

# ***THE BOBWHITE BULLETIN***

***An Update on the Virginia Quail Recovery Initiative***

***5<sup>th</sup> Edition, Fall 2014***

A COOPERATIVE EFFORT:



## Welcome from the Quail Team!

*The Bobwhite Bulletin* is your annual electronic update on the status of Virginia's Quail Recovery Initiative (QRI), a cooperative effort between several agencies, groups, and individuals to restore early successional habitat and the Northern Bobwhite quail population 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 three QRI Team Leaders. This year we even have a guest article from Dean Cumbia of the Virginia Department of Forestry!

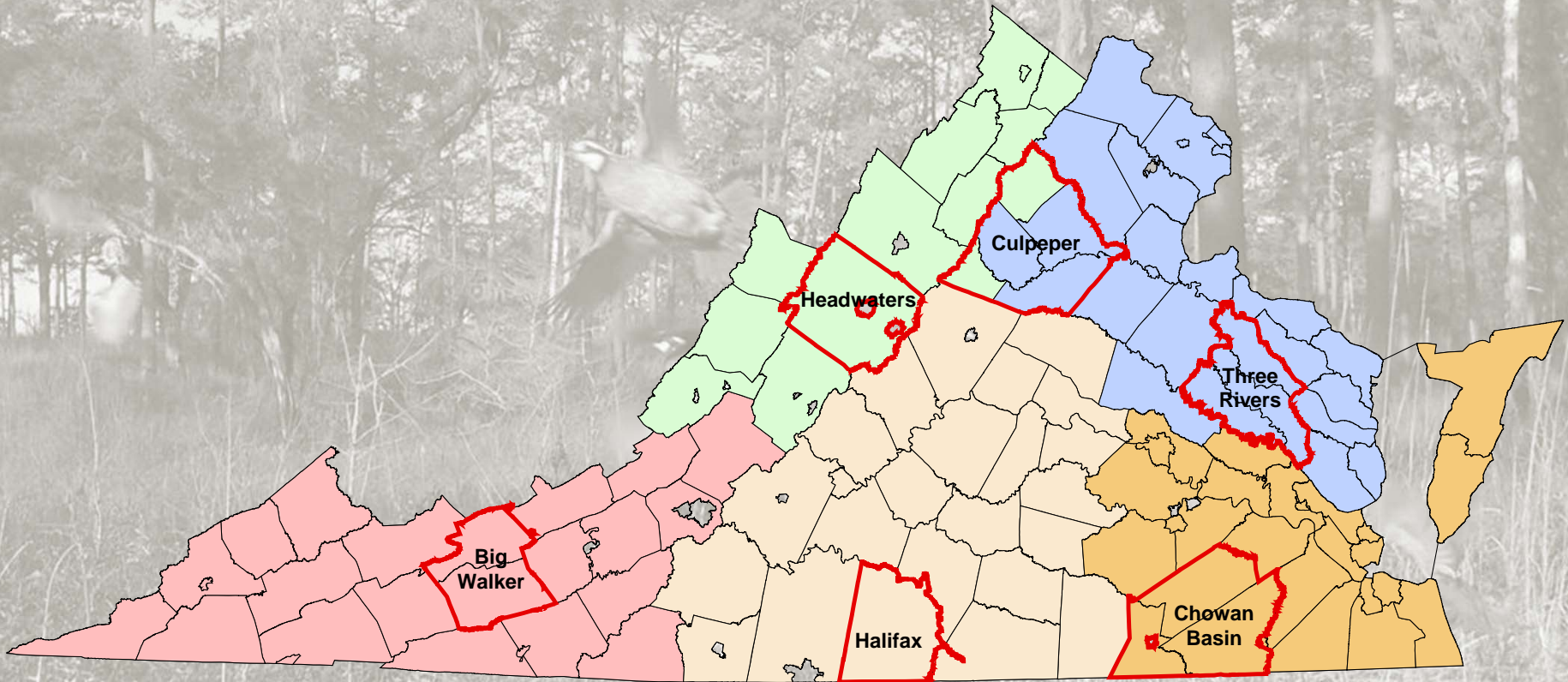
We've reached the five year mark, folks, both for the QRI and *The Bobwhite Bulletin*. As such, this marks a great time to recollect on lessons learned, but also point forward to the great potential we have for quail in Virginia's future. Progress is still slow but steady in the quail world, with projects being completed from the Chesapeake Bay to Appalachia, most especially in our six quail priority areas. In some counties like Halifax, King and Queen, and southeastern Virginia we are seeing more "quail quilts" forming to the benefit of wild quail populations around us. These quilts are oh so critical for the future of quail in Virginia. Nonetheless, the truth remains that we are facing a momentous task. Quail population recovery will not happen overnight, nor will it happen on every square inch of our increasingly human-populated state. Please read Team Leader Marc Puckett's article called "Realistic Expectations" on the next page for a more in-depth look at where we're at.








