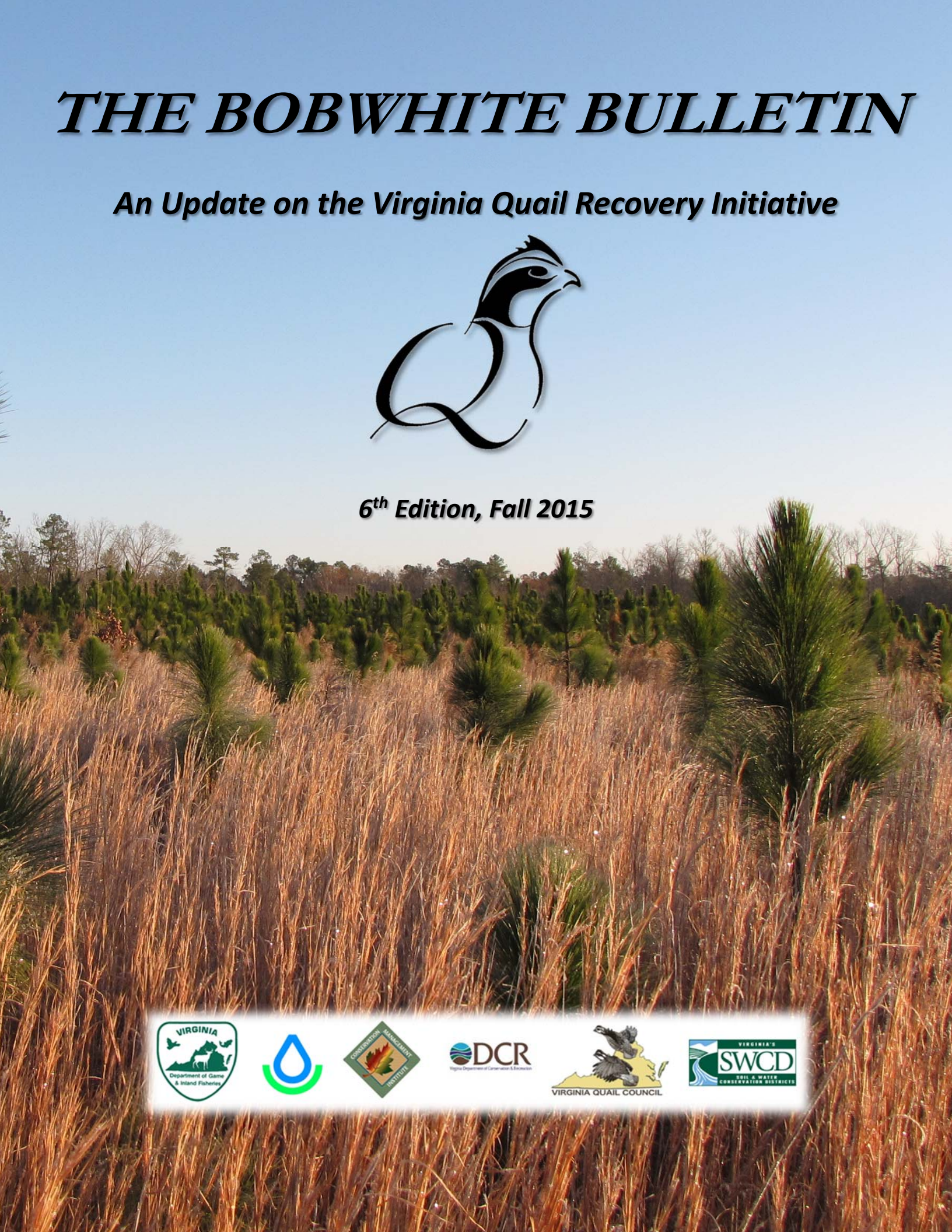
THE BOBWHITE BULLETIN

An Update on the Virginia Quail Recovery Initiative



6th Edition, Fall 2015

Welcome from the Quail Team!

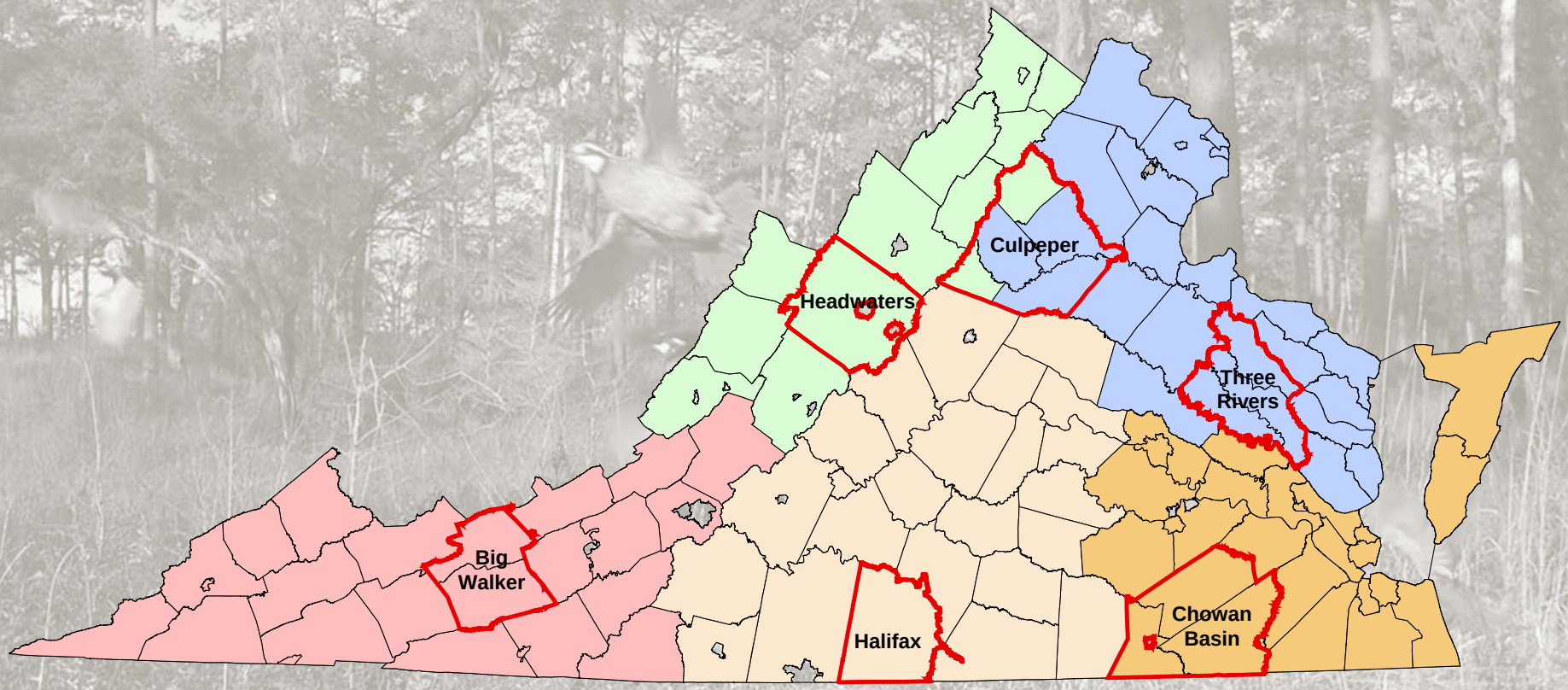
Quail, that's the name of the game around here! Welcome, folks, to our sixth edition of *The Bobwhite Bulletin*, your annual update on the status of Virginia's Quail Recovery Initiative (QRI), a cooperative effort to restore early successional habitat and the Northern Bobwhite population in the Commonwealth of Virginia. Our exciting work is on-going and this newsletter will highlight selected thoughts, ideas and projects from our five Private Lands Wildlife Biologists (PLWBs) and Team Leaders. Amazingly, for the first time in forever, we haven't had any turnover in staff and you'll be happy to see some team continuity. This year *The Bulletin* also highlights the work of one of our best partners, Virginia Working Landscapes at the Smithsonian Conservation Biology Institute.

