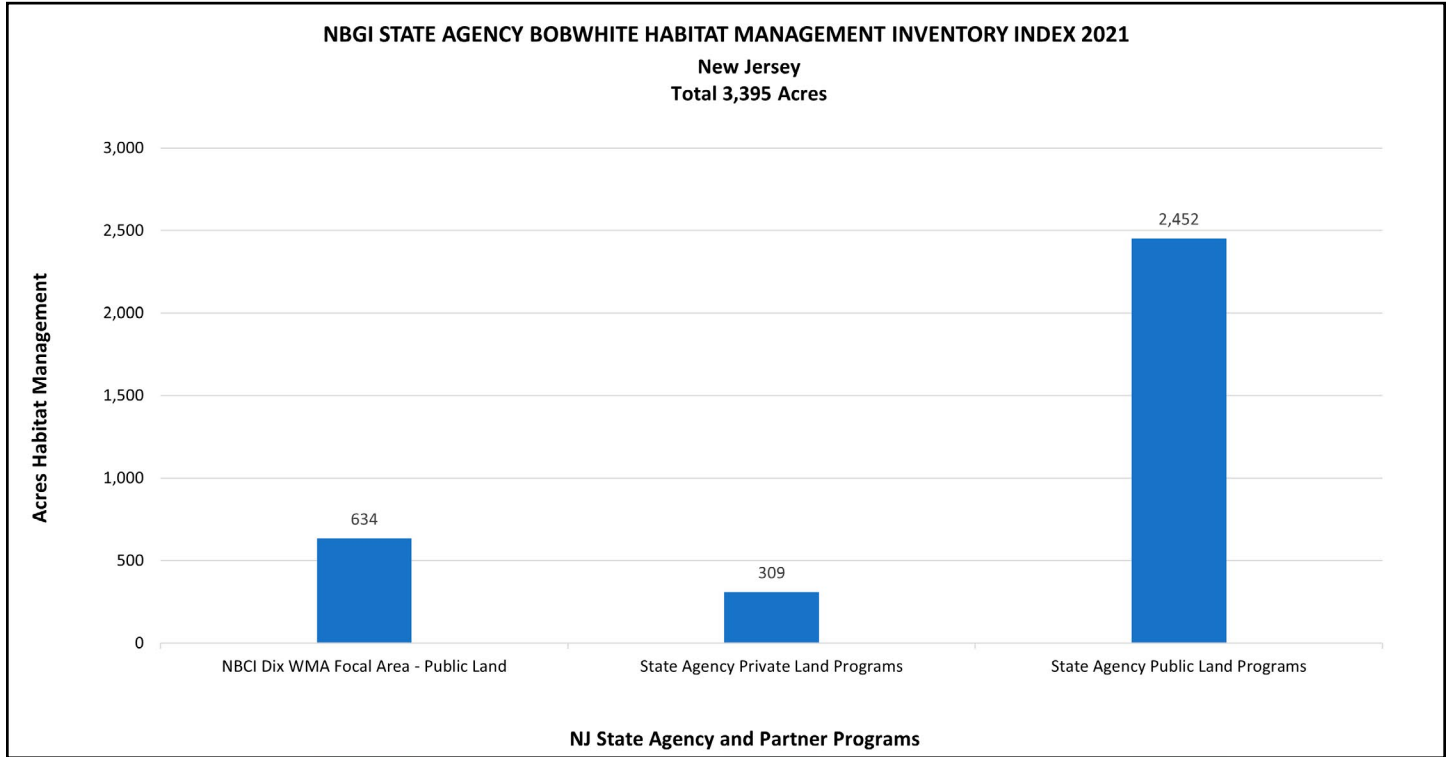
Population: Bobwhite populations remain very low, well below detection levels, according to USGS North American BBS data: 0.00/route in 2016-22.

Hunting: Wild quail hunting season has been closed statewide since September 2011. Hunting pen-raised birds is permitted at two NJDEP WMAs and on licensed shooting preserves.

Management: NJFW continues to operate under the New Jersey Northern Bobwhite Action Plan (revised 2011) and partner with multiple agencies, NGOs, and private citizens. A formal Recovery Plan was completed in 2018 that outlines specific criteria to initiate a translocation, including proper site selection. Quail management highlights include:

- Dix WMA continued receiving technical habitat management work over the course of the year (approx. 430 acres). NBGI CIP habitat and population monitoring was completed on New Jersey's focal area.
- Participating in the NBTC Translocation ad-hoc to further the potential of a future wild bobwhite translocation in the state.
- The NFWF, USDA NRCS, NJFW, and QF hired a new Farm Bill Biologist to coordinate and implement wildlife habitat-related conservation programs, with a primary focus on the EQIP WLFW Northern Bobwhite in Pine Savannas Project.





- About 245 acres of management occurred via ongoing cooperation between sportsmen, NGOs, and NJFW on quail habitat projects at a local sewage authority through the WLFW project.
- Over 8,200 acres of state-owned WMAs are implementing forest stewardship plans in a comprehensive approach to management of young forests in a manner that draws upon the expertise of several conservation-tasked state agencies and other stakeholder groups.

NBGI State Quail Coordinator: Jimmy Sloan, Upland Game and Habitat Biologist, james.sloan@dep.nj.gov

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 BBS 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.

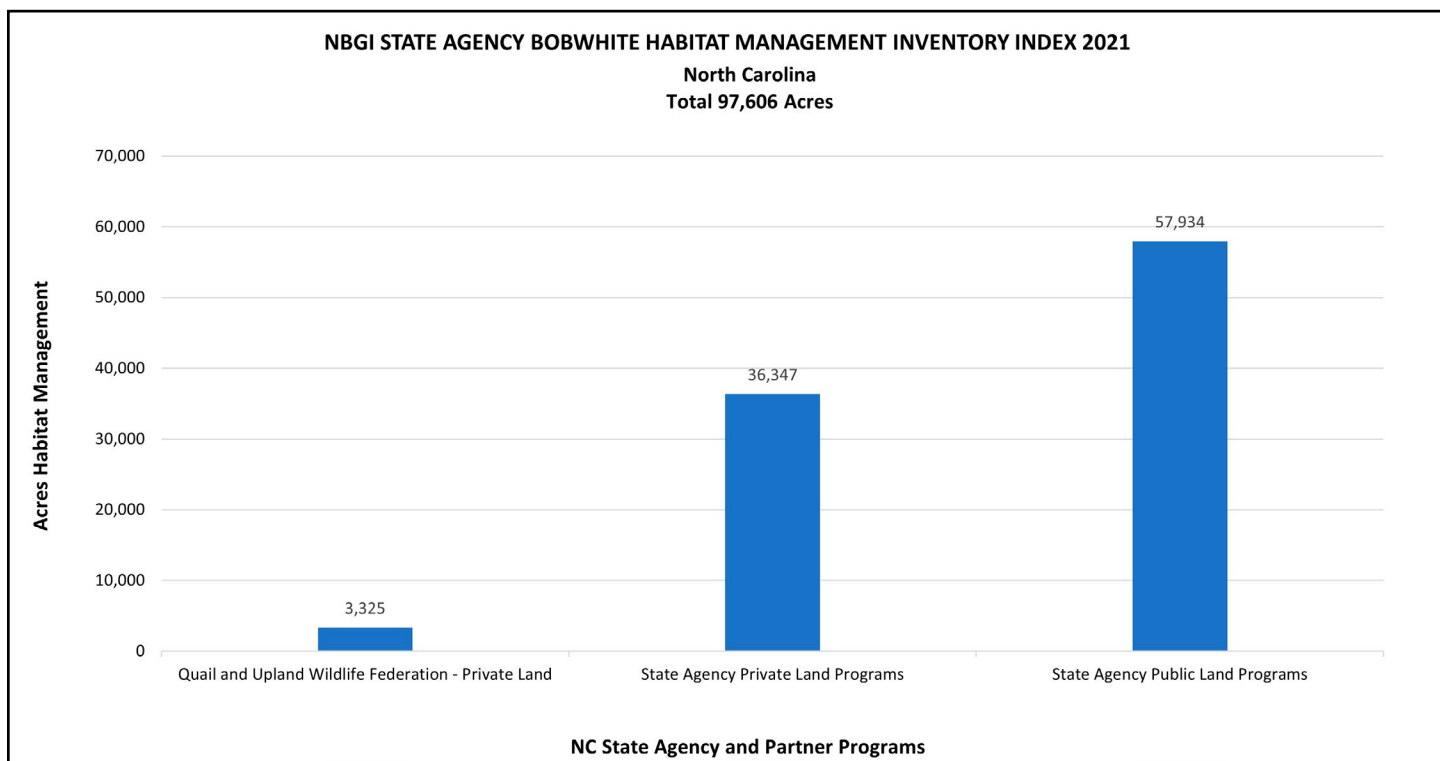
Hunting: Each year, the NCWRC uses a post-season survey to estimate the number of hunters, days hunted, and harvest of all game species in the state. During the 2020-21 season, approximately 6,800 hunters spent 46,000 days hunting quail and harvested 20,000 birds. The bulk of quail hunting and harvest 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 has created a new program called Wild Quail Management Areas that will allow dedicated property managers to implement specific management actions (nest predator trapping and supplemental feeding) for the benefit of wild bobwhites.
- Outreach efforts continued 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.

NBGI State Quail Coordinator: Hannah Plumpton, Upland Gamebird Biologist, hannah.plumpton@ncwildlife.org





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

Population: Ohio's bobwhite population estimate, based on 2020-21 roadside surveys, is 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. No hunters responded to our annual small game questionnaire that they hunted quail in 2021. 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:

- ODNR is working with Ohio FSA and NRCS to promote Quail SAFE and Quail EQIP under the WLFW programs.

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

Oklahoma Department of Wildlife Conservation (ODWC)

Population: The statewide number of quail observed in 2021 per 20-mile route was up slightly from the previous year—1.0 quail/route (q/r) to 1.23 q/r. This was below the 10-year average of 2.82 q/r. Half of the regions in Oklahoma displayed decreases in bobwhite populations. These decreases are due to lowered chick production and survival into the fall population, likely associated with weather variables like rainfall timing. The northwest region showed an increase in population of from 2.875 q/r to 3.875 q/r, which is still below the 10-year average of 6.09 q/r and well below the 29-year average of 7.93 q/r. The largest decrease occurred in the southeast and southcentral regions, where no quail were observed during the 2021 surveys. Statewide quail abundance has remained below the 10-year average since 2018.