Finally, this year our team yet again had some more turnover. We will miss PLWB Blair Smyth, who has moved on to become a District Biologist with the Virginia Department of Game and Inland Fisheries in Bedford. He has been replaced by Lorien Huemoeller, covering Southcentral Virginia. Looking to the future, our team looks forward to receiving your phone calls and emails as you search for answers on how to provide quality habitat on your property. Contact information for the PLWB in your region is located below the map on the next page. 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                          |  | Hanover: (804) 537-5225 x 119    |
|  | Christiansburg: (540) 381-4221 x 128          |  | Smithfield: (757) 357-7004 x 126 |
|  | Halifax: (540) 315-0074                       |  | Verona: (540) 248-6218 x 108     |
|  | Marc Puckett - Project Leader: (434) 392-8328 |   |                                  |

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## Realistic Expectations: Thoughts From Marc Puckett, Team Leader



It is arguable that a person could not be in this quail business without being an optimist (or perhaps delusional). Many well-intended folks threw in the quail towel years ago. But “diehards” remain. In the articles I have written over the years I have always tried to focus on the positives. My fear was that too much pessimism would cause the few remaining quail enthusiasts to abandon ship.

But “rose colored glasses” are not doing us any favors in quail recovery. The situation is dire, and in spite of enormous efforts, quail continue to decline in all 25 states that comprise the National Bobwhite Conservation Initiative (NBCI).

There *are* bright spots:

- Large portions of Texas are reporting increased quail numbers this year largely due to favorable weather (In parts of Texas, when it rains, it pours quail).
- Portions of western Kansas, where hundreds of thousands of acres of native mixed prairie abound, still harbor impressive quail populations.
- And in north Florida and south Georgia, across over 350,000 acres of quail oriented conservation easements primarily under the supervision of Tall Timbers Research Station and Land Conservancy, bobwhites are doing exceedingly well. This is a result of intensive management on a large scale.
- And even in Virginia, in portions of counties where years of conservation work overlap with favorable timber management practices, quail thrive.

But in much of the rest of the heavily populated eastern seaboard, the decline continues at rates of between 4% and 7% per year. It’s time to take off the rose colored glasses, wipe those lenses clean, take a stiff drink of coffee and look at the situation with a degree of realism. To do less is a disservice not only to the bobwhites themselves, but to those of us who work hard under duress trying to do the impossible. That is correct. I said it. The bobwhite quail is not going to be restored to the entire state of Virginia in my lifetime. I have heard repeatedly now for decades “we did it for deer, bear, turkey, geese (on some levels) and other species, why not quail?”

First of all – these species did not come back overnight. When you examine the history, it took 50 to 75 years of concerted efforts on the part of many entities to “bring back” these great animals. Further, the landscape we live in today, largely by accident, favors deer, turkey, bear and other animals far more so than quail, grouse, woodcock or golden-winged warblers. And this is not likely to improve on a large scale (there are some “unless” I’ll talk about in a minute).

If you examine human population growth and growing global demand for food, fiber and wood products it won’t take you long to figure out that forestry and agricultural intensity is going to increase. This means “cleaner and cleaner” farms and timber plantations, and by “clean” I mean cleaned of competitors for water and nutrients. In short, things that...



## Realistic Expectations: Thoughts continued...

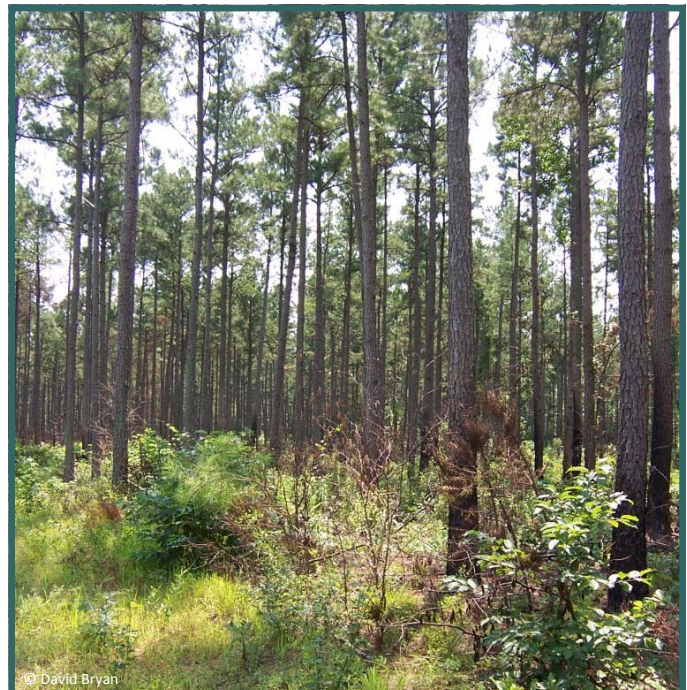
compete with crops and pine trees like blackberry, broom sedge, partridge pea, plum, sumac, beggar weed – those things that landowners tend to want to bush-hog, or spray to control, will be reduced on our landscape. And of course these same things serve as critical habitat for dozens of declining species like quail. Our dilemma as humans is that we are always pitting our short term gains as individuals against our long-term survival as a species. And big money tends to cloud our view of anything beyond the next decade.