The team's 2015 could be called the year of outreach. You may have noticed our new quail logo on the cover of *The Bobwhite Bulletin* this year. The logo is part of our new marketing efforts to raise the profile of the QRI in Virginia. We envision the logo to be what the Nike swoosh has been or the Browning buck or, well, you get the point. Within the next six months you should begin to see new quail products sold from the Department of Game and Inland Fisheries' eStore and hopefully your local PLWB will be sporting some of the new products. In addition to the logo, our state quail website has been revamped and our Facebook page continues to impress. Momentum is the key. Virginia, in terms of quail potential, we aren't Texas, we aren't Florida. Nonetheless, we are blessed to be in a beautiful Commonwealth with much potential for quail habitat and population rebound. From the Chesapeake Bay to the Appalachians, we are seeing quail respond to habitat efforts. However, on a broader scale, we are coming to also appreciate the value of our work to so many other species from the Monarch Butterfly to declining bumblebees and songbirds.

Won't you join our efforts today? We look forward to hearing from you!

ANSWERING THE CALL: THE QUAIL RECOVERY INITIATIVE

Financial Assistance is Available – Join the Quail Recovery Team Today



Quail Priority Areas

Christiansburg: (540) 381-4221 x 128

Halifax: (540) 315-0074

Hanover: (804) 537-5225 x 119

Smithfield: (757) 357-7004 x 126

Verona: (540) 248-6218 x 108

Marc Puckett - Project Leader: (434) 392-8328

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DCR Virginia Department of Conservation & Recreation

FSA

USDA NRCS United States Department of Agriculture Natural Resources Conservation Service

Virginia Department of Game & Inland Fisheries

Virginia's SWCD Soil & Water Conservation District

Virginia Department of Forestry

Jay Howell: Team Leader - DGIF Richmond Office

One of the greatest challenges we face with the quail recovery is finding a way to get people to care about the problem. Since you're reading this, you probably already have your own reasons for being interested in what's going on with bobwhites, but your average Commonwealth citizen probably doesn't spare a minute to worry about the steady decline of a little brown bird. I was in a training class where we were learning how to connect with the public. The instructor said that people respond to stories far more than facts and figures. So, for this article, I thought I'd share a story about why I care about little brown birds so that maybe someone else will too.

It was my second year of college and I was in Principles of Ecology class. Like many people in university, I wasn't entirely sure what I wanted to pursue for my academics, but I always liked biology. We were studying mycorrhizae, the symbiotic fungus that lives in a relationship with plants and their roots. The fungus provides improved water and nutrient uptake from the soil and the plant provides carbohydrates to the fungus. That day in class I had a glimpse. How improbable that beneath the surface of the mightiest forest the critical relationship between two vastly different forms of life is what makes the whole thing possible. This one relationship leads to a million other connections that build and rely upon each other. I felt like I could see a vast net connecting you, me, and every living thing. I've been studying that net ever since trying to learn everything I can about those tiny fibrous lines that I saw that day.

People today feel disconnected from the world. Technology and the fast pace of modern life makes nature seem far away. What I know is that nothing could be further from the truth. Everyone and everything is connected, sometimes in startling and dramatic ways but more often quietly beneath the surface. Not only are we connected, we are dependent. Take a piece away and we may not feel it right away, but we are all made less by its absence. That's why I care about a little brown bird that lives in the weeds. To give you another metaphor, think of the world as a vast orchestra with each living thing an instrument doing its part to form the greater harmony. Take away a violin and you may not be able to hear it but the harmony is just a little bit weaker. Lose enough pieces and harmony becomes cacophony.

Bobwhites are one piece in a rich tapestry that makes up the natural world. Their decline is indicative of changes that are occurring not just for one species but a whole host of species that act in concert with each other. Together we must ensure that those connections aren't lost, because once they are gone they could be gone forever.

Amy Johnson and Charlotte Lorick: Virginia Working Landscapes (VWL)

It's been another busy year for biodiversity studies on Virginia's working lands. We've been up to our ears in unmowed meadows, bee identifications, and data sheets and for us, that's great. We are part of the Virginia Working Landscapes (VWL) team at the Smithsonian Conservation Biology Institute (SCBI). VWL works to promote the conservation of Virginia's native biodiversity and encourage the sustainable use of land through ecosystem research, habitat monitoring and community engagement. Since 2010, VWL has monitored plants, birds, and pollinators on public and private grasslands throughout 15 counties in Virginia. We have worked with over 50 different landowners and surveyed more than 100 fields. The information collected is used to inform landowner management and develop best practices for conserving wildlife habitat on working lands.

One of the reasons we've had such a productive year at VWL is due to partners like the Virginia Quail Recovery Initiative (VQRI). This year we joined forces with this dedicated team to share knowledge, network contacts, and resources to further our mutual conservation efforts in the region. Together, we expanded our reach by engaging new landowners, offered more workshops to boost community outreach and prioritized regional management needs at the annual VQRI meeting.

So what does this mean for quail? Over the 5 years that we've surveyed fields, we have seen very few quail – and we often hear the same story from landowners. "I used to hear bobwhites on the farm but haven't...

Field Sparrow Nest © Amy Johnson

Amy Johnson and Charlotte Lorick: VWL continued...

...heard them for years. Where did they go? What can I do to bring them back?" This is where the partnership with VQRI comes into action. Our survey area overlaps with coverage areas of several VQRI private lands biologists (PLBs). These PLBs are equipped with knowledge specific to the goals of landowners wanting to restore quail to their property. While VWL monitors habitats and species on private lands, we don't provide the technical assistance to answer these questions. So if landowners want to help bring back the quail… working with PLBs on habitat restoration is the best approach.

But, how does one recognize the "progress" of habitat restoration? How do PLB's and landowners know if their efforts are "working"? That's the answer VWL seeks through our monitoring. Many of these restoration projects involve the conversion of non-native cool season grasses, such as fescue, to native warm season grasses and forbs such as little bluestem and wild bergamot. Our field team, made up almost entirely of local volunteer citizen scientists, monitors both of these field types. Each year we train and deploy about 50 volunteers who brave the heat, gnats, thistles and ticks to measure how these projects impact biodiversity. Many environmental factors influence progress so although not all projects produce quail (though we've seen it happen in the first year!), there's often other wildlife reaping the benefits of these efforts. Here are some observations we've made at our Virginia sites:

1.**Increased relative abundance of native grasses helps breeding grassland and shrubland birds**. We found a positive relationship between the proportion of native grasses and the diversity of bird species that are dependent on grass- and shrublands in fields during the breeding season. Native grasses provide excellent cover and structure for nesting birds and fledglings. Some common native grass species we observe include big bluestem, Eastern gammagrass, Indiangrass and switchgrass.

2.**In native grasslands, including forbs and legumes increases the diversity of grassland birds.** In the same study we found that grass- and shrubland bird diversity increased with native forb plant richness. Forbs can be an excellent source of protein for nestlings as they host many species of insect larvae at the peak of nesting season. Important forbs for birds include asters, beggarweed, false indigo and goldenrod.