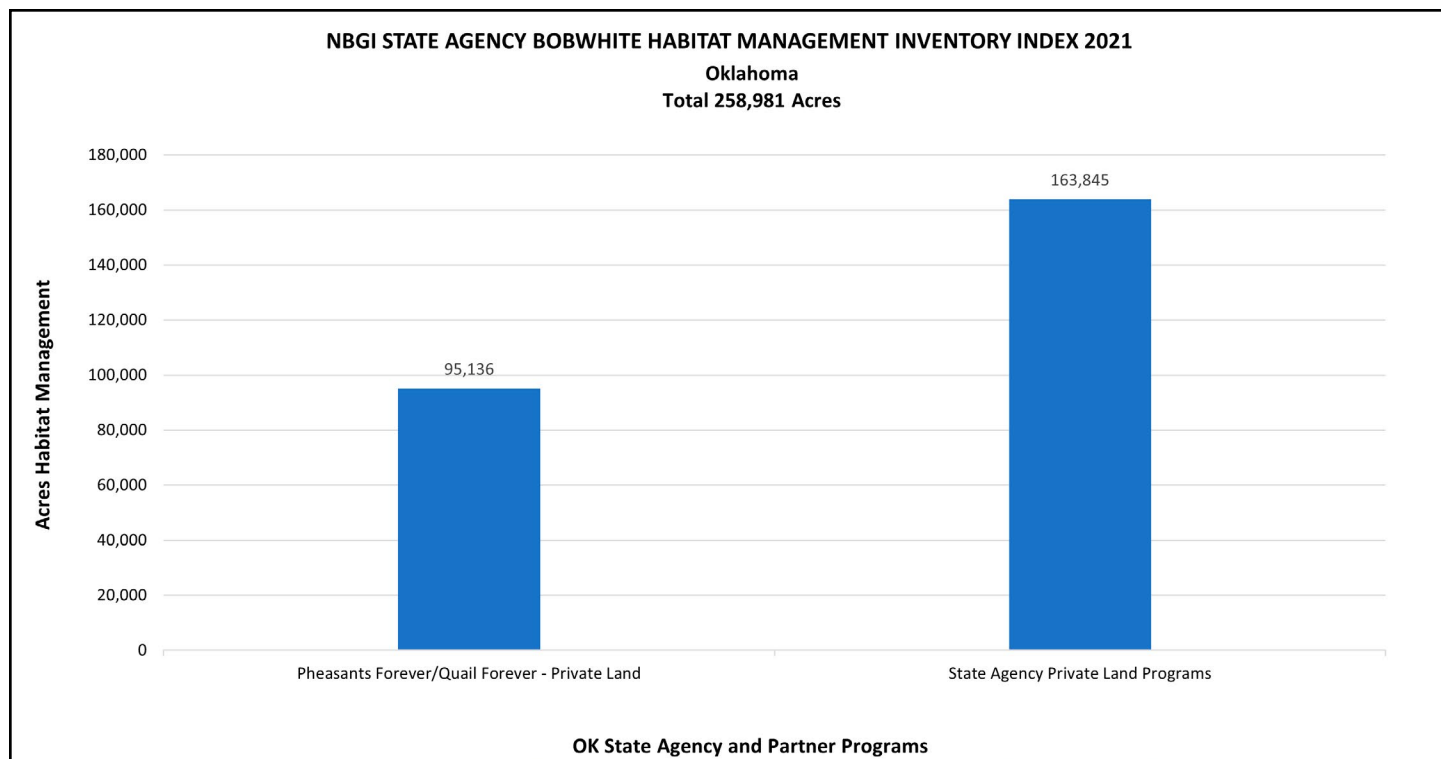
Hunting: From 1986-2020, quail hunter numbers have declined by 81% (110,960 in 1986 to 20,833 in 2020). Long-term fluctuations in hunter participation and harvest are likely due to decreases in quail numbers and habitat quality, while large annual fluctuations are primarily due to the localized weather conditions.



Management: The ODWC provided technical assistance on 41,537 acres through the Quail Enhancement Program during 2020 to assist private landowners with quail conservation, as well as 163,845 acres by regional private lands biologists. Other highlights include:

- The ODWC continued its partnership with Oklahoma State University to conduct research on four ODWC WMAs. The current research project began April 1, 2018, and is currently utilizing GPS units attached to northern bobwhites to monitor habitat usage and movement.
- ODWC completed its work with the University of Georgia's Southeastern Cooperative Wildlife Disease Study (SCWDS) on a health assessment of bobwhite quail which included 10 WMAs. Results showed that quail in Oklahoma were overall very healthy compared to previous health assessments.

NBGI State Quail Coordinator: Tell Judkins, Upland Game Biologist, tell.judkins@odwc.ok.gov



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 mid-October through the end of February, allowing an 8-bird daily limit with 24 in possession.



Management: PGC completed the updated Northern Bobwhite Quail Management Plan in 2021 and is a partner with NBGI. The management plan calls for establishing quality habitat on the Bobwhite Quail Focus Area (BQFA) with the intent to reintroduce bobwhites. Management highlights include:

- Letterkenny Army Depot (LEAD) in Chambersburg continues to be the focus of restoration efforts in Pennsylvania. This project is supported by the Keystone Quail Restoration Initiative, a partnership between Letterkenny Army Depot, PGC, Shippensburg University, Harrisburg University, Renfrew Institute, the Big Covey Chapter of QF, Cumberland Valley Chapter of PF, NWTF, Mr. Kurt Oelmann, and NBGI.
- A comprehensive BQFA management plan was completed, and monitoring and habitat management operations began in 2017. Monitoring for the project has included spring whistle counts, fall covey counts, BBS point counts, a BBS route, NBGI CIP habitat monitoring, and pollinator surveys. Habitat management to date has included approximately 2,100 acres of prescribed fire treatment, 1,927 acres of overstory removal, 1,652 acres of herbicide treatment, and planting over 5,000 shrubs.
- Pennsylvania has submitted official translocation requests to partner states and is working closely on logistics for this effort. Reintroduction will require the partnership of other states in providing wild northern bobwhites for Pennsylvania. It is thanks to NBGI and so many of its member states' continued support that Pennsylvania has made such great strides in its effort to bring back bobwhites.
- NBGI completed the first ever site assessment of Pennsylvania's Bobwhite Quail Focus Area. The site assessment gave an unbiased opinion of the habitat at the time of the visit as well as constructive criticism on ways it can continue to be improved.
- Reported 1,128 acres of bobwhite management for the NBGI Habitat Management Inventory in 2021.

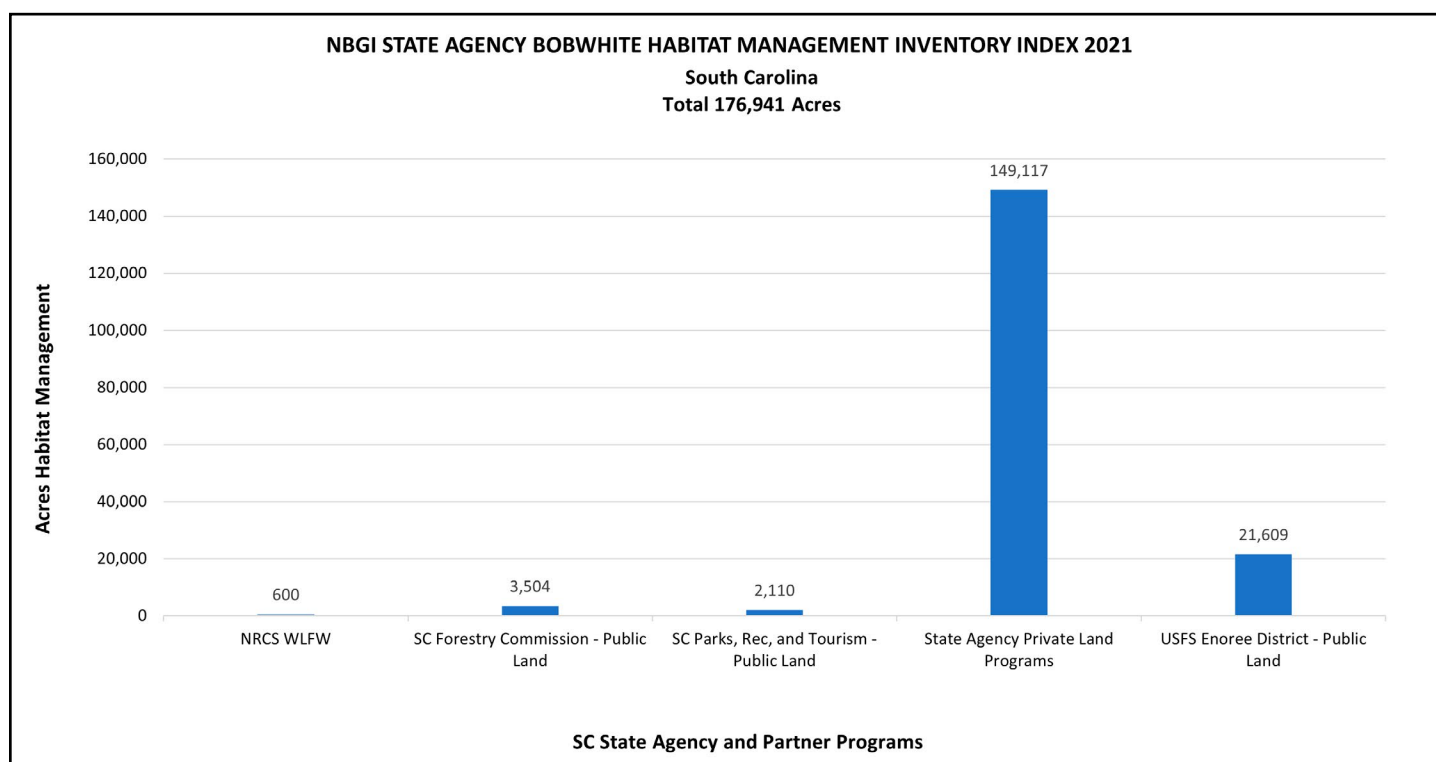
NBGI State Quail Coordinator: Ken Duren, Game Bird Section Supervisor, kduren@pa.gov

South Carolina Department of Natural Resources (SCDNR)

Population: The SCDNR 2021 statewide bobwhite whistling cock census was 11.9% above the 2020 index and 23.7% below the long-term average.