So what keeps me in this game? What allows me to continue to go for it on 4<sup>th</sup> and 6? It's the "unless" I mentioned. One great thing is most of the land in Virginia is privately owned by individuals. This means that they can make choices that favor quail if they choose to. The big money entities cannot force landowners to manage their land any particular way. Quail will continue to decline in my home state unless a major campaign is undertaken to educate "the masses" to the value of thickets, weeds, native grasses, wildflowers and brush.

Much as we have educated generations to value mature forests and wetlands, we must educate current generations of landowners about the value of transitional habitats. Landowners must come to know they have choices and what those choices are. For example, fall mowing (Bush-hogging) runs rampant over Virginia every year. By simply changing the mowing to late winter or early spring (February to early March), and not mowing it all every year (but mowing in rotation, 1/2 or 1/3 annually), positive changes will be seen in your wildlife populations. If you sometimes substitute disking for mowing, even more results will be seen. Or instead of relying totally on cool season, non-native forage grasses like fescue, as a landowner you make the decision to convert 20% of your forage base to native warm season grasses, mixed with legumes, you will become part of something bigger than yourself. And consider that when you are deciding how to prepare to replant your recently clear-cut pines, you choose less intense herbicide options. Yes, this may cost you 5% or 10% of your future timber income, but you may be OK with that if you know your choice benefits bobwhite quail. I am optimistic that landowners will make good choices when they know what those choices are and what the costs are.

So what does our quail recovery effort hope to accomplish? Why not give up if we feel widespread recovery is not likely in the short term? Because it *can* be done in the long term if we do not give up. Our goal now is to "hold the line" in as many places as possible. We are trying to build some pockets of wider success (in keeping with NBCI's Focal Tiers concepts and to demonstrate that it can be done with habitat), and establish some source quail populations in areas where they are nearly extirpated.

Our quail efforts are focused for a reason, and what we do now we hope will set the stage for wider scale recovery when landowners are awakened and excited about the choices they can make on a large scale to impact our environment for decades to come. There are no silver bullets and chasing red herrings is costing us dearly. The time is now to refocus on spreading the message on a grand scale, sparing no expense, that transitional habitats matter.



© David Bryan

## David Bryan: PLWB - Northeast VA Field Office



As Private Lands Biologists, we often preach that landowners should strive to achieve balance for wildlife on their lands. For example, a farmer could consider increasing the value of his farm by managing odd areas for wildlife, adding field borders, planting multispecies cover crops, strategically placing brush piles, etc. Depending on their goals, a landowner with predominantly forests could consider pre-commercial thinning, prescribed burning, and management for mast producing hardwood species or perhaps a rare native pine species such as longleaf. In both cases, the farmer or landowner could make a profit on their land via crops and trees while still providing critical cover for Northern Bobwhite quail, songbirds, turkey, pollinators and a suite of other species.

Over my 3.5+ years on the job, I have found that generally the forestry and wildlife combination has worked the best. Despite the clear wildlife advantages to field borders and the economic balance that can be achieved through programs, unfortunately finding a balance between agriculture and wildlife has been a tough sell. Often we see our best wildlife projects coming on lands where the landowner is moving away from agriculture and into more permanent wildlife-friendly systems like wildflower meadows. These can certainly make for some great projects, maybe Virginia's best, but the truth is that we need to find a balance in order for more farmers to get involved in our Quail Recovery Initiative. Accordingly, we would like to showcase the efforts of one such farm, Selby Farm of Fauquier County, Virginia.

Selby Farm is a 460 acre farm located about 20 minutes north of Warrenton, just east of The Plains, Virginia.

Currently owned by Charlie Mackall, the land has been in the family for over 150 years. The old homestead, which is still inhabited, was completed in 1908 and is a beautiful reminder of eras gone by. As for the farm itself, which is managed by Cliff Grimsley, approximately 125 acres are in pasture for grazing some 50 head of cattle and 160 acres are in hay for both use on and offsite. Over the years I have found that traditionally it is hardest to work on such cattle and...



Charlie Mackall and His Wildflower Meadow © David Bryan

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

hay farms, as many if not most fields are fenced off and each field has a designated use in the grazing system. Add in the fact that fescue, a quail-inhibiting cool season grass, is the most dominant plant on the farm, typically it is hard for such farms to go in a more wildlife friendly direction. Not so on the Selby Farm, however. Charlie and Cliff are dedicated to their wildlife goals, most especially Bobwhite quail, and have put in the effort to make things happen!