3.**Migrating birds utilize native grass meadows to prepare for migration.** Although our team has not been surveying native grass meadows during migration, we've had several instances where we've observed large flocks of grassland species, such as bobolinks, utilizing these meadows as post-breeding stopovers to molt and feed in preparation for migration. We recommend delaying bush-hogging to optimize the resources available to birds during August and September. This also leaves plenty of cover for the winter months, a vulnerable time for quail.

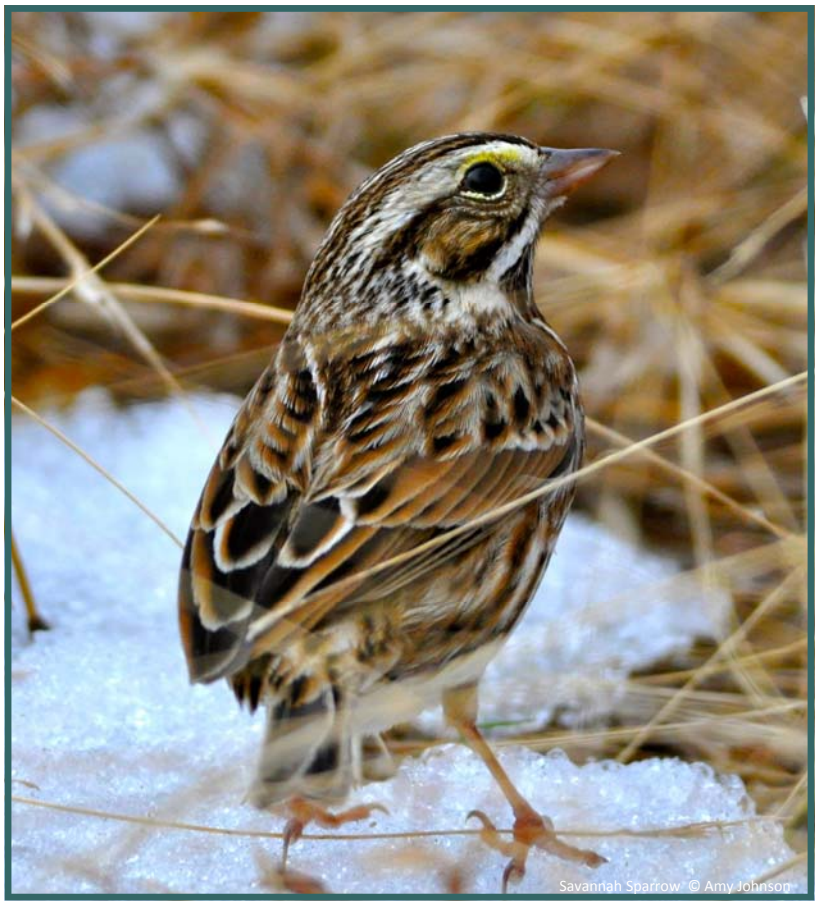
Female Common Yellowthroat, a Migratory Songbird © Amy Johnson

Amy Johnson and Charlotte Lorick: VWL continued...

Native warm season grass meadows are a vital resource for wintering birds such as the American Tree Sparrow (pictured below). We have surveyed wintering bird communities in fields comprised of both native warm season grasses and cool season grasses. The difference between field types in bird abundance alone has been impressive. One field, for example, we observed a 100-fold increase in the average number of birds after the field was converted to a native grass meadow. This could be due to the abundance of seeds that remain on the native species throughout the wintering months, but is also likely due to the cover they provide during harsh weather and heavy snow. Native warm season grasses create tent-like pathways and shelters beneath the meadow canopy throughout the winter, while cool season grasses tend to lay flush with the ground. With all of this in mind, put off your fall mowing plans until early spring.

VWL surveys have been a great way to measure the positive impacts that the VQRI has had not only on quail, but on the grassland community as a whole. **These positive impacts are how we recognize "progress"**.

If you're interested in measuring the progress of VQRI habitat projects on your property, we are always on the lookout for new survey fields. Our current survey region ranges from Loudoun to Augusta County and we require fields to be a minimum of 20 contiguous acres of grassland. Our survey season begins in mid-May of each year and spans through the end of August, during which time we ask that your field is free from management (bush-hogging, heavy grazing, spraying, etc.). At the end of the year, each landowner is provided with a report of our findings which is also available to the public on our website. To see last year's results, to find helpful resources, or for more information on the work we do and the lessons we've learned, visit us at www.VAWorkingLandscapes.org. The more people we get involved, especially prior to a habitat restoration project, the more success stories we'll have to share!



David Bryan: PLWB - Northeast VA Field Office

Over the years, I have been blessed to work with many engaged, enthusiastic landowners, but few compare to Bill and Ann Tidball of Madison County's Ashland Farm. The Tidballs have long been involved with land conservation, as they placed their land in easement and fenced off their streams through the Conservation Reserve Enhancement Program, an effort which resulted in their winning the 2009 Bay Friendly Clean Farm Award. Despite all this, Bill wanted more and his next pursuit was wildlife – specifically the elusive Northern Bobwhite quail.

Meeting Bill for the first time in early 2013, I was impressed with his joyful demeanor and genuine interest in wildlife. Working with myself and Jack Kauffman of the Virginia Department of Forestry (VDOF), we were able to develop a habitat plan for the farm that would help Bill meet his goals. As a first step, Bill enrolled in the State Forestry Quail program, funded by the Virginia Department of Game and Inland Fisheries and administered by VDOF. Through this program, he was offered cost-sharing assistance to plant over 40 acres of shortleaf pines. Shortleaf is a native, slower-growing pine that allows for understory growth of quail habitat before the pines reach canopy closure.

Elsewhere, Bill decided to develop wildflower meadows for the quail and other species with help from the Quail Best Management Practices Program. Native warm season grasses such as Little Bluestem were planted in an effort to provide nesting opportunities for quail and songbirds, and wildflowers such as Black-eyed Susan, Plains and Lanceleaf Coreopsis, and Partridge Pea were also planted to provide brooding areas, attract insects – the primary food for chicks – and produce seed for adults. Additionally, Bill has worked on managing invasive species throughout his property including johnsongrass and ailanthus, or tree-of-heaven.

Prior to starting their wildlife work, Bill and Ann had not heard the Bobwhite call in two years. That has certainly changed. Now wild Bobwhites are calling on the property, almost every day in the spring. Chicks have been seen around their home. Bill has also commented on the amount of songbirds they see – the number and variety have both increased. They no longer fill their bird feeders as the birds take advantage of the habitat around them. More recently, through the efforts of the Virginia Working Landscapes team (featured elsewhere in the Bulletin on page X), the Tidballs were excited to learn that their site has attracted *Bombus pensylvanicus*, the once common but now imperiled American Bumblebee. The Monarch Butterfly has also been seen taking advantage!

Perhaps best of all, the Tidballs were not content to sit and keep the wildlife to themselves. Eager for others to get involved, the Tidballs volunteered to be a stop on our fall Quail and Pollinator Field Day...

David Bryan: PLWB - Northeast VA Field Office continued...

...in conjunction with the Virginia Working Landscapes team and, on their own time and dime, prepared lunch for the entire group. Now that is Southern hospitality! Weeks later, the Tidballs also allowed the Natural Resources Conservation Service to host a wildlife training for its field staff on the site.