Hunting: Average hunter success decreased over the prior year in the annual Quail Hunter Survey. The most recently published report for the 2020-21 hunting season indicated 0.18 coveys per hour of hunting.

Management: Quail management highlights include:



- Monitoring and habitat manipulation continued in 2021 with many projects being completed and habitat being 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.
- One Quail Forever, NRCS, and SCDNR Farm Bill Biologist position vacancy was filled. Mr. Nathan Eldridge is working in Hampton and Allendale counties assisting landowners with federal assistance programs with a focus on the statewide Working Lands for Wildlife cooperators.
- The Bobwhite Quail Whistling Cock Census was conducted for the 43rd year, the Annual Summer Bobwhite Quail Brood Survey was conducted for the 28th year, and the Annual Fall Covey Count Survey was conducted for the 21st year.
- The South Carolina Bobwhite Initiative (SCBI) website has been maintained. Visitors can also find out more about SCBI on Instagram (www.instagram.com/scbobwhites) or on Facebook (www.facebook.com/scbobwhites).

NBGI State Quail Coordinator: Michael Hook, Small Game Program Leader, hookm@dnr.sc.gov

Tennessee Wildlife Resources Agency (TWRA)

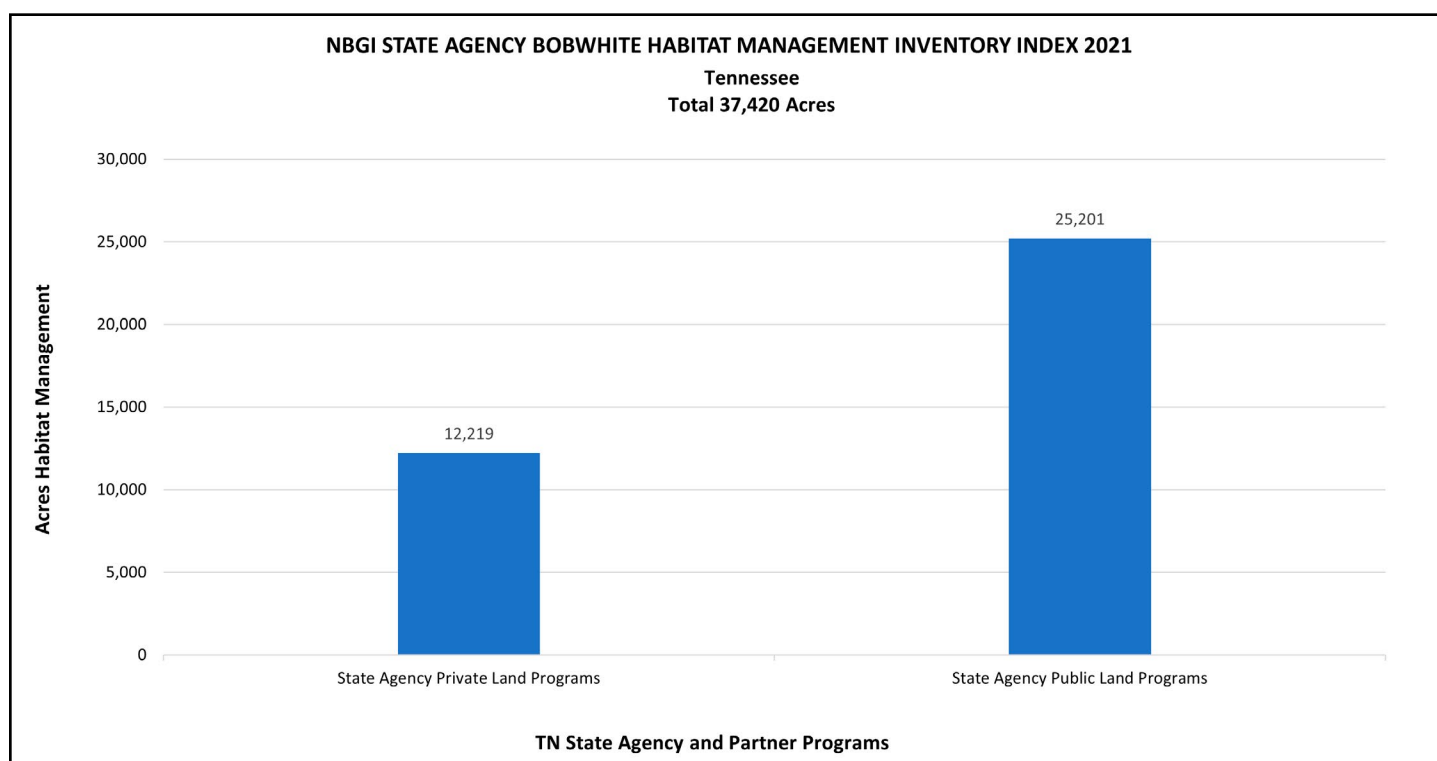
Population: Tennessee's quail population continues to decline or remains locally stable. TWRA has collected spring counts on anchor WMAs for 2014-21 and enters data into the Eastern Avian Knowledge Network database. Spring counts continued in 2022.

Hunting: A mixed mode survey was conducted again for the 2020-21 season. It was estimated that 6,394 + 1,950 hunters harvested 23,802 + 10,707 bobwhites.

Management:

- Tennessee has five anchor WMAs and four focus areas that continue to be managed. In 2018, Wolf River WMA became Tennessee's first NBGI CIP. NBGI CIP habitat inventory (as well as both spring and fall covey counts) were completed, and management continues on this area.
- Reported 37,420 acres of bobwhite management for the NBGI Habitat Management Inventory.

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



Texas Parks and Wildlife Department (TPWD)

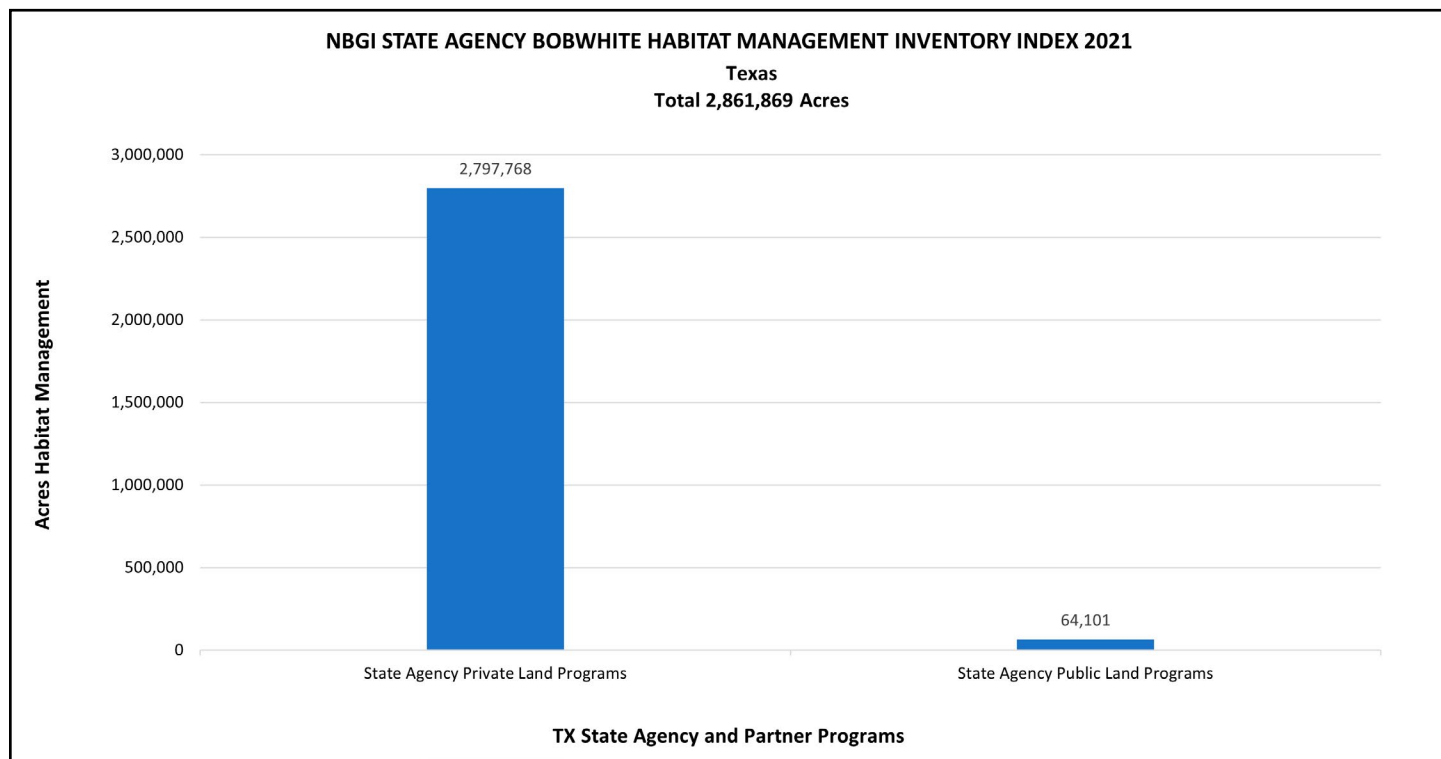
Population: According to TPWD surveys, bobwhite populations in west and central Texas continued on a multi-year decline during the 2021-22 period, primarily due to limited nesting cover associated with extended drought conditions. Populations in south Texas fared better than their counterparts resulting in higher reproductive activity and good fall recruitment. Spring and summer 2022 conditions have not been favorable thus far, with exceptional drought conditions blanketing much of the state. Recent rainfall has provided regional relief, but much more will be needed to buoy quail populations this fall.

Hunting: The TPWD bobwhite hunter numbers for 2020-21 decreased from 36,926 in the previous year to 29,280; however, estimated bobwhite quail harvest increased 11% over the previous year up to 315,572. The small game hunter survey questionnaire has excluded pen-reared birds in the harvest estimate since 2013.