Before I even met Charlie and Cliff in 2011, they had already been working with the Natural Resources Conservation Service's Roger Flint to eradicate approximately 25 acres of fescue field borders along hay fields, stream banks and odd areas and convert them to native warm season grasses including Big Bluestem, Switchgrass and Indiangrass. Once I came into the picture in 2011, you can be sure that I was impressed with the work that had already been done. However, Charlie and I began talking about devoting one field entirely to wildlife, specifically through the development of a wildflower meadow. I mapped out the acreage, wrote up a plan, but to my surprise Charlie decided not to sign up for a program or hire a contractor like they'd done for the field border work. In most cases you'd assume that the landowner would just say, "thanks for the idea, but no – we're going to pass". Believe me, this happens a lot in the wildlife habitat business. Way too often, in fact. Much to my amazement, though, Charlie and Cliff followed our plan to an extent that has turned out beautifully. They have planted approximately eight acres of native grasses, Black-eyed Susan, Partridge Pea and Illinois Bundleflower. Natives like Pokeberry have also come in from the seedbank, adding to the field's value. Additionally, approximately 150 Silky Dogwoods were planted along a wet weather stream.

The native grass efforts on Selby Farm have not always been easy and lessons have been learned. For example, in their earlier efforts they had plantings which were replanted after thinking initial stands had failed. As a result, two plantings worth of seed came up leading to some intensely thick field borders. While some species may use them, this does not satisfy the target – quail. Charlie and Cliff have tried everything from haying to mowing to heavy disking to prescribed burning to thin these stands out. The next potential option would be strip spraying to get these stands into shape. Despite these setbacks, the benefits have far outweighed the negatives. Charlie says, *"We have made some hay from these stands. Our animals love it and the literature would indicate that it is superior in nutrition compared to cool season grasses. We have a small triangular planting next to our cattle pens. When we open up this area, the animals concentrate there. The warm season grasses are clearly a preferred diet"*. On the wildlife side, Charlie continues *"The other important benefit to such a program is it provides good cover and nesting habitat for other birds and wildlife. We see more meadowlarks, field sparrow and rabbits than before."* So there you have it folks, wildlife and agriculture – even cattle farming – can work together. At Selby Farm, yet another field is currently in the process of being converted to native grass hay. The work will continue there, no doubt. In the rest of the county, though, and in the broader context we need more folks like Charlie and Cliff on board. Will you answer the call?



Manager Cliff Grimsley in the Wildflower Meadow © David Bryan

## **Bob Glennon: PLWB - Southeast VA Field Office**



Seeded and planted field border buffers have been well-publicized and funded conservation practices to improve habitat for many species of wildlife including Northern Bobwhite quail. The buffers were originally intended to create 'soft edges' between well-managed forests and cropland and pastures. However, they were never intended to be a 'cure-all' for wildlife. Indeed, although the buffers pose significant changes to farming operations, the acreage of buffers is very small compared to the total acreage of habitat required for wildlife. Accordingly, buffers must be accompanied by good management of forests, cropland, and pastures in a manner that will benefit wildlife as part of a whole farm approach in order to be most effective. Even the best

field border of native grasses and forbs (aka wildflowers) will contribute little for quail if the surrounding forest is densely stocked and devoid of understory. Buffers are also less effective if the farm lacks areas of annual plants, such as ragweed and partridge pea, in which chicks can hunt for insects, and areas of low woody cover under which quail can hide from predators.

There have been some great diverse buffers established over the past couple decades, whether they were established specifically for quail or established for rabbits, songbirds, or pollinating insects. The Wildlife Habitat Incentives Program (WHIP) and the Environmental Quality Incentives Program (EQIP) have provided incentives to landowners to seed herbaceous buffers and plant woody shrub buffers. Some of those buffers were relatively simple mixtures of a native grass and a native legume such as partridge pea. Others were very complex seed mixtures of at least two native grasses and at least nine native forbs designed to provide habitat for pollinating insects. Properly designed shrub buffers and hedgerows provided low woody cover for quail and rabbits, fruit for songbirds, and flowers for pollinating insects. While the Wildlife Habitat Incentives Program was not carried over in the 2014 Farm Bill, the Environmental Quality Incentives Program continues to offer buffer options as it must target 5% of its funding for wildlife projects. (Please take advantage!) The Conservation Reserve Program (CRP) also continues to target buffer practices in the continuous part of the program known as CP-33. The Conservation Reserve Program provides a sign-up incentive payment per acre, 50% of the establishment cost of establishing the buffer, as well as an annual rental payment based on the soil type on the site. Monetary-wise, CP-33 is perhaps the best option for landowners willing to make a long-term commitment.

Any buffer practice requires intensive maintenance to provide the benefits for which it was designed. Buffers of native grasses and forbs must be burned periodically or mowed well enough to grind dormant stems into fine residue and disked lightly to allow the seed of re-seeding annual forbs to make contact with the soil. Grass and forb buffers require the removal of all woody plants and shrub buffers require the removal of tree species. Buffers are good complimentary conservation practices within a well-designed wildlife habitat management plan. Consult your local private lands biologist for a complete plan.