I could go on and on, but you all get the picture. The Tidballs have been an inspiration to all of us in the conservation field and an example to all. Not only do they have the species on their land, the fruits of their labors, but they are willing to share with others. It is only the efforts of the Tidballs and other landowners like them that will allow our Initiative to be a success.

Jeff Jones: Team Leader - NRCS Richmond Office

The Natural Resources Conservation Services continues its commitment to the Quail Recovery Initiative and associated habitat improvements throughout the Commonwealth of Virginia. Despite a decreased budget and ever-increasing conservation challenges on the ground, our team of Private Lands Biologists continues to take the lead on habitat creation and management efforts throughout Virginia.

This coming fiscal year, payment incentives for habitat work will once again be available through the Environmental Quality Incentives Program (EQIP) to eligible landowners and producers. Key practices such as Conservation Cover for converting fescue to natives, Brush Management for invasive species work, and Prescribed Burning, to name a few, will all still be available. Additionally, we have a new practice – Wildlife Structures – for landowners interested in brush piles, rock piles or modifying existing fencing in a wildlife-friendly manner. Our first application deadline of the new fiscal year is in mid-February, so now is the time to plan. If any of these options peak your interest, please call your Private Lands Biologist today.

Bob Glennon: PLWB - Southeast VA Field Office

The Upland Bird Habitat Buffer practice, also known as CP-33, is part of the Conservation Reserve Program administered by the USDA's Farm Service Agency. It is one of the 'continuous' practices that are approved without competing with other applications if the land and the landowner are eligible for the practice.

The best CP-33 results have been achieved with a seed mixture of the native little bluestem and the native wildflowers partridge pea, black-eyed susan, lanceleaf coreopsis, plains coreopsis, and Maximilian sunflower. That mixture contains no 'tall' native prairie grasses and no non-native species that tend to dominate the wildflowers. The seeding rates of each species vary based on the number of seeds per pound and the desired density of seeds per square foot. Balancing the numbers of seeds per square foot prevents any single wildflower species from dominating the stand.

Common Name	Scientific Name	Seeding Rate (weight of pure live seed (PLS) per acre)	Seeds per Square Foot
Grass			
Little Bluestem	Schizachyrium scoparium	3 pounds	15
Forbs (Wildflowers)			
Black-eyed Susan	Rudbeckia hirta	2 ounces	3
Plains Coreopsis	Coreopsis tinctoria	1 ounce	3
Lanceleaf Coreopsis	Coreopsis lanceolata	10 ounces	3
Partridge Pea	Chamaecrista fasciculata	2 pounds	3
Maximilian Sunflower	Helianthus maximilianii	11 ounces	3
Total		6 pounds , 8 ounces	30

The minimum widths of the buffers are 30 feet and the maximum width is 120 feet. The wider the buffer is and the longer the buffer is the better the chances are that bobwhite quail will survive, thrive, and escape predators. Optimum quail habitat contains native grasses and wildflowers (nesting habitat), annual plants that have spaces between the plants for quail chicks to hunt for insects (brood habitat), and low woody cover (headquarters habitat). Areas of native grasses and wildflowers with shrubby hedgerows and disked firebreaks within 150 feet of each other are ideal.

A relatively new successful 18-acre buffer (pictured) has been established by Jim and Leslie Kellenberger in Sussex County. They established 6500 feet of buffer 120 feet wide around crop fields with recently clear-cut forests adjacent to the buffer. The stand has germinated and grown well and the surrounding habitat supports not only quail, but a wide variety of other grassland birds. Won't you join them in their efforts?

Black-eyed Susan and Coreopsis © Bob Glennon

Lorien Huemoeller: PLWB - Southcentral VA Field Office

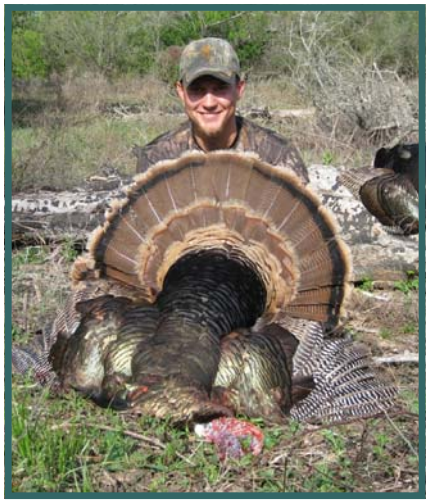
Weldon Anderson will be the first to tell you that he was born in the wrong generation. It doesn't take long to see that his property, Slick Rock Farm in Halifax County, supports this claim. I never have to go far to find restored antique cars and carriages, tobacco barns rebuilt by hand, stack poles used for hay, piles of Native American artifacts, and Civil War memorabilia. Every time I think I've seen it all, there's always something new waiting. The best part of Slick Rock Farm is that the rich cultural history on the property is not where the story ends; Weldon's desire to keep the past alive is also seen in the early successional habitat for quail that he created years ago and continues to maintain today.

Historically, the fields on the property were used for tobacco and hay. In 2011, Weldon enrolled some of the fields into the Virginia Department of Game & Inland Fisheries Best Management Practices (BMP) Program. Although this program has come and gone, Weldon's old crop fields remain in prime quail habitat. The fields are home to 3-5 quail coveys year round. Every year he disks 1/3 of the fields in strips and controls fescue and sericea lespedeza as needed. As you can see in the photos, sumac, blackberry, and numerous legumes and native grasses were waiting in the seed bank. Once the crop lands were allowed to go fallow, these beneficial plants finally got their chance to thrive.

Weldon epitomizes what the State and Federal habitat management programs hope to achieve. He used the BMP program to help create quail habitat. Once that contract was completed, he re-enrolled in the program and got further assistance to help maintain the fields for quail. Thanks to Weldon's hard work; quail, rabbit, deer, turkey, songbird, and pollinator populations increased and continue to thrive.

When asked what his favorite part of participating in the BMP program was, he quickly responded, "seeing the quail come back". It's an honor as a biologist to work with a landowner whose heart is in the right place and who's more than willing to put in the work required to maintain wonderful quail habitat. Weldon holds the same enthusiasm for brushy quail habitat as he does for the barns and carriages he's rebuilt. It is this type of motivation and willingness to commit to a long term project that makes Slick Rock Farm a wonderful success story that I'm excited to get the opportunity to share. It's always an adventure getting to step back in time to the 'good ole days' when I visit Slick Rock Farm and I'm thankful Weldon Anderson has shared so much of its history with me.

Justin Folks: PLWB - Northwest VA Field Office



I earned my Master's degree from the Caesar Kleberg Wildlife Research Institute at Texas A&M University-Kingsville in 2012 (No, not the main A&M campus in College Station and I am NOT an "aggie." TAMUK used to be Texas A&I until the 1990s, and their mascot is the javelina. Just a little history lesson for you there, but I digress…). I'm not trying to toot my own horn about it; merely setting the stage for the rest of this article.

My graduate work occurred near the city of Carrizo Springs, way down in the South Texas brush country and also within the famed "Golden Triangle" of big white-tail bucks. South Texas is a semiarid place, getting around 25-28 inches of rainfall per year, and the rainfall "pattern" can be and often is sporadic. The semiarid climate there keeps the vegetation in a grass-forb-shrub community, hence the term "brush country." When rainfall is adequate, it is one of the most diverse and beautiful ecosystems on the planet, with scores of bobwhites, small mammals, songbirds, and big deer. However, when it is dry, it is DRY! The vegetation and wildlife, however, are used to this boom-and-bust environment and it was really cool to see firsthand just how resilient quail can be.