Management: TPWD quail conservation highlights include:

- Current bobwhite research in cooperation with Texas A&M-Kingsville: human dimensions work investigating the bobwhite decline in Texas as part of a social-ecological system using a network perspective, including stakeholders, habitats, and bobwhite populations in north and south Texas.
- In partnership with QF: awarded \$200,000 grant through NFWF's Southern Plains Grassland program; grant will go towards quail and wildlife conservation in west Texas as well as supporting a full-time statewide QF Coordinator to support partnership positions across the state.
- In partnership with Tall Timbers Research Station: co-funding a regional biologist position to assist with new Western Pineywoods Quail Program, working in concert with other conservation collaboratives, helping landowners in east Texas manage forested land and promoting quail conservation through research and management.
- The Grassland Restoration Incentive Program (GRIP) model of incentive-based habitat work on private lands continues within the geographies of the Oaks and Prairies, Rio Grande (South Texas GRIP) and Gulf Coast Joint Ventures (Coastal GRIP). Funding partners include ConocoPhillips, NFWF, TPWD, and others. Projects are underway.
- About 2.8 million acres of quail habitat were developed on private lands and another 64,000 acres on public lands under the direction of state wildlife personnel.
- Reported 2,861,869 acres of bobwhite management for the NBGI Habitat Management Inventory.

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



Virginia Department of Wildlife Resources (VDWR)

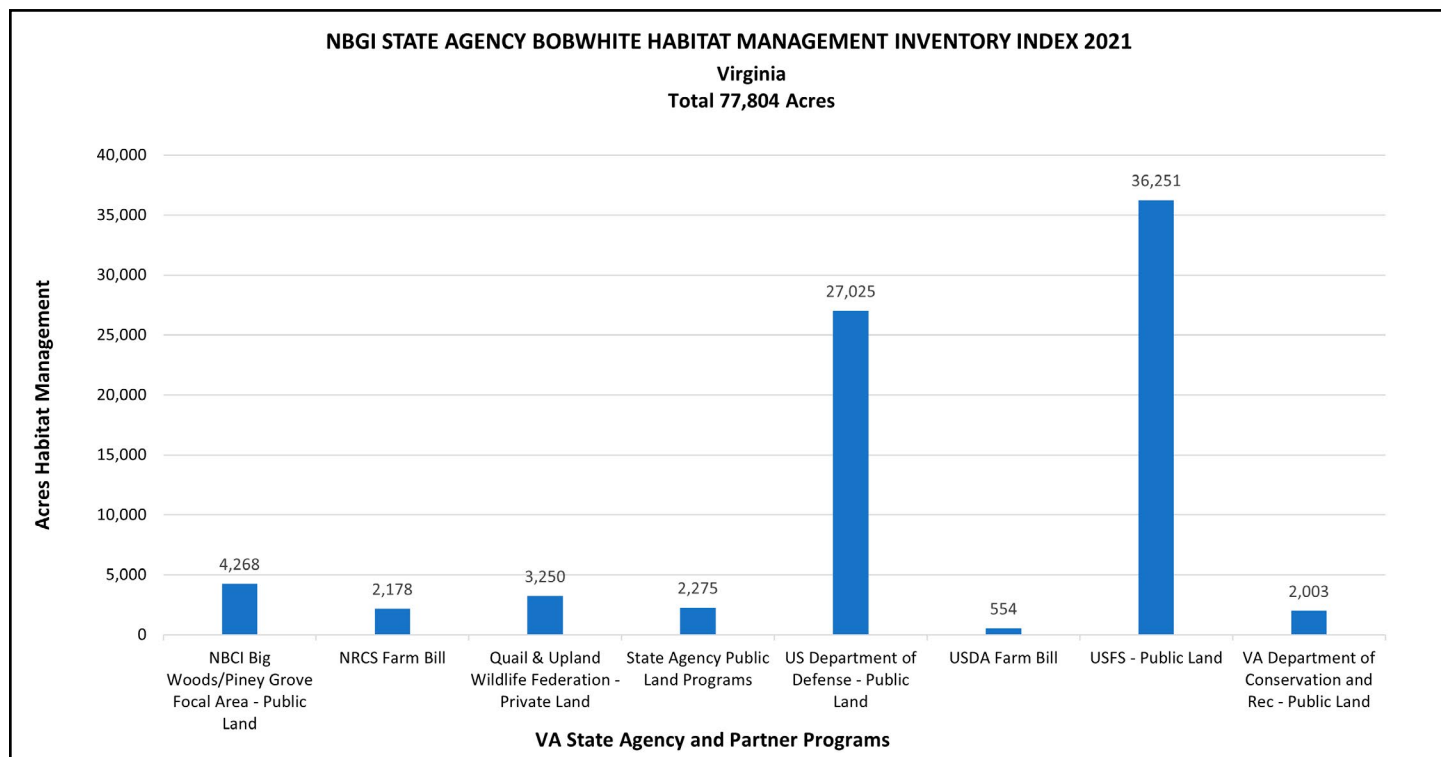
Population: While Virginia's quail population continues to decline in some areas, populations seem to have stabilized in other significant areas, and there are a few areas where modest increases are underway. One hunter reported finding 87 unique coveys of quail this season. Several others reported finding in excess of 50 coveys, but hunting conditions were poor over much of the season, and coveys found were down overall.

Hunting: For the 2021-22 hunting season, 24 avid quail hunters reported on 314 hunts. They found 504 coveys and averaged finding 1.6 coveys per hunt, with a statewide average of 2.0 hours per covey find. Though there were fewer hunts and fewer covey finds overall, number of coveys per hunt increased slightly, and hours per covey find declined. Our hunter interest survey for 2018-19 showed that quail hunting was still extremely important to 8.9% of our hunters (harvest and effort statistics were not collected in this survey). The hunter harvest and effort survey for the 2015-16 season indicated the number of quail hunters decreased slightly from 3.7% to 3.6% of all licensed hunters. The survey indicated a total of 115,703 quail were harvested, of which 12,261 were wild quail, comparable to the 2011-12 season.

Management: VDWR Quail Recovery Initiative completed 12 years of implementation on June 30, 2021. The agency prepared a comprehensive report, compiling their actions on behalf of bobwhites since 1980, as well as the 2017 Quail Plan Revision. Quail management highlights of the first 12 years include:

- 5,340 site visits made to landowners owning over 549,220 acres of land, resulting in over 3,020 management plans written.
- Quail team back up to full strength with two QF Farm Bill biologists being hired.
- 68 tracts of land and 448 landowners in the Quail Management Assistance Program totaling 107,923 acres enrolled, with 14% under some form of quail management.
- Preparing for the tenth year of June call counts and point habitat assessments, per NBGI CIP monitoring protocol for focal areas.
- Added Parker's Branch WMA to our Big Woods – Piney Grove CIP Focal Area, with substantial new habitat management planned.
- Reported 76,164 acres of early successional habitat management statewide by DWR and multiple federal and state partners for the NBGI Habitat Management Inventory (reflecting a major rebound after we adapted to COVID-19, particularly with prescribed fire acres).

NBGI State Quail Coordinators: Marc Puckett, Small Game Project Leader, marc.puckett@dgif.virginia.gov and Jay Howell, Small Game Project Leader, jay.howell@dgif.virginia.gov



NBGI State Agency Bobwhite Habitat Inventory Index 2021

Molly Foley | NBGI Data Analyst

The NBGI Habitat Inventory is an index of the potential for bobwhite to occur on the landscape based on habitat, now or in the near future, as identified by the state's quail coordinator. For 2021, 19 state agency coordinators reported 4,593,452 acres of bobwhite habitat management for 65 programs, demonstrating a tremendous commitment to habitat to benefit bobwhites and myriad fauna.

Introduction

This is the eleventh annual National Bobwhite and Grassland Initiative (NBGI) State Agency Bobwhite Habitat Inventory (hereafter, Inventory), an index of habitat management over the past year as reported by state agency quail program coordinators. The Inventory fulfills part of the 2010 charge of the NBGI Management Board to document “all things being done to benefit bobwhites in each state.”

The Inventory documents acres of management of plant succession (prescribed fire, disking, prescribed grazing, cutting, chemical application, etc.), planting vegetation, and protecting vegetation (deferred grazing and haying, leaving crop residue, leaving standing crops, etc.). Data in this report are rounded to nearest whole number, with X.5 rounded up (e.g., 1333.49 and 1333.5 are equivalent to 1334). Inventory management is for the 2021 reporting year, which varies across states and among years.

The Inventory is divided into three primary land categories based on a combination of ownership, leadership, and funding source: (1) **State Agency Public Land**, includes management on the wildlife agency's land (Figure 1); (2) **State Agency-Based Private Land**, includes management on private lands that is funded, led, or made possible by the wildlife agency, and is generally not reported in other private land categories (Figure 2); and (3) **US Department of Agriculture (USDA) Farm Bill**, includes acres managed under the USDA Farm Bill program (Figure 3). The **Partner Private Land** (Figure 4) and **Partner Public Land** (Figure 5) categories include programs administered by partner agencies, organizations, and institutions, and are generally not featured in Figures 1-3. As of 2019, Inventory acres of habitat management for **NBGI Coordinated Implementation Program (CIP) Focal Areas** are not required and are being reported in the CIP database. Some states continue to report these acres for the Inventory, and this management can be found in Figures 4 and 5.

Multiple management treatments on any one acre can be counted >1 time per year (e.g., burning, chemical treatment, and planting one acre in same year equals

three acres of habitat management). Acres are sometimes counted more than once across land categories. For example, agency and partner management might occur simultaneously on USDA Farm Bill lands. The Inventory is action-oriented.

Does existence of habitat management mean that wild bobwhites can be expected at a particular program's physical locations? Not necessarily. Inventory protocol specifies that habitat is suitable for bobwhites in the reporting year or will be in the near future. It can take several years after initial management for some habitats to become suitable for bobwhites, followed by a bobwhite population response. Bobwhites occupy or increase in an area based on survival and reproduction, which are affected by weather and other non-habitat factors, and by movement into an area, which is affected by distance to existing populations. Further, as described in detail in the 2012 and 2013 State of the Bobwhite reports, because of variability among NBGI states and partners in ability to measure habitat, the NBGI Inventory is appropriately interpreted as an index of habitat management. As an index of the amount of habitat management beneficial to bobwhites, comparisons among years, states, partners, and programs should be made cautiously.

To better describe the amount of uncertainty in habitat data, coordinators grade their confidence in acreage they report by choosing among seven levels of confidence (very confident, moderately confident, somewhat confident, neutral, somewhat uncertain, moderately uncertain, and very uncertain). The highest confidence is often based on measurement of bobwhite abundance, and this aspect is a foundation of the NBGI CIP. Such detailed measurement, however, is not feasible at large scales, so the Inventory's coordinator confidence ratings provide a qualifier for expectations for bobwhite to occupy habitat and/or to be abundant. This is particularly useful for large areas where bobwhites were known to exist and some kind of habitat program had been implemented, but there is no measurement of habitat quality (e.g., stage of plant



succession) or actual bobwhite abundance.