Cut-back Shrubby Border on Cropfield Edge © Bob Glennon



## Jay Howell: Team Leader - DGIF Richmond Office



It's hard to believe that another year has come and gone. The quail plan is almost five years old, and we've had a lot of success creating habitat and educating land owners. Unfortunately this hasn't resulted in the kind of landscape wide gains we would like to see. Conditions in land use are what they are for economic and cultural reasons that didn't just occur overnight. Some people look around them and don't see these changes because they gradually occurred over time. Each little step may not have seemed like much but they add up to a place that is just no longer suitable for many species that were once abundant.

While economic factors may be out of our hands, we're doing what we can to work on the cultural ones through education and outreach. We're trying to teach people that weeds and thickets aren't the result of a lazy owner, they're the proud mark of a wildlife conservationist. Wild things need those rough edges to thrive and grow. Is it any wonder that

in our tightly manicured landscapes that these animals are starting to disappear?

Landscape level change will not occur until people wake up and realize just what we are losing. We're doing our best, but we can't reach everyone. If you're reading this, the best thing you can do is tell your friends and neighbors about what's going on and hopefully get them to see things the way we do. Getting that conversation going is the first big step to change.

## Jeff Jones: Team Leader - NRCS Richmond Office



Another year is complete and our team was able to accomplish a lot of excellent work in the Commonwealth. In the world of the United States Department of Agriculture, big changes have come our way. The 2014 Farm Bill was enacted on February 7, 2014 and consolidated conservation programs for more flexibility, accountability, and adaptability at the local level. The Wildlife Habitat Incentive Program (WHIP) has been dissolved and essentially rolled into the Environmental Quality Initiative Program (EQIP). As such, it is no longer a separate program or separate funding stream. As for wildlife funding, the new Farm Bill mandates that 5% of the EQIP funds are to be allocated for wildlife projects, which for Virginia, will lead to more wildlife funding than had been allocated in the past through the WHIP. This provides an awesome opportunity for landowners to create and maintain habitat on their lands using funding from

the Natural Resources Conservation Service. In FY-14, our partnership with the Department of Game and Inland Fisheries resulted in 375 landowner site visits, 229 wildlife management plans, 145 wildlife contracts, 8 public events, many outreach hours and serving 51,843 farm acres for technical and/or financial assistance for wildlife projects. Overall, this was another very successful year of Farm Bill program implementation for wildlife projects. Let's keep things going!

## Lorien Huemoeller: PLWB - Southcentral VA Field Office



I am the newest member of the Bobwhite Quail team, replacing Blair Smyth in Southside and Central Virginia. I have a BS in Wildlife Science and a Masters in Natural Resources from Virginia Tech. I've worked previously as a professional firefighter and as a Biologist for a mining company. However, I'm very excited to have the opportunity to get back to my roots in wildlife and to be a part of the Quail team.

In my few months as a PLB, one of the most important things I learned is that creating early successional habitat for quail happens on both a macro and micro scale. Great habitat is about the 'big picture' of structure and how major components come together. The landscape looks unkempt, messy, overgrown, and "let go". At the same time, great habitat also requires focus on smaller influences like bare ground with proper cover overhead and how individual plants may impact the landscape around them. For microhabitat, I see the individual flowers in bloom, the small patches of dirt where quail have been dusting, and if I'm lucky, a quail nest tucked away. Due to the varying scales of early successional habitat,

I've learned to approach each property I visit as if it were a puzzle. It's my goal to recognize all the different pieces and it's my job to fit them together in ways that benefit quail.

There was one site visit where both the macro and micro elements surrounding quail habitat all came together and put my role as a Private Lands Biologist into perspective. It was a hot afternoon in June when I visited Casselmonte Farm in Powhatan County. Owned by Bill and India Cox, Casselmonte Farm consists of 120 acres, with the majority of the acreage being managed for quail, and a few acres for an organic farm. The second I stepped out of the vehicle, I heard quail calling from various areas of the farm. The calling continued throughout the site visit. It was obvious that all of the Cox's hard work creating quail habitat had paid off. They thinned pine stands a little heavier to allow more sunlight to reach the forest floor, aiding in a great understory of grasses, forbs, and thickets that quail need. Their pine stands, as seen in the background of this photo, are burned on a rotation to maintain the pine savannah. They also created beautiful wildflower meadows that they burn and disk every few years to maintain the early successional habitat. Between the wildflower stands and the pine savannah is a row of shrubs and thickets that quail use for transportation, protection, and as a "covey headquarters" throughout the day. As a new PLB, hearing that distinctive bobwhite call while walking around Casselmonte Farm really put into perspective all of the information I'd been studying over the previous months. It was refreshing to see proof that patience and hard work can pay off when it comes to habitat creation and quail.

I spent my first few months as a PLB studying what quail need on both a macro and micro level. I felt like I had all the puzzle pieces but didn't know how they fit together until my site visit with Bill and India Cox. From the bare ground in the wildflower meadows, to the soft edge habitat leading into the large pine savannah, Casselmonte Farm brings all the puzzle pieces together, and they fit perfectly.