South Texas study site in April 2010 rainy season © Justin Folks

Justin Folks: PLWB - Northwest VA Field Office continued...

I saw more quail in Texas than many will see in a lifetime and I wasn't actively looking for them (my research was actually on deer). I also saw way more hawks, coyotes, snakes, foxes, and other predators there than I've seen ANYWHERE in Virginia. Why are the hawks eating all the quail in Virginia, but not in Texas? (I hope you can pick up the sarcasm here…). While there are more hawks, etc., in South Texas than you could shake a stick at, the quail didn't seem to mind because they had all the cover imaginable available to them and within easy reach.

So what does this have to do with quail in Virginia? Everything. Take good quail cover in Virginia and put it next to quail cover in Texas - it looks exactly the same. The plant species may change, but the structure is identical. The semiarid nature of South Texas makes it the brush country while it takes disturbance to make "brush country" in Virginia. It's as simple as that.

The biggest factor determining quail abundance in Texas is rainfall. When there's rain, there are birds everywhere. When it is dry, quail seem to almost disappear. As a consequence, Texans don't really have as much control over their quail numbers, but we Virginians hold the fate of quail in our hands because we have the rain.

So, if you want to see more quail, there are two options for you:

(1) Move to Texas and pray for rain, or...

(2) Do something about it here in the Old Dominion.

Which will you choose?

Same South Texas study site in April 2011 without rain—thankfully in VA we don't have this problem! © Justin Folks

Andy Rosenberger: PLWB - Southwest VA Field Office

How do you measure a successful project? Depending on how you look at that question you may find the answer to be fairly simple or exceedingly complex. When I first started as a Private Lands Biologist I was of a simpler mindset. To me at that time, my ultimate goal was to work with landowners and provide them the tools and knowledge to get quail on their property. I was not so naïve that I did not understand the numerous other benefits of habitat work and how it can help many other species. Benefits to other species was part of my training and a highlight topic to help landowners understand why habitat creation was important. Nonetheless, quail were my number one focus.

Dr. Brian Murphy was one of the very first landowners I worked with. His property resides in Craig County and over the years has transitioned from livestock, to hay, and now wildlife. When we first started working together my goal was to help him create the habitat needed to get quail on his place. We came up with a plan to remove the fescue, plant native grasses and wildflowers, create shrub thickets, and utilize fire and a disk for management.

Each year Dr. Murphy made a little more progress. Since this was one of my first projects, I would often seek permission to bring prospective clients to see his property. These field visits really helped many landowners see firsthand what I was trying to explain to them. In every instance when we arrived, there was Dr. Murphy waiting for us. He was always more than happy to talk to the potential project landowners and would lead a tour of his property. During these tours his enthusiasm really showed when talking about his experience and observations. In addition to talking about how he performed the work, he would also highlight the benefits he has seen as his property transformed. A few of his observations have been:

- an increase in rabbits;
- deer walking his fields during the day;
- increased bird diversity including norther harriers and short-eared owls;
- nesting woodcock;

Andy Rosenberger: PLWB - Southwest VA Field Office continued...

- native wildflowers released from the seed bank once fescue competition was removed; and
- an increase in butterfly and pollinator populations.

With every visit he exhibited his contagious enthusiasm and would be sure to point out the changes he has seen and how all these observations are noticeably absent on his neighbors fescue pastures. He even pointed out how in the summer his fields at night would be bright with fireflies and he could tell where his property line was due to their absence on the other side of the property fence.

His observations and enthusiasm have shown me that success cannot simply be measured by the mere presence or absence of quail. Success is much larger than that and it is a good idea to lift your head up and look around, not when the task is done, but during the entire process to admire the change that has happened. Was his project successful?

To Dr. Murphy it was from the first time he lifted his head from the task at hand and made an observation of what had changed. He not only has changed his habitat but has helped me change my view of success. In the end I am not sure if he has helped me more than I have helped him. I gave him the technical advice, but he has been a showcase property, an educator, a staunch program supporter, and most importantly an example of how to look at the big picture when measuring success.

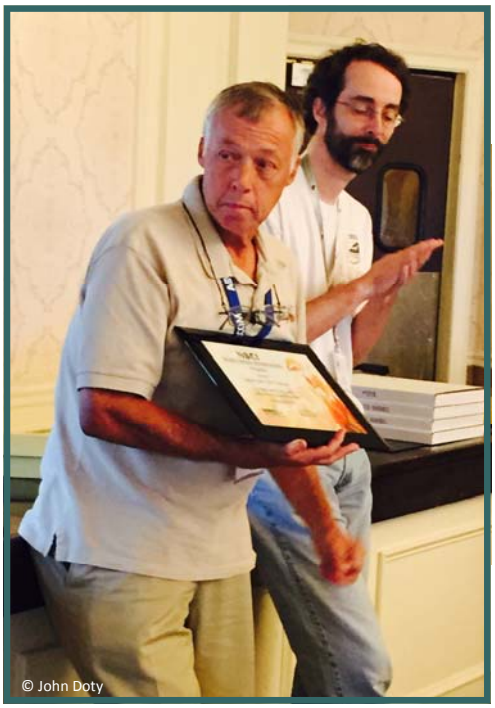
And in case you were wondering, this summer, after five years of hard work, Dr. Murphy had quail show up on his property. He was just as excited to see them as he was with all his other observations.

Annual NBTC/NBCI Report

The National Bobwhite Conservation Initiative (NBCI) had a big year for their first year under Pittman-Robertson (PR) funding. As you may recall from last year, many of the 25 NBCI states stepped up their ante with regards to helping fund NBCI staff. This past fiscal year was the first of three dedicated years of PR funding. A full report on NBCI activities is available at their website: http://bringbackbobwhites.org/. A couple of notable points, NBCI hired new Forestry, Grazing and Grasslands, Database, and Agricultural Policy Coordinators, Steve Campbell from Georgia, Jef Hodges from Missouri, Derek Evans from Tennessee, and Tom Franklin from DC, respectively. They are top notch people and are sure to accelerate NBCI's gains this year.

After two years as the NBCI Management Board Chairman, Virginia Department of Game and Inland Fisheries Director Bob Duncan will become past-chair this September, and Florida Fish and Wildlife Commission Director Nick Wiley will assume the Chairmanship. Director Duncan led NBCI through a pivotal moment in their history. In April of 2014 NBCI was essentially out of funding. With Chairman Duncan's help, and help from many others, the NBCI states stepped up and agreed to do something unprecedented, jointly funding NBCI staff using a portion of their Federal Aid in Wildlife Restoration Funds (known as Pittman-Robertson funds). This represented a major paradigm shift and signaled confidence in NBCI as an effective entity. Mr. Duncan will likely continue to play a key role with NBCI and his leadership has been greatly appreciated.

The 21st annual meeting of the National Bobwhite Technical Committee was hosted successfully by the New Jersey Department of Game and Fish this August, in Galloway, New Jersey. Approximately 100 biologists and managers attended. Our hats are off to the New Jersey staff and their partners for making the event a good one. Highlights this year included informative presentations on quail translocation from Dr. Theron Terhune of Tall Timbers Research Station, including one ongoing project in New Jersey. And at this year's banquet, two new entities were recognized as Bobwhite Legacy Landscapes – The Red Hills Region of north Florida and south Georgia, and the Rolling Plains Region of north Texas and western Oklahoma. Group achievement awards went to Tall Timbers Research Station and Land Conservancy and the Georgia DNR for their joint work on quail translocation, and the Center for Native Grasslands Management was awarded for their yeoman's efforts on behalf of bobwhites on working farms. John Morgan, Kentucky Small Game Project Leader was presented the annual leadership award for his outstanding efforts in leading the development of NBCI's Coordinated Implementation Program. And six states presented NBCI Firebird Awards: Florida – the Upland Ecosystem Restoration Project, Kentucky – Shaker Village / Pleasant Hill, Louisiana – Christian Winslow and the Sandy Hill Burn team, Missouri – Kyle Hedges and Frank Loncarich, Tennessee – Clint Borum – Landowner Incentive Program Biologist, and Virginia – Bob Glennon – Private Lands Wildlife Biologist (Go Bob!!).