In summary, the NBGI Inventory is an index of the potential for bobwhite to occur on the landscape, as identified by each state's quail coordinator. There are non-biological sources of variability that affect the accuracy of this assessment of management. Foremost, there are differences among states in capacity to collect data, and within a state from year-to-year. Also, the reporting strategy varies among states (e.g., conservative or liberal inclusion of habitat management).

Some states were constrained in 2021 by other factors. Similar to previous years, quail coordinators for Pennsylvania Game Commission and West Virginia Division of Natural Resources believe that wild bobwhite population abundance was inadequate for responding to habitat management. Per NBGI Inventory protocol, presence, or potential presence (immigration or translocation) of wild bobwhite are minimum criteria for claiming habitat management for an area. Because Pennsylvania has a peer-reviewed plan to translocate wild bobwhite, their management was reported for a fourth year under public land partners (Figure 5).

Results

Nineteen state agency coordinators reported 4,593,452 acres of bobwhite habitat management, more than the 3.6 million acres reported last year. Management in 2021 included:

- 531,743 acres on state wildlife agency publicly owned lands (Figure 1),
- 3,412,138 acres on private lands through state wildlife agency efforts (Figure 2),
- 209,305 acres on private lands through the USDA Farm Bill (Figure 3),
- 332,441 acres on Partner Private Lands (Figure 4), and
- 107,825 acres on Partner Public Lands (Figure 5).

The "reporting year," 2021, included dates ranging from July 1, 2020, to April 15, 2022, varying with fiscal years, accounting systems, etc. Acreage for all 25 NBGI states are as follows:

- AL: 49,200,
- AR: 55,821,
- DE: 6,697,
- FL: 276,652,
- GA: 300,410,
- IA: 36,564,

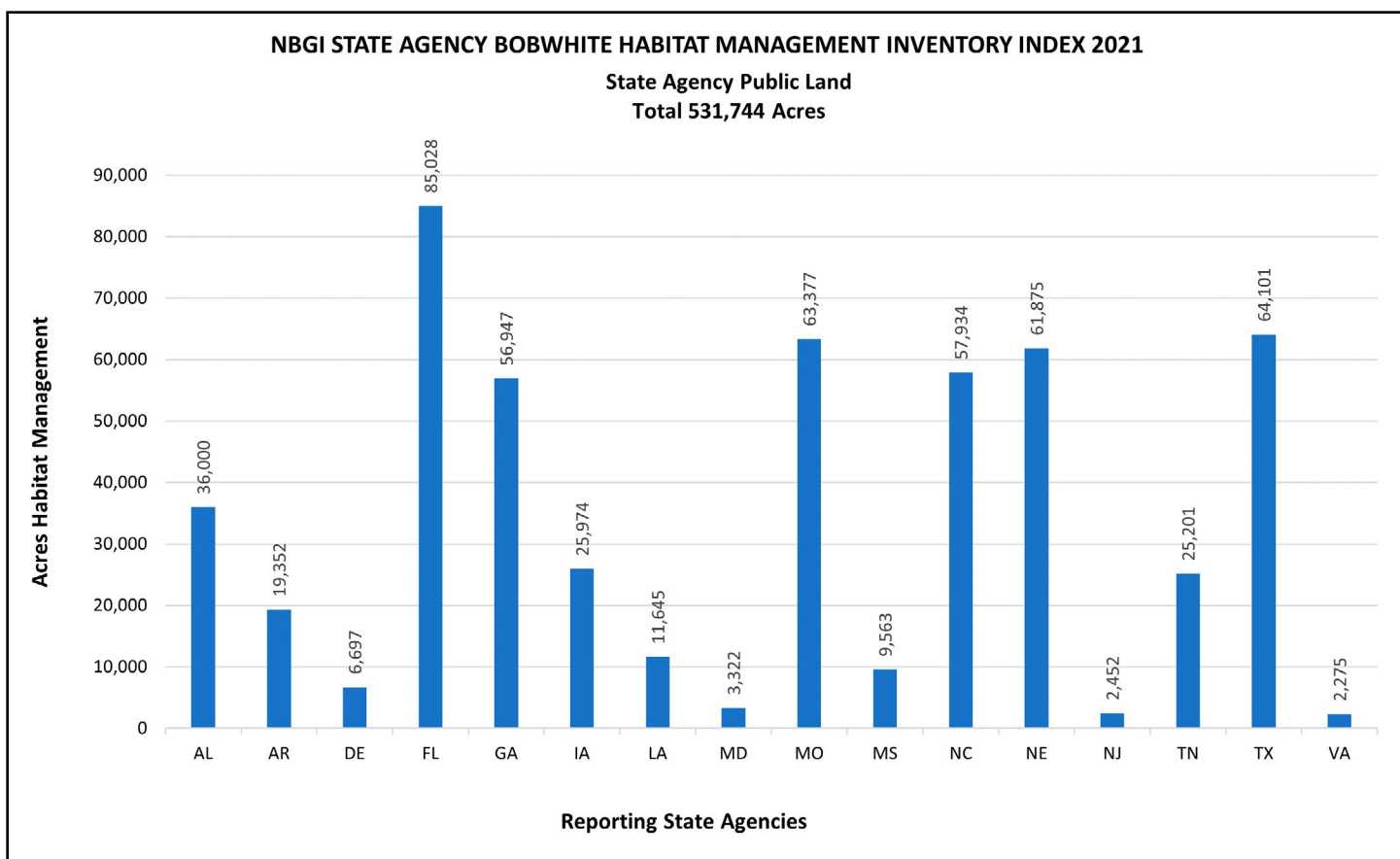


Figure 1. 2021 NBGI State Agency Bobwhite Habitat Management Index for 16 state public land programs. Index is acres of habitat managed during the reporting year (ranging from July 1, 2020, to January 1, 2022).



- IL: no data submitted,
- IN: no data submitted,
- KS: no data submitted,
- KY: no data submitted,
- LA: 27,589,
- MD: 4,462,
- MO: 196,159,
- MS: 14,093,
- NC: 97,606,
- NE: 110,663,
- NJ: 3,395,
- OH: no data submitted,
- OK: 258,981,
- PA: 1,128,
- SC: 176,941,
- TN: 37,420,
- TX: 2,861,869,
- VA: 77,804, and
- WV: no data submitted due to lack of adequate bobwhite population.
- 85,028 (FL, moderately confident),
- 56,947 (GA, moderately confident),
- 25,974 (IA, moderately confident),
- 11,645 (LA, very confident),
- 3,322 (MD, somewhat confident),
- 63,377 (MO, moderately confident),
- 9,563 (MS, very confident),
- 57,934 (NC, moderately confident),
- 61,875 (NE, very confident),
- 2,452 (NJ, very confident),
- 25,201 (TN, very confident),
- 64,101 (TX, very confident), and
- 2,275 acres (VA, somewhat confident).

State Agency Public Land Management

For 2021, management of state wildlife agency public lands, 16 state agencies reported 531,743 acres of bobwhite habitat management (Figure 1). State coordinator acreage reports (state, coordinator confidence) included the following:

- 36,000 (AL, somewhat confident),
- 19,352 (AR, moderately confident),
- 6,697 (DE, moderately confident),

State Agency-Based Private Land Management

For 2021, on private lands where management was based on state agency work and not a part of the USDA Farm Bill, 15 state agencies reported 3,412,138 acres, (Figure 2). State coordinator acreage reports (state, coordinator confidence) included the following:

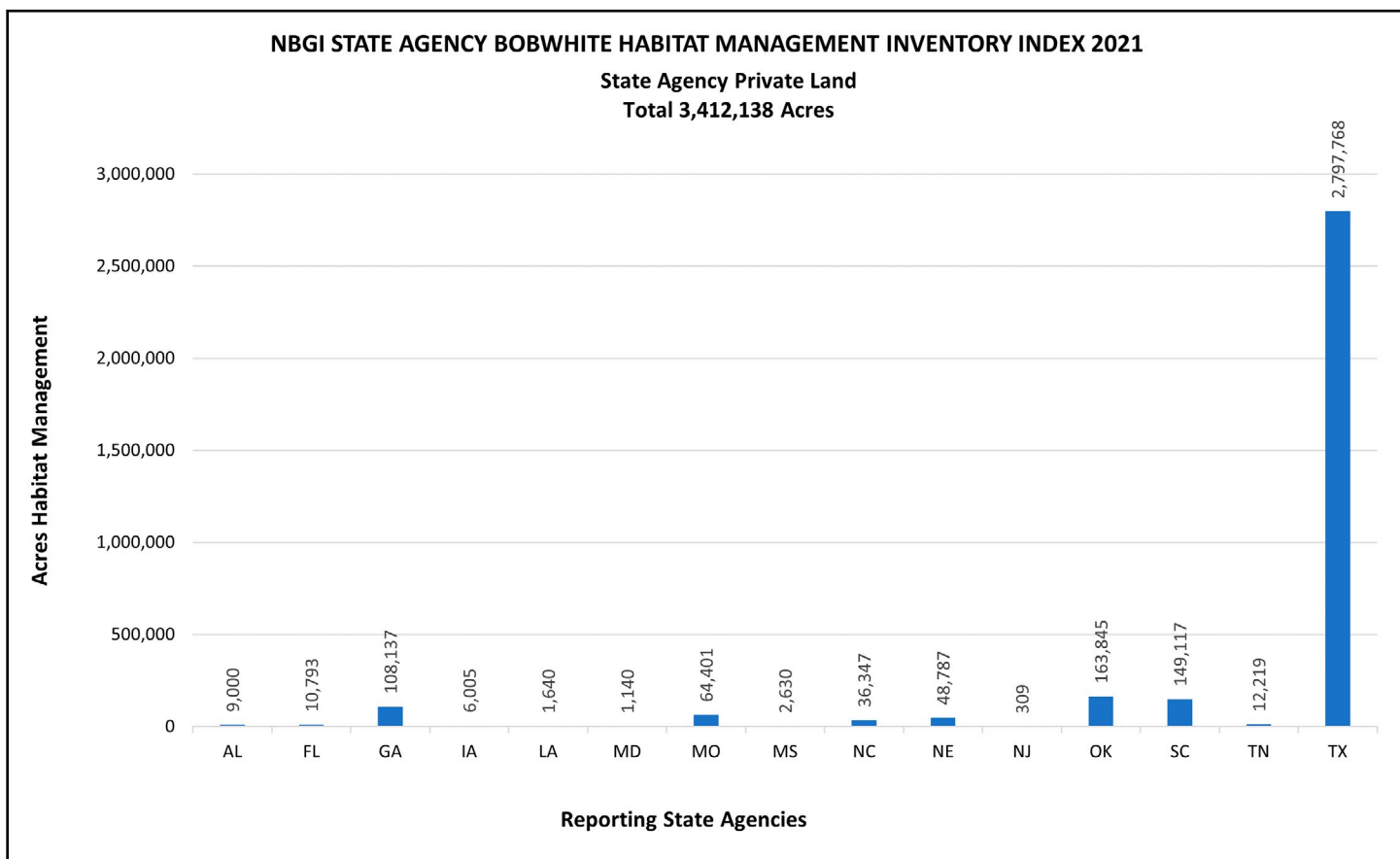


Figure 2. 2021 NBGI State Agency Bobwhite Habitat Management Index for 15 state-led private land programs. Index is acres of habitat managed during the reporting year (ranging from July 1, 2020, to January 1, 2022).