© Lorien Huemoeller

## Annual NBTC/NBCI Report

Virginia continues to play key roles within the National Bobwhite Technical Committee (NBTC) in support of the National Bobwhite Conservation Initiative (NBCI). For those of you who may not know the difference between these two entities, the short answer is NBCI is a product of the 25 member states of the NBTC. The NBCI staff serves at the pleasure of the NBTC Steering Committee and more importantly the NBCI Management Board, an entity composed of high level state agency directors. Our small game project co-leaders each assumed new roles within NBTC this year during the NBTC annual meeting in Iowa in late July. Marc Puckett wrapped up his 4<sup>th</sup> year of steering committee duty (two more to go!), completing his two year term as chair, and now he becomes past-chair of NBTC. In his new role, Marc will continue to be part of the steering committee and will be in charge of annual elections and awards. Jay Howell became chair of the research subcommittee of NBTC for a 2 year term. All of our private lands wildlife biologists participate in NBTC subcommittees, some now for multiple years. And most notably, the Virginia Department of Game and Inland Fisheries' Executive Director Bob Duncan continues to serve as chair of the NBCI Management Board.



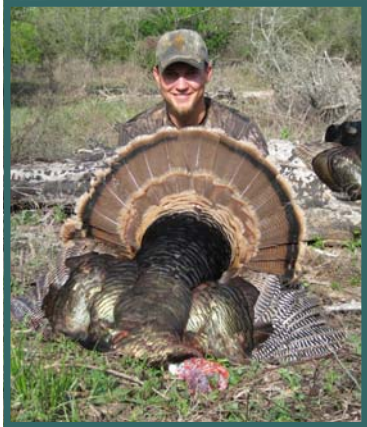
This was a crucial year in NBCI history. During early spring, NBCI was in danger of losing its operating and staff salary funds. Survival hinged on obtaining new funding to support NBCI staff. After a long year of struggle, trial and error, and with the help of many partners, NBCI was able to secure increased Pittman-Robertson Funding and some funding from other sources from numerous key states for a three year period insuring not only the survival, but the growth of NBCI. This was a monumental undertaking and NBCI Management Board Chair Bob Duncan deserves many accolades for his tireless efforts in gaining state support of this concept. Having an NBCI staff to facilitate for bobwhites on a national scale we believe is critical to the future of all quail recovery efforts.

Another noteworthy point for 2014, the NBTC Outreach Subcommittee in conjunction with NBCI Communications staff developed several new awards. These were given for the first time at the awards banquet during the annual NBTC meeting in Iowa. Deemed the "Firebird Awards" in honor of the bobwhites ties to fire, states were given the opportunity to recognize people or entities within their state at this national level. The first two Firebird Award recipients for Virginia are our rock solid partners :



the Virginia Natural Resources Conservation Service and the Conservation Management Institute at Virginia Tech. While we have dozens of important partners, our cornerstone private lands biologist program hinges on support from these two entities. And further, the first ever "Landscapes of National Significance for Northern Bobwhites" designation was given by NBCI/NBTC to the South Texas partnership of landowners, research entities, agencies and non-governmental organizations that have labored hard for decades on behalf of bobwhites. South Texas is arguably one of the last great landscapes in America where millions of acres of quail habitat still exist largely due to conscious decisions made by many over the years. The award was accepted on behalf of this group by Dr. Lenny Brennan of the Ceasar-Kleburg Wildlife Research Institute. We look forward to seeing NBTC / NBCI continue to grow not only in size, but effectiveness. Next stop? New Jersey in August 2015.

## Justin Folks: PLWB - Northwest VA Field Office



I first met Mr. Bill Fletcher of Rappahannock County soon after I joined the Quail Team back in 2012. My predecessor, Debbie Wright, along with our Team Leader, Marc Puckett, had already worked with him on one of our State Wildlife BMP contracts. Bill had planted 130 acres of native grasses and forbs and I went out to certify its completion. I was overwhelmed by how much work he had done, but I was really taken aback when he said he wanted to do more. We just completed his second large contract this summer.

Bill rents portions of his two farms out to a tenant that manages a rotation of corn and soybeans. Some fescue hay is also harvested as it is on many Piedmont lands. However, what makes this site so unique is that Bill told me flat out that pretty much everything that wasn't in production or no longer made sense to have in production he wanted in bird habitat. Accordingly, this has equated to 330 acres currently being managed for quail, and the plan is to do even more next year.

In Bill's first contract, most of the work involved converting old fescue fields to native grasses and forbs. A good kill on the fescue, a great native seed bank, and good germination from the seeds he planted resulted in some great nesting cover throughout one of his farms this year. In his most recent contract (planted this year), we were able to impact significantly more acreage because we decided to just spray fescue and allow the native seedbank to emerge on a majority of the acreage, as well as just sowing an annual cover crop in field borders around a few of his crop fields and letting them go fallow. The difference was that we were able to impact 130 acres in the first contract and 200 acres in the second (all for about the same amount of money), and I can tell you that the structure of the areas that weren't planted to native seed look as good, if not better, than the areas where natives were drilled. The work that Mr. Fletcher has done certainly goes to show that you don't always have to plant something to create habitat suitable for quail.