© John Doty

This year NBCI developed a proposal for consideration of the steering committee to begin encouraging the development of a national Upland Gamebird Stamp modeled after the federal Duck Stamp which has been providing funds for waterfowl conservation since the 1930s. The steering committee voted to move forward with finding an entity to take on this task, or find other innovative ways to gain better, more consistent funding for upland gamebird conservation.

Workshop Report: QRI/VWL Quail and Pollinator Field Day

On September 11th, the Quail Team partnered with Virginia Working Landscapes, the Virginia Department of Forestry, Piedmont Environmental Council, J.W. Townsend, Inc., and NRCS to put on a Quail and Pollinator Habitat Field Day at the Fletcher and Tidball properties in Rappahannock and Madison counties. We had over 35 attendees on an absolutely gorgeous day and the event was a huge success. All of the attendees were enthusiastic and engaged as we discussed the overlap among quail, pollinators, and other wildlife, and what it takes to create and maintain their habitat.

At the Fletcher property, Amy Johnson of Virginia Working Landscapes discussed the results of their bird surveys, and how the conversion of cool season sod to "quail habitat" has impacted the bird communities using the property. I spoke about the management and creation of "quail habitat," and we looked at examples of 3 year-old fields that had been disked versus those that had not been disturbed, a 2 year-old planting, and a planting in its year of establishment. We also discussed the value in allowing a native seedbank to thrive by solely killing sod at the right time, of which, Mr. Fletcher has done a lot with great results.

Hosting at Ashland Farm in Madison, Mr. and Mrs. Tidball generously provided lunch to a hungry crowd and then the group split up and went to separate habitat stations across the farm. Some participants went on a "pollinator walk" with PLB David Bryan and Celia Vuocolo, pollinator specialist with Virginia Working Landscapes. The rest of the group learned about the establishment of shortleaf pine, its importance, and its benefit to quail and other wildlife from Jack Kauffman, forester with the Virginia Department of Forestry and Marc Puckett. The final station was with J.W. Townsend, Inc., who established the pollinator fields at the Tidball property. At this station, attendees learned about some of the challenges with establishing native grasses and wildflowers, and were introduced to the native seed drill on-site.

A huge "THANK YOU!" goes out to Mr. Fletcher and Mr. Tidball for hosting the event! Without all of our partners, this event also would not have been possible. Please encourage your neighbors to attend workshops such as these; they are very informative and a great time for all!

Habitat Management Tips from the Quail Team

Introduction: For new landowners, it's often intimidating to know where to start when managing loblolly pine plantings. Whether land was recently cleared and needs to be replanted, or the pines are 15 years old, there are different directions landowners can take to incorporate wildlife habitat. The first point I try to express to a landowner regarding their pine stand is to think hard about their goals for the property. As a land manager, you need to decide what is more important, making as much money as possible out of the planted pines, or giving up a percentage of that income to create adequate quail habitat. Put simply, you cannot have both. You can, however, strike a balance that allows for wonderful quail habitat while still making money on the pine stand. The following timeline explains different decisions available to landowners to help them strike a balance between managing pines for both income and wildlife.

Year 1: The Clear-cut. Known widely as an eyesore, decimation of the land, a practice that mutilates the landscape, etc… is actually an opportunity to create some of the best early successional habitat for quail, rabbits, deer, turkey, songbirds, and pollinators. Once the timber is harvested, the nutrients the trees were using are freed up, and sunlight now has full access to the ground. Seeds no one knew were in the seed bank will germinate and flourish. This is where the first decision in managing planted pines for wildlife is made. Your first decision is to decide on how many pines you want to plant back. If you're aiming for making money, my easiest answer is to go with whatever the forester recommends. If you want to manage for wildlife habitat, aim lower. Choose a planting density of 10'x10' (436 trees/ac) or 12'x12' (303 trees/acre). The 10'x10' spacing still allows for pretty good profitability, the 12'x12' spacing is if you're really wanting to aim for quail. With either density, you will have fewer trees to harvest (so less income to be made), but the lower number of trees per acre allows for the early successional habitat in the understory to last longer. At a high planting density, the tree crowns will start to connect and shade out the understory in 5-7 years after planting. That means the quail habitat in the understory is being out-competed as the trees get larger and closer together. Planting at a lower density allows for early successional habitat in the understory for a much longer period of time. As a final consideration, consider not planting trees up against all of the logging roads. Leave some space between the roads and the tree planting to allow some additional habitat and travel corridors for wildlife to grow.

Basal Area of approximately 70-80 sqft/acre - not so great for quail! © Marc Puckett

Now that the planting density is chosen, the next decision to make is whether or not you want to site prep the clear-cut area prior to planting. Site prepping the area through prescribed fire or herbicide spray helps clear the landscape of debris, thickets, and competition for the small pines. Ultimately you will have healthier pines by doing this because they have less competition, however it does require that you erase good habitat across the landscape. If wildlife is the main goal and the layout of the land allows, go with…

Habitat Management Tips from the Quail Team continued…

...a site prep burn. Burning will put nutrients back into the soil where herbicide will not. If you choose herbicide for site prep, you can choose to spray selective herbicides that are more native grass and legume friendly so that some competition and space is freed up for the pines and some habitat remains in the understory. Under normal site prep, Arsenal, Escort and Oust are used. Note that for ease of explanation we use trade names in this article, but we do not endorse specific products—use the chemical names imazapyr, metsulfuron methyl and sulfometuron methyl, respectively, when purchasing products. In any case, Arsenal controls broadleaf woody plants and most native and non-native grasses and wildflowers, except legumes such as partridge pea. Escort controls tough woody plants including most legumes. Oust kills the grasses that Arsenal does not kill. You can choose to spray Arsenal alone, which will be friendlier to some of the habitat.

Year 2: Release Spray. Eighteen months after the site prep is complete and the pines are planted, it is time to look at the landscape and decide if you need to do a release spray. Release sprays involve spraying herbicide to release the pines from competition. If you're managing for profit, this means spraying a combination of the previously-described chemicals that will kill everything but the pines. If you're managing for wildlife, you can choose to not do a release spray at all, wait an additional year to allow for more herbaceous growth, or like with the site prep spray, spray only Arsenal so that some habitat is left behind.

Years 3-14: Enjoy! Once the site release spray is complete, you can enjoy quality quail habitat in the understory of the pine stand for the next few years. Then, as all forests do, the tree canopies will close and shade out the habitat in the understory a few years prior to the first thinning. You can choose these years to manage logging decks and road edges with periodic disturbance to maintain some habitat on the property as the pine stand transitions into mid-successional habitat.

Year 15: Thin. It's getting close to time for the first thinning. I normally suggest going with whatever a forester recommends for the first thinning. The weaker trees will be removed, and usually half of the stand is thinned out. If you planted originally at 435 or 303 trees an acre, this will leave you around 150-200 trees per acre. This is still too dense for quail habitat to establish in the understory, however it is a safe amount of trees to remove all at once. If you thin extremely heavily, the trees left behind no longer have the buffer they're used to having to protect them from ice and wind damage. Not only will removing too many trees at once stress the ones left behind, you also risk losing a higher percentage of trees to the elements.