- 9,000 (AL, very confident),
- 10,793 (FL, somewhat confident),
- 108,137 (GA, very confident),
- 6,005 (IA, very confident),
- 1,640 (LA, very confident),
- 1,140 (MD, somewhat confident),
- 64,401 (MO, very confident),
- 2,630 (MS, very confident),
- 36,347 (NC, moderately confident),
- 48,787 (NE, very confident),
- 309 (NJ, very confident),
- 163,845 (OK, very confident),
- 149,117 (SC, somewhat uncertain),
- 12,219 (TN, moderately confident), and
- 2,797,768 acres (TX, very confident).

Private Land Enrolled in US Department of Agriculture Farm Bill

For 2021, on private lands where management was based on USDA Farm Bill programs, 8 state agencies reported on 10 programs, practices, and management delivered by partners for a total 209,305 acres of bobwhite habitat management (Figure 3). State coordinator acreage reports (state, program/practice/delivery, coordinator confidence rating) included the following:

- 4,200 (AL, USDA NRCS, somewhat confident),
- 26,679 (AR, USDA Farm Bill Quail Forever (QF) Delivered, moderately confident),
- 2,595 (AR, USDA Farm Bill AGFC Delivered, moderately confident),
- 135,326 (GA, USDA Farm Bill GDNR Delivered, moderately confident),
- 2,482 (IA, Pheasants Forever Delivered, moderately

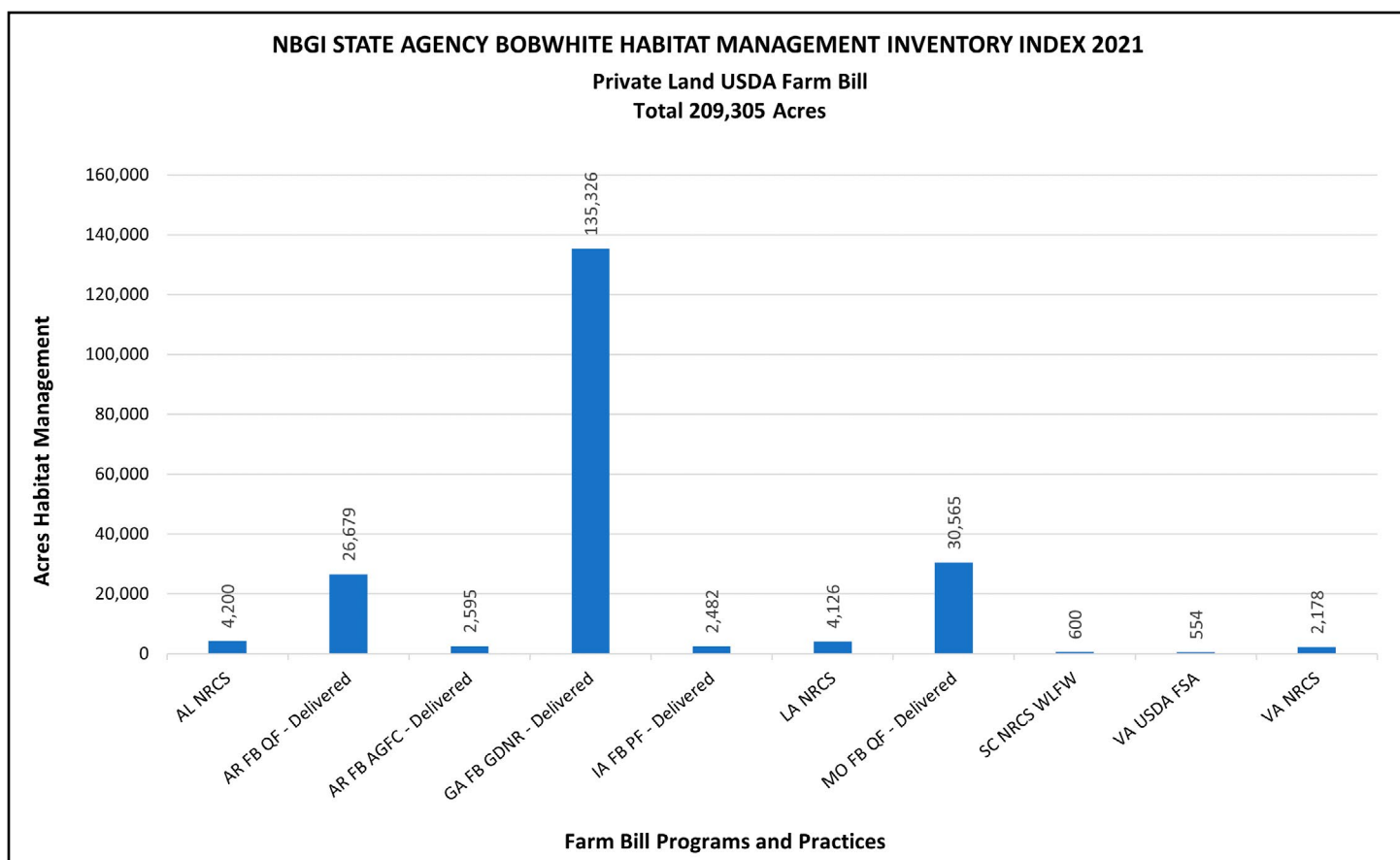


Figure 3. 2021 NBGI State Agency Bobwhite Habitat Management Index for 8 states and 10 US Department of Agriculture Farm Bill funded programs. Index is acres of habitat managed during the reporting year (ranging from July 1, 2020, to December 31, 2021).

Acronyms: FB (Farm Bill), FSA (Farm Services Agency), NRCS (Natural Resources Conservation Service), USDA (US Department of Agriculture), WLFW (Working Lands for Wildlife); AR, GA, IA, and MO program delivery by AGFC (Arkansas Game and Fish Commission), GDNR (Georgia Department of Natural Resources), MDC (Missouri Department of Conservation), PF (Pheasants Forever), and QF (Quail Forever).



- confident),
- 4,126 (LA, USDA NRCS, very confident),
- 30,565 (MO, USDA Farm Bill QF Delivered, moderately confident),
- 600 (SC, USDA NRCS WLFW, somewhat confident),
- 554 (VA, USDA FSA, somewhat confident), and
- 2,178 acres (VA, USDA NRCS, somewhat confident).

Partner Private Land

For 2021, 8 state agencies reported on 11 partner private land programs that contribute to quail management for a total of 332,441 acres (Figure 4). This category of habitat management continues to recognize the important contributions in Legacy Landscapes (e.g., Tall Timbers Research Station and Land Conservancy [TTRS]) and by quail non-government organizations, such as Quail Forever and Quail and Upland Wildlife Federation. State quail coordinators are increasingly recognizing partner management, resulting in a more diverse picture of quail

conservation, including programs of the USDA Farm Bill that specifically target quail restoration (Figure 4).

State coordinator acreage reports (state, program/practice/delivery, coordinator confidence rating) included the following:

- 3,600 (AR, Quail and Upland Wildlife Federation, moderately confident),
- 981 (AR, Quail Forever Acres for Wildlife, moderately confident),
- 1,416 (AR, AGFC Acres for Wildlife, moderately confident),
- 180,831 (FL, TTRS, moderately confident),
- 8,126 (MO, Quail Forever, moderately confident),
- 29,600 (MO, Quail and Upland Wildlife Federation, very confident),
- 1,900 (MS, Quail and Upland Wildlife Federation, very confident),
- 3,325 (NC, Quail and Upland Wildlife Federation,