There are quail in the county, but to our knowledge the Bobwhites have yet to show up on Bill's properties since he started his management. Until they arrive (and I'm sure they will), the...



Wildflower Meadow at Bill Fletcher's Farm © Justin Folks

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



American Tree Sparrow © Amy Johnson, SCBI

benefits of his work are already evident. The Virginia Working Landscapes project out of the Smithsonian Conservation Biology Institute conducted bird surveys at Bill's property last winter in areas where he traditionally manages cool season sod grasses and in areas where he has converted to natives. The property is generally very "birdy" in the summer, and bird observations did not differ much between native and non-native fields. In the winter, however, birds were overwhelmingly more abundant in the native fields. There were two individuals from two species in the fescue fields versus two hundred individuals of nineteen species in the native fields!. The standing native grasses and

forbs provided excellent winter food and cover compared to the "clean" sod fields. Data from this study support the fact that native fields are invaluable to wildlife in winter and that they're not just about nesting cover (i.e., don't mow in the fall!!!). A special thanks to Amy Johnson for sharing data and observations from her study.

Bill Fletcher has been a great landowner to work with, and he has done some phenomenal work. We are anxiously awaiting the day when those wild bobwhites find their new home on his property – may it be soon!



Maximilian Sunflower Stand at Bill Fletcher's Farm © Justin Folks

## **Marc Puckett: Team Leader - DGIF Farmville Office**



Our quail recovery initiative has reached a milestone, having just completed our 5<sup>th</sup> year of program delivery. We have reported extensively on the accomplishments of our quail team, which includes many partners. I won't list every line item, but some of the highlights included: continued to employ our team of 5 private lands wildlife biologists who made 2,049 site visits to landowners owning over 229,000 acres, wrote over 1200 quail oriented management plans, added 33,700 acres of early-succession habitat statewide through a variety of state and federal cost-share programs, helped distribute \$4,307,916.00 in wildlife habitat funds, and conducted a great amount of outreach and public event. Year by year specifics are in the table on the next page In addition our team has given out over \$25,000.00 in seed to over 200 landowners, continued to convene annual meetings of the Virginia Quail Council, distributed over 2000 habitat management videos and program promotional DVDs, completed a pilot study on aerial photography comparisons between 1960s and

2009 photographs assessing landscape level habitat change, continued to promote our Quail Recovery Initiative (QRI) in every possible venue, continued to build our well received Facebook page, and continued to refine our NBCI Model Focal Area monitoring program as one of seven pilot states. I could go on, but will only mention one more thing – how proud we are of our private lands wildlife biologists. They are truly a team that strives to improve every day. They have obtained a level of knowledge second to none with regards to managing lands for bobwhite quail and their associated species and have done this largely through self-motivation and initiative.

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 / farm game 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



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

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 16<sup>th</sup>, 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):**

| <b>Fiscal year</b>   | <b>Site visits</b> | <b>New Con-<br/>tacts</b> | <b>Publicity<br/>Hours</b> | <b>Management<br/>Plans</b> | <b>Managed<br/>Habitat<br/>Acres</b> | <b>Total Farm<br/>Acres<br/>Owned</b> |
|----------------------|--------------------|---------------------------|----------------------------|-----------------------------|--------------------------------------|---------------------------------------|
| <b>2010</b>          | <b>251</b>         | <b>235</b>                | <b>840</b>                 | <b>104</b>                  | <b>1,168</b>                         | <b>21,080</b>                         |
| <b>2011</b>          | <b>540</b>         | <b>406</b>                | <b>596.25</b>              | <b>270</b>                  | <b>5,354</b>                         | <b>81,972</b>                         |
| <b>2012</b>          | <b>429</b>         | <b>397</b>                | <b>767.25</b>              | <b>295</b>                  | <b>5,145</b>                         | <b>32,955</b>                         |
| <b>2013</b>          | <b>454</b>         | <b>164</b>                | <b>668</b>                 | <b>300</b>                  | <b>5,649</b>                         | <b>41,160</b>                         |
| <b>2014 (so far)</b> | <b>375</b>         | <b>196</b>                | <b>513.25</b>              | <b>229</b>                  | <b>7,844</b>                         | <b>51,843</b>                         |
| <b>Totals</b>        | <b>2,049</b>       | <b>1,398</b>              | <b>3384.75</b>             | <b>1,198</b>                | <b>25,160*</b>                       | <b>229,010</b>                        |

\*Figure does not include all WHIP / EQIP acres – updated figure with all WHIP / EQIP = 33,700

## **QRI in the News**

- Bobwhite Quail also garnered attention from a recent New York Times article on the State of the Birds written by John Fitzpatrick of the Cornell Lab of Ornithology. For this great read, click [HERE](#).
- To read Tee Clarkson's recent article on the plight of the Bobwhite quail in the Richmond Times Dispatch, please click [HERE](#).
- The DGIF-DOF Quail Forestry Program was also recently detailed in a Richmond Times Dispatch article as can be read [HERE](#).
- The Country Courier was one of several local papers to publish a landowner-focused article by PLWB David Bryan—See page 7 of this [PDF](#).
- Quail aren't the only species in decline. Check out an article on the Monarch Butterfly decline [HERE](#).



## Andy Rosenberger: PLWB - Southwest VA Field Office



I am sure it is no surprise to anyone reading this that average land parcel size is shrinking in Virginia. As time goes by, more and more large properties are being sold and divided into smaller parcels. As a result, this means that more and more of us are less likely to have acreage that we can devote to quail habitat.

As I go around the countryside discussing the perils facing quail I have noticed a trend. Many of the individuals I talk to indicate that they would love to hear more quail but believe there is not much they can do since they live on a small parcel of land. For many this is a stopping point and they hope larger land-

owners will take up the cause to save the bird we all love. While their heart is in the right place their actions are not. But does it have to be this way?

Early last spring I got a call from a representative of the National Wild Turkey Federation's Botetourt County Longbeard Chapter. A group of members were interested in quail and asked me to give a presentation of what could be done. This initial small meeting spurred into a larger meeting open to anyone willing to learn what needs to happen on the landscape to save quail. From there an email list was formed to keep all interested individuals connected and a signup sheet was sent around for those that wanted a site visit. Then the group put together a field visit to a local farm where all those interested could see exactly what quality quail habitat looked like. But it did not stop there! Subsequently, the group proceeded to set up at events like the county fair to further spread the word that quail are in decline and provided information on how they could help reverse this trend.

Much of this work was done by individuals that do not own much land. They did not sit back and say "I do not have enough land to help, so there is nothing I can do". Instead they recognized there was a need to help get the word out. I can tell you from firsthand experience after working with the Botetourt Longbeards that local promotion goes a long way and is a much needed component of the Quail Recovery Initiative. If you talk to your neighbor or community member about the quail initiative, you will have much more success than if your local biologist like myself, a person that they do not know, brings the topic up with them. Not to mention that our biologists are unlikely to come into contact with them in the first place without local action. A common phrase often mentioned by my boss Marc Puckett is "Don't wait for the government to restore quail". While we are going to do everything in our power to bring back quail, we are limited by our staff size. While we are fortunate to have a team dedicated to restoring quail, there are only eight of us – five biologists in the field and three team leaders. Eight people simply cannot reach all the landowners. We need your help! There are 8.26 million people in Virginia and the eight of us cannot reach out to all of them. We have all heard the saying, "it takes a community to raise a child". The same could be said about restoring the quail population. To throw out another idiom, "many hands make light work".

I can tell you firsthand that I have had a much bigger impact in Botetourt County during the past 6 months than I have had the previous 4 years on the job. The sole reason for this is the involvement, dedication, and commitment made by Botetourt Longbeards. With their help Botetourt has gone from having a few properties managing for quail to a bright future where landscape changes are occurring.



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

So if you are a small landowner that cannot directly impact the quail population on your property, here are some suggestions of what you can do to help. This is just a short list as we all have varying skills that range from simply talking to neighbors to volunteering time. Again, do not wait for the quail team to solve the problem alone because this is too large of a task for eight people alone. We can help with the facts, financial incentives, biology, and enthusiasm but we need your help. Together we can make the quail recovery a reality and not simply a plan.

Things you can do:

- Get likeminded individuals together as the power of a group is greater than an individual.
- Talk to your local private lands biologist about how you can help.
- Talk to your neighbors about the plight of the Bobwhite quail and how lots of little areas add up to make large areas.
- Do not tell larger landowners what they should do, but offer suggestions of how they can contribute.
- Offer to help perform work, which might be enough to get a landowner to take on quail management.
- Approach the landowner to that field you pass every day that sits idle and is only cut about once a year to simply keep it from turning into trees. These areas are great opportunities for habitat work!
- Come up with ideas and share them with the quail team. We are a team of eight biologists, but we are not eight geniuses and learn from landowners all the time.
- ***All in all, get involved!***



Recent Botetourt Longbeards Event © Andy Rosenberger

## Dean Cumbia: Guest Writer, Virginia Department of Forestry



Virginians are working hard to bring back quail and other species that thrive in open environments. Those that have been working “in the trenches” of habitat restoration realize that there are many active uses for open lands including cropland, pastureland, orchards, vineyards, and areas that are regularly mowed. The rougher, yet frequently disturbed types of lands that quail love are rare gems. Let’s pause, and find some shade in the woods and let’s think. Under the forest canopy we see shade in the woods with only glimmers of sunlight filtering through. Little habitat exists in these situations. But listen, look, there’s lots of activity in these forests: action, work through harvesting, thinning, re-

planting, and prescribed burning that’s opening the ground to that key element – sunlight on the ground. This is what the quail need.

The Virginia Department of Forestry (DOF) and the Department of Game and Inland Fisheries (DGIF) began discussions several years ago and asked: How could we harness the potential of Virginia