If trees were planted directly up to the logging roads, clearcut a row of trees on each side of all the logging trails. This practice is called "road daylighting". It helps the logging roads dry and opens up the areas along the roads to early successional habitat. Briars and shrubs will grow in these areas and you can plant native warm season grasses...

Basal Area of approximately 40 sqft/acre, coming back in great habitat for quail! © Marc Puckett

Habitat Management Tips from the Quail Team continued…

…in the roads for additional food and habitat. Having strips of habitat like this along all of the logging roads will serve as travel corridors for wildlife as well.

Year 16 or 17: Burn. You want to start a prescribed fire rotation 1-2 years after the first thinning. This will help reduce the amount of debris on the forest floor, increasing pH of the soil and helping seeds in the seed bank germinate. When it comes to managing pines for quail, fire is your best tool. If you do not burn, unwanted saplings will take over the understory and shade out beneficial grasses, wildflowers, and legumes that early successional wildlife need.

Year 19-24: Burn Again. Yes, burn again. And again. Burn ½ to 1/3rd of the property every single year. This will help keep the hardwood saplings suppressed, and burning on rotation will allow for numerous growth stages of habitat for quail. It also allows wildlife areas to escape to as other sections are being burned.

Year 25: Second Thinning. It's time for the pines to be thinned a second time. You're currently sitting at around 150-200 trees per acre and now's the time to really start creating a pine savannah. This is also the time where your goals for wildlife or economics really start to separate. To manage for quail, you're aiming for a pine savannah with about 40-50 trees an acre with early successional habitat in the understory. This means leaving the best pines standing and thinning everything else.

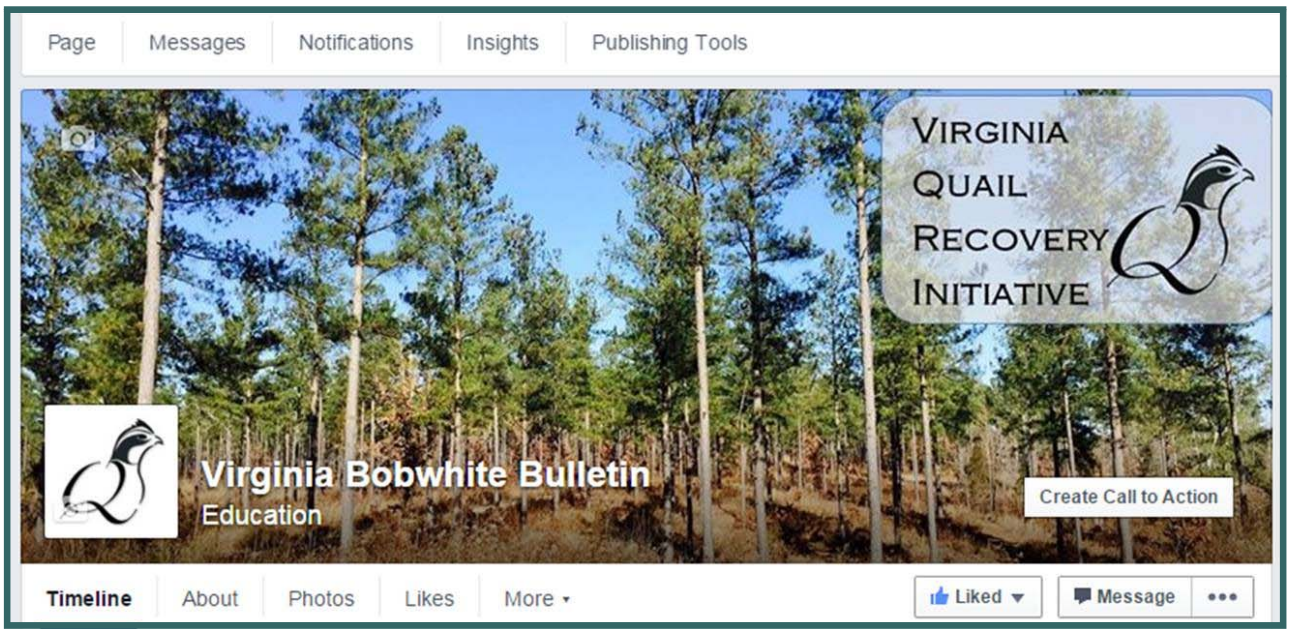
Year 27 and on: Enjoy! Welcome to your pine savannah! Begin the burning rotation again and enjoy all the wildlife that have wonderful early successional habitat in the understory. You can choose to let the understory go fallow or you can broadcast native warm season grass and wildflower seeds.

Needless to say, there are a lot of options available when managing a monoculture loblolly stand for wildlife habitat. The main goal is to create as much early successional habitat in the understory as possible for wildlife to take advantage of. It is inevitable that there will be years where the wildlife habitat will be out competed by the pines, but there are decisions a landowner can make that will benefit quail, deer, turkey, songbirds, and pollinators in the long term.

If you have a pine stand that you would like to manage for quail habitat, contact your Private Lands Biologist and set up an appointment for a site visit. You can find your local PLB on our new website, www.vaquail.com. Select the Get Involved button, then Private Lands Biologists.

Bobwhite Bulletin Updates on Facebook

The newsletter version of *The Bobwhite Bulletin* is only produced once a year, but you can stay up-to-date on news from the Quail Team, get quail management and plant identification tips, find links to quail articles, and more on our new Facebook version of *The Bobwhite Bulletin* at www.facebook.com/virginiabobwhitebulletin. If you are a Facebook member, please "like" us and encourage your family and friends to do the same. On the page, you can post comments and ask our biologists questions. If you are not a Facebook user, the site is still public and we encourage you to check in routinely. Currently we have a little over 775 likes, but we know there are way more folks interested in Virginia's quail. Please check it out, show that you care by liking and following the site, and send to all your friends. We need your support!



Additionally, Team Leader Marc Puckett has a monthly blog on the National Bobwhite Conservation Initiative's website. We encourage you to take a look at the monthly updates. Please pay a visit to the website: http://bringbackbobwhites.org/blogs/virginia. While you are there, check out all of the other great NBCI information!

Mattaponi WMA Burn 2015 © David Bryan

Marc Puckett: Team Leader - DGIF Farmville Office

A GREAT GROUP OF PEOPLE VIRGINIA IS LUCKY TO HAVE!

I am trying to sit here and reflect back on the year in human terms. Trying to take stock and put into words so many intangible things that we do not report, so many things that are hard to put numbers on, and trying to figure out how I report on the human spirit. You see, we have a team of people that are self-motivated to do a great job. Our team of five private lands wildlife biologists routinely challenge themselves to learn more and improve our program. No one made anyone develop a Facebook page, they took that upon themselves. No one required them to re-do our quail web page (www.vaquail.com), they saw the need and did it. No one made one of them try radio advertising as an outreach tool, but he did. No one forced them to become plant identification experts, or cost-share program gurus; it was simply in their DNA to strive to be better and to help each other along the way. That is what I would call a team. And all we have done to help is foster an atmosphere that encourages initiative. We have tried to give them the tools and equipment they need to succeed. And we have tried not to stand in their way when ideas develop. We have encouraged each one of them to excel in the areas they wish to excel in.

As time has passed, we have also started developing training opportunities that go beyond the basics for them. This year our quail team, along with several Ft. Pickett natural resources staff spent nearly an entire day in the field with Dr. Theron Terhune – Game Bird Research Program Leader at Tall Timbers Research Station. Theron was nice enough to spend hours with us touring the habitat on Ft. Pickett and answering questions and sharing his knowledge. It is hard to put a price tag on that experience. Thanks Theron!

We also spent a day with VDGIF's long time forester Kent Burtner. Kent was kind enough to drive down from Verona on a very hot May afternoon and teach our team all about cruising timber. For the uninitiated, that does not mean driving a log with wheels and power steering. Cruising timber is how foresters estimate the value and volume of a timber stand. It is critical to properly marketing a timber tract. Why is this important to our quail team? Most landowners we work with have timber of some kind and our team needs to be able to "talk the talk and walk the walk." It is part of credibility and being able to relate to landowners.

Marc Puckett: Team Leader - DGIF Farmville Office continued...

If you show up on a property and you don't know what board feet are, or how trees per acre relates to basal area, that landowner may look at you and wonder if you really know anything about quail, either.

The team also spent two days on a specially arranged trip to the University of Tennessee, Knoxville to visit with Dr. Pat Keyser, and his team at the Center for Native Grasslands Management. Dr. Keyser has done a ton of work with native grasses on working landscapes. How can we integrate cattle and quail? His research is showing that moderate levels of cattle grazing, even during the primary nesting season, actually improves native grass stands for quail and some songbirds. Left to their own devices, many native grass stands become too thick for bobwhites. What better way to manage them than a method that puts pounds on steers at the same time? Our team is out front on issues like these.

We've also stepped up to lead by example at the national level. Seven of our team members participated in the 21st National Bobwhite Technical Committee meeting in Galloway, New Jersey this August. Participated is the key word, we never simply attend. For many years Virginia has held leadership positions on the steering committee of NBTC. That continues. This year one of our team members stepped up to become vice-chair of the Outreach Committee (to become chair in two years), and another now serves as chair of the Research Committee and continues to play a key role in the implementation of NBCI's Coordinated Focal Area Program. I have one more year as past-chair and that will wrap up a six year term for me that began in 2010. All our team members play active roles on NBTC committees. And team member Bob Glennon was presented the NBCI Firebird Award for Virginia this year for his never ending energy in teaching and mentoring us all.

Where am I going with all this? Not much further. I hope the point is well taken. You can't compare Virginia's habitat potential to states like Texas, Georgia, or Florida. That'd be like trying to compare taste between a Georgia Peach and a Virginia Honey Crisp apple. Virginia is Virginia and we are doing our best and always striving to improve. We are proud of our team and of what we have done.

Partridge Pea © Bob Glennon

Marc Puckett: Team Leader - DGIF Farmville Office

To follow-up on our lead in (pages 3-4), these are some of the things our team and partners accomplished over the last year. Without our partners, we'd be nowhere. I am happy to say that after going on 7 years of this Quail Recovery Initiative, our partnerships are more numerous and stronger than ever. I'll sum up some of our efforts in the annual table, but here are a few things that won't fit into a table. Our team and partners:

- Participated in seven prescribed fires with multi-agency teams throughout the state helping prescribe burn over 800 acres of VDGIF, or partner lands.
- Participated in or organized 15 public outreach events.
- Held 7th successful meeting of the Virginia Quail Council.
- Conducted an input meeting with Virginia's Game Bird Oriented non-governmental organizations.
- Held two multi-day team training / planning meetings.
- Completed General Assembly requested Quail Efforts Overview and Development report.
- Held successful workshop for Southside Bee Keepers, over 100 attending.
- Co-taught Prescribed Fire 310 as part of the Virginia Department of Forestry's Wildlife Fire Academy.
- Participated on Virginia's Prescribed Fire Council.
- Participated in a joint meeting of Partners in Flight and the National Bobwhite Conservation Initiative.
- Participated in high level meetings of the National Bobwhite Technical Committee.
- Updated Virginia's Quail Webpage.
- Represented small game interests in VDGIF's regulations input and development process.
- Conducted, June call counts, Rural Mail Carrier and Avid Quail Hunter Surveys.
- Completed NBCI Modal Focal Area Point Count monitoring (one of 7 pilot states).
- Maintained the Virginia Bobwhite Bulletin Facebook page.
- Developed outreach items for sale on VDGIF's web store and for "give-a-ways" to landowners and partners using our new logo (seen here!)

There is more that we simply forget about. It is hard to capture it all, and if we spent less time being held accountable, we'd have more time to get work done on the ground. The table below emphasizes some of the things we place great value on in addition to what we have already described.

Perhaps the biggest "news" for our team this year has been revising, seeking input, planning and improving the QRI for the next 5 years. This is a very positive event because our first quail plan back in the late 1990s did not survive budget cuts and changing times. One of the key points we made when developing our latest quail plan was that it needed time to work and we are pleased with our agency's commitment, as well as that of our partners', to produce long term quail recovery. To that end, our revision process has gone like this: (1) we conducted an internal review of the quail plan which included a meeting and input session of our small game...

Marc Puckett: Team Leader - DGIF Farmville Office continued...

...team back in October 2013, (2) we presented an overview of our work to the Director's Quail Advisory Group in June of 2014 and gathered their input, (3) we conducted an overview and input / brainstorming session with the Virginia Quail Council which includes many DGIF employees, our private lands biologists and many of our partners in July of 2014, (4) we solicited input from our QMAP and Virginia Quail…

Council partners via our e-mail list serves, (5) we conducted an online survey of the Virginia Quail Council members, and (6) we conducted another meeting with the Director's Quail Advisory Group on September 16th, 2014. At the time of press we are still gathering public input and refining our plan for the next 5 years. You can rest assured we have learned a lot and always strive to improve our program – but no matter what we do, we can't do it alone – every one of you needs to help us.

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Private lands wildlife biologists' summary of accomplishments (in conjunction with many partners):

Fiscal Year	Site Visits	New Contacts	Management Plans	Managed Habitat	Total Farm Acres Owned
2010	251	235	104	1,168	21,080
2011	540	406	270	5,354	81,972
2012	429	397	295	5,145	32,955
2013	454	164	300	5,649	41,160
2014	375	196	229	7,844	51,843
2015 (so far)	501	280	365	1,751	65,650
Totals	**2,550**	**1,678**	**1,563**	**26,911**	**294,660**

Note that habitat contracts and acres declined this year due to several factors. Funding declined for one thing, and that had an effect. Also note the number of site visits increased and we have a high number of contracts pending which will hit during this fiscal year. It is encouraging to see this high number of new contacts continuing after six years of work. This tells us interest is still strong. We are getting observational reports back from hunters and constituents across the state seeing quail in areas where they had not been seen in recent years. Properties in the northern piedmont where substantial work was done have had quail return. During our point count monitoring in Sussex County, we heard a good number of quail on our reference and focal areas. Hunters in the peninsular counties, as well as in the central piedmont reported "a slight comeback is underway." Yet in south central Virginia hunters reported very low numbers last season. Our surveys have not yet all come in and have not been analyzed for this summer, but hatching weather early on was fantastic. It turned dry for a spell during late summer, but I do not believe it had a negative impact on overall hatching. I would predict we have had one of the better hatching years in recent memory. The hunters can tell me after this season whether I was correct or not. Our team will keep grinding away at habitat creation. There are more and more people in our state recognizing the value of thickets, weeds, wildflowers and native grasses. At some point we'll reach a critical mass and we will see some recovery.