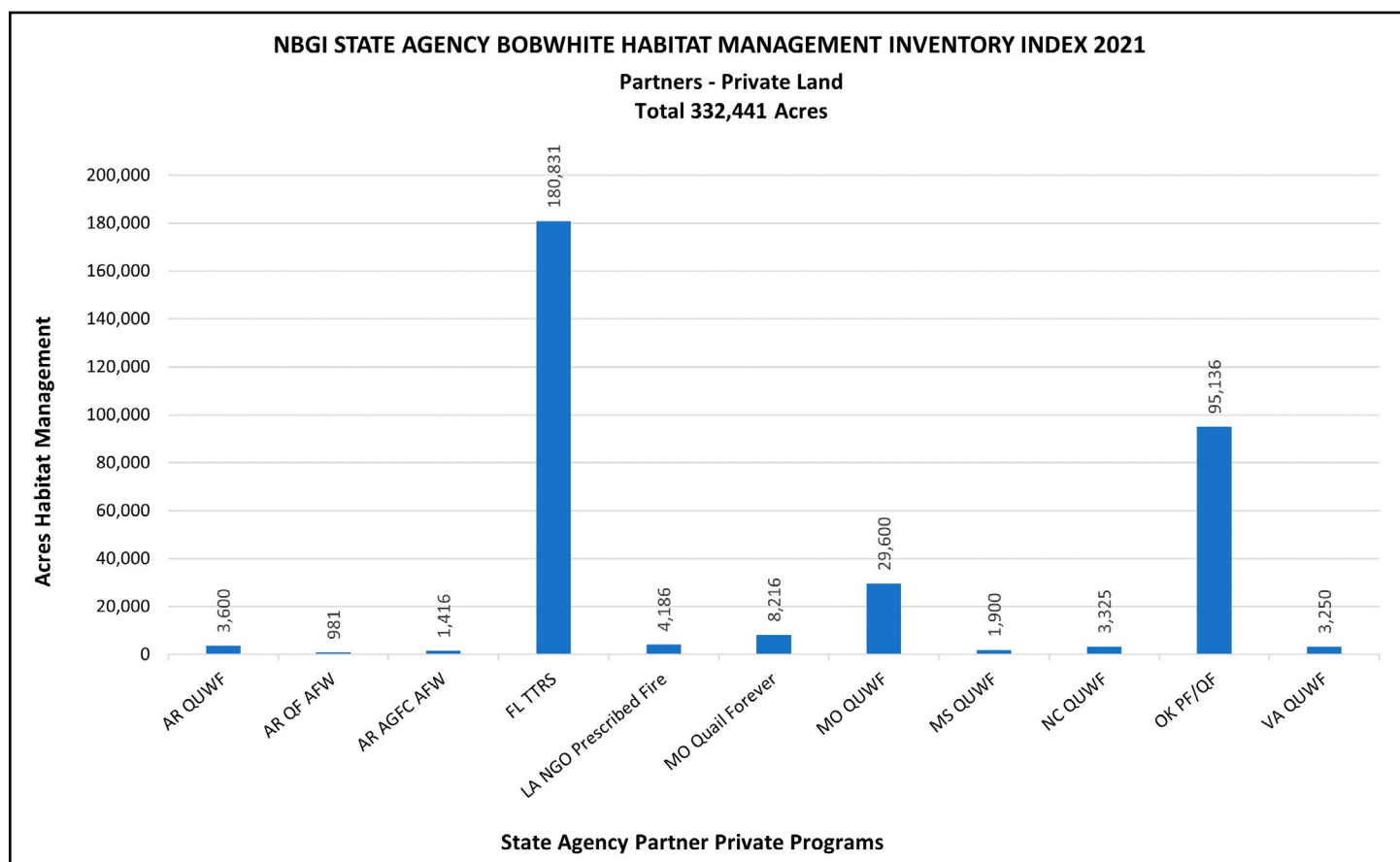


Figure 4. 2021 NBGI State Agency Bobwhite Habitat Management Index for 11 partner private land programs. Index is acres of habitat managed during the reporting year (ranging from July 1, 2020, to December 31, 2021).

Acronyms: AFW (Acres for Wildlife), AGFC (Arkansas Game and Fish Commission), PF (Pheasants Forever), QF (Quail Forever), QUWF (Quail and Upland Wildlife Federation), and TTRS (Tall Timbers Research Station and Land Conservancy).



moderately confident),

- 95,136 (OK, Pheasants Forever/Quail Forever, very confident), and
- 3,250 acres (VA, Quail and Upland Wildlife Federation, somewhat confident).

Partner Public Land

For 2021, 7 state agencies reported on 13 partner public land programs that contribute to quail management for a total of 107,825 acres (Figure 5). State coordinator acreage reports (state, program/practice/delivery, coordinator confidence rating) included the following:

- 1,198 (AR, NBGI National Park Service Pea Ridge Focal Area, moderately confident),
- 1,525 (IA, NBGI Ringgold Focal Area, very confident),
- 578 (IA, NBGI Shawtee Focal Area, moderately confident),
- 5,992 (LA, NBGI USFS Kisatchie-Vernon Focal Area, very confident),

- 634 (NJ, NBGI Dix WMA Focal Area, very confident),
- 1,128 (PA, NBGI Letterkenny Army Depot Bobwhite Quail Focus Area, very confident),
- 3,504 (SC, Forestry Commission, very uncertain),
- 2,110 (SC, Parks Rec and Tourism, somewhat uncertain),
- 21,609 (SC, USFS Enoree District, somewhat confident),
- 27,025 (VA, US Department of Defense, somewhat confident),
- 2,003 (VA, Department of Conservation and Recreation, somewhat confident),
- 36,251 (VA, USFS, somewhat confident), and
- 4,268 acres (VA, NBGI Big Woods/Piney Grover Focal Area, moderately confident).

Summary

In this eleventh year of the NBGI State Agency Habitat Management Inventory, 19 state agency coordinators reported 4,593,452 acres of bobwhite habitat

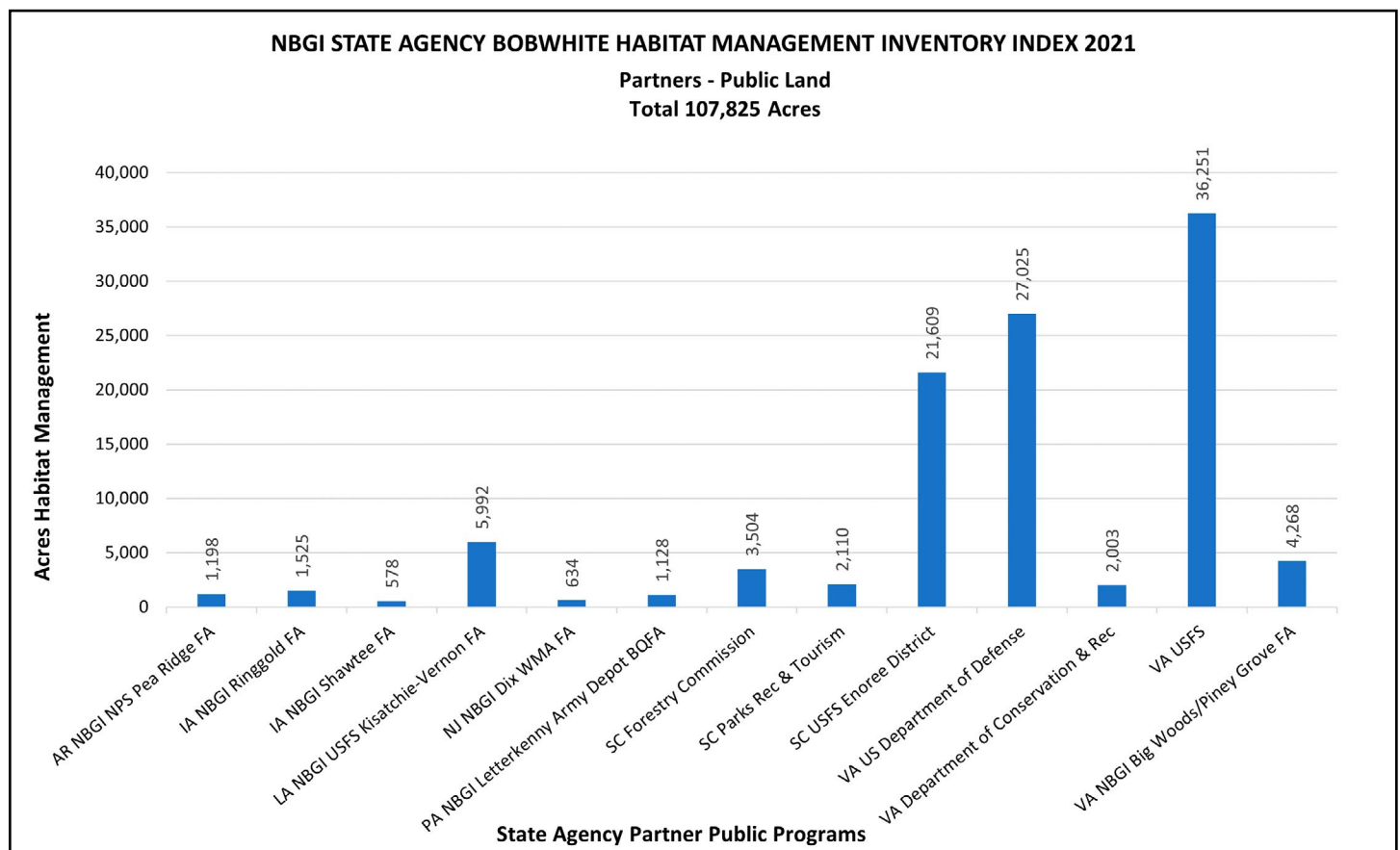


Figure 5. 2021 NBGI State Agency Bobwhite Habitat Management Index for 13 partner public land programs. Index is acres of habitat managed during the reporting year (ranging from July 1, 2020, to April 15, 2022).

Acronyms: BQFA (Bobwhite Quail Focus Area), FA (Focus or Focal Area), NPS (National Park Service), USFS (US Forest Service), and WMA (Wildlife Management Area).



management for 65 programs. Total acreage was up from 3.6 million acres last year, which is a reflection of state coordinators continued recognition of the many efforts by partners to put habitat on the ground.

Across the past 11 years, three of the NBGI Inventory land categories—State Agency Public Land, State Agency-Based Private Land, and Private Land enrolled in USDA Farm Bill—have been standardized and are displayed in Figure 6. The trend of USDA Farm Bill programs continues upward this year, showing a 128,049 acre increase compared to 2020. Another positive trend seen this year is a marked uptick in Agency-Based Private Lands management. There has been an 919,146 acre increase with Georgia, Missouri, and Texas reporting the largest increases in management activities

on their private land. Additionally, the downward trend since 2018 in Agency-Based Public Lands management has started to stabilize with a small increase of 78,657 acres compared to 2020. Bobwhite conservation has traditionally been based on habitat on private lands, and the Inventory bears this out with 86% of all management occurring under the private land categories for the reporting year of 2021.

In summary, it is clear from the NBGI Habitat Inventory that state wildlife agencies and partners are continually working on the foundation of bobwhite populations, habitat management. Regardless of program size, land is being improved for the benefit of many species of wildlife, and in many cases, quail hunting is improved.

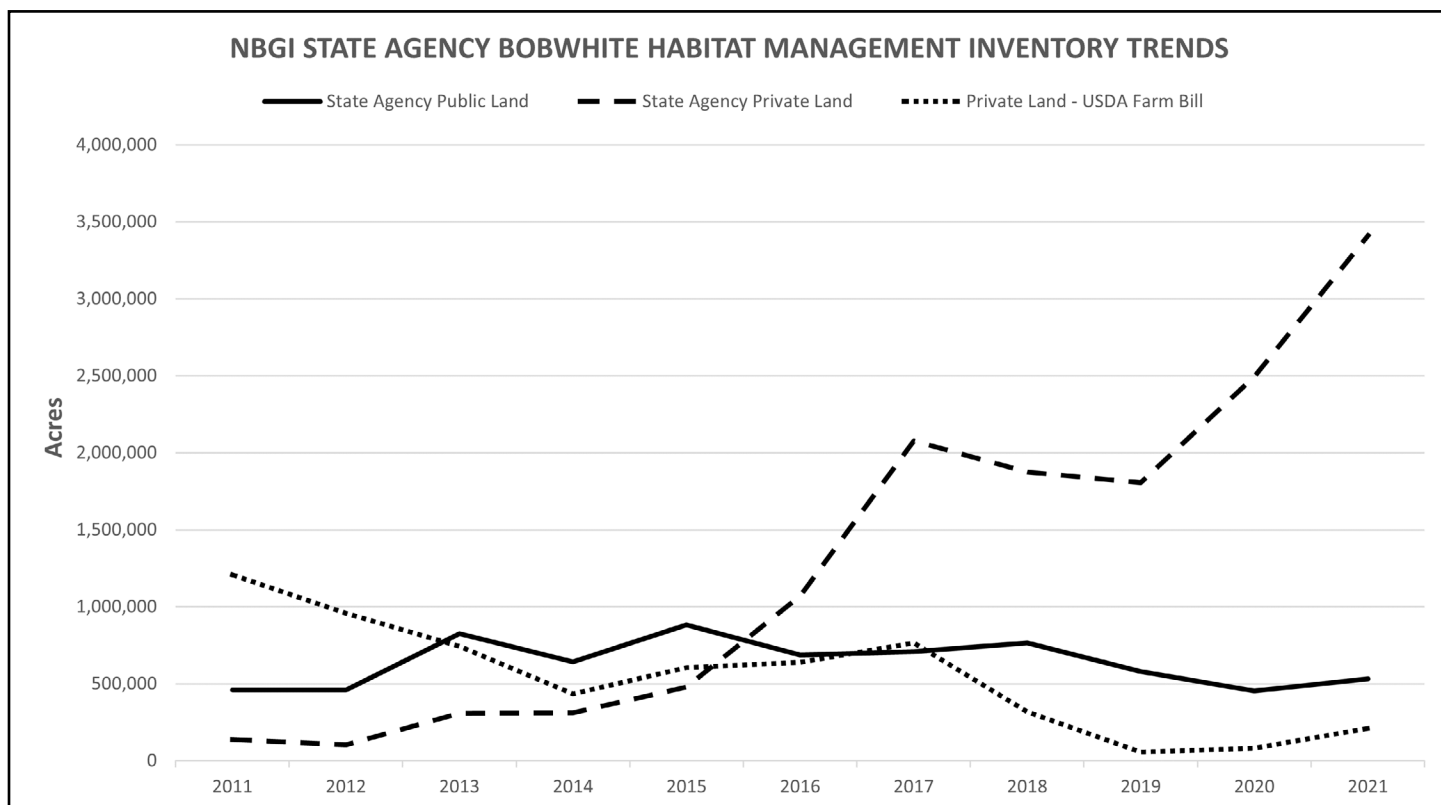


Figure 6. Trends in NBGI State Agency Bobwhite Habitat Inventory Index, 2011—2021. Includes data from standardized categories identified in Figures 1-3.



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

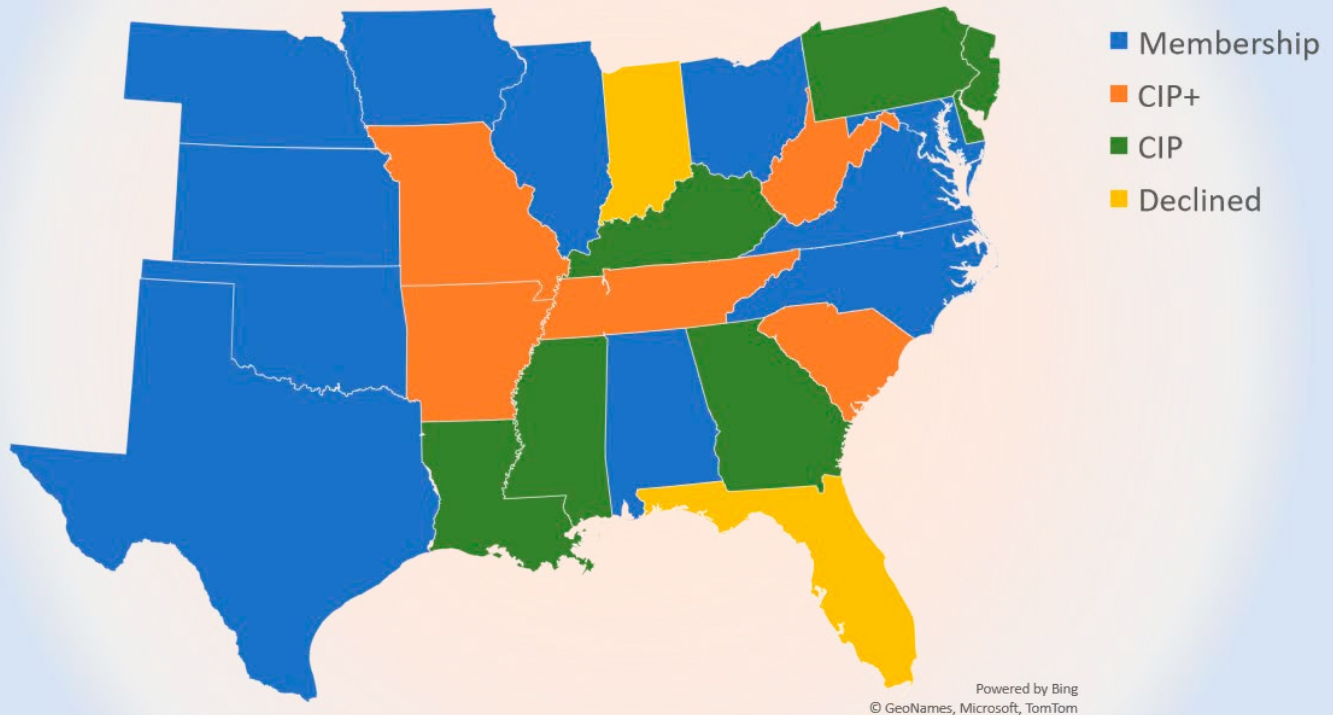
ALPFC – Alabama Prescribed Fire Council
BBS – USGS North American Breeding Bird Survey
BMP – Best Management Practices
BQFA – Bobwhite Quail Focus Areas
BQI – Bobwhite Quail Initiative
CIP – Coordinated Implementation Plan (NBGI CIP)
CNF – Conecuh National Forest
CP – Conservation Practice (as used in 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





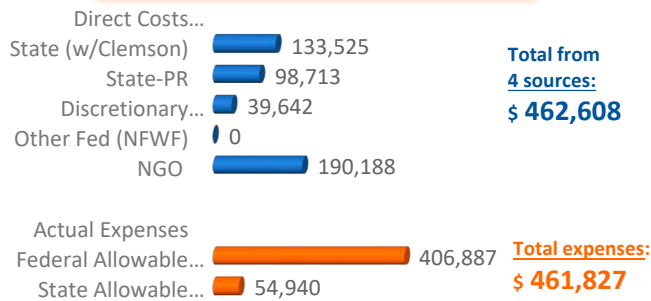
FY23 NBGI Services Summary



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

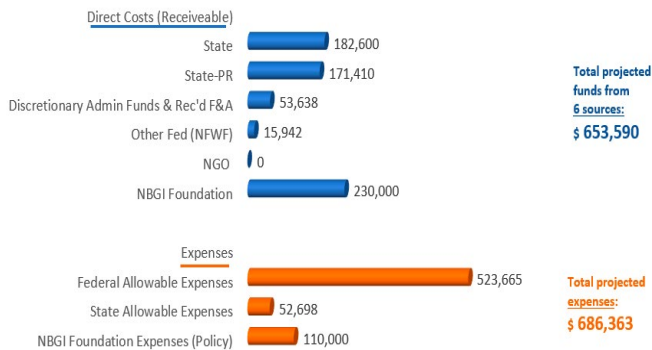
FY22: July 01, 2021–June 30, 2022 ♦ FY23: July 01, 2022 – June 30, 2023

FY22 Financials Actual



FY22 NBGI Type of Cost	Total Actual FY22 Expenses	Total Actual FY22 Federal Eligible Expenses	Total Actual FY22 State Eligible Costs
Salaries	\$ 270,371	\$ 246,981	\$ 23,390
Benefits	\$ 112,766	\$ 103,012	\$ 9,754
Travel	\$ 31,204	\$ 30,878	\$ 326
Printing (flyers/publication)	\$ 782	\$ 731	\$ 51
Website hosting/domain renewals/CCIT servers	\$ 16,912	\$ 16,912	\$ -
Postage/Freight/Shipping	\$ 185	\$ -	\$ 185
Dues/Memship fees/Sponsorship fee	\$ 3,610	\$ 3,610	\$ -
Office Digital devices	\$ 10,681	\$ -	\$ 10,681
Project supplies	\$ 277	\$ 277	\$ -
Office supplies	\$ 1,081	\$ 527	\$ 554
Subcontractor	\$ 13,960	\$ 3,960	\$ 10,000
Total Actual Expenses	\$ 461,827	\$ 406,887	\$ 54,940

FY23 Financials Projected



FY23 NBGI Type of Cost	Total Estimated FY23 Annual Costs	Total Estimated FY23 Federal Eligible Costs	Total Estimated FY23 State Eligible Costs
Salaries	\$ 344,100	\$ 308,158	\$ 35,943
Benefits	\$ 147,963	\$ 132,508	\$ 15,455
Travel	\$ 54,000	\$ 60,000	\$ -
Printing (flyers/publication)	\$ 9,500	\$ 9,500	\$ -
Website hosting/domain renewals/CCIT servers	\$ 4,000	\$ 4,000	\$ -
Postage/Freight/Shipping	\$ 300	\$ -	\$ 300
Dues/Memship fees	\$ 2,000	\$ 2,000	\$ -
Office Digital devices	\$ 500	\$ -	\$ 500
Project supplies	\$ 3,000	\$ 3,000	\$ -
Office supplies	\$ 500	\$ -	\$ 500
Subcontractor (Policy) thru NBGIF	\$ 110,000		\$ 110,000
Subcontractor (Other)	\$ 10,500	\$ 10,500	
Total Projected Expenses	\$ 686,363	\$ 529,665	\$ 162,698



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.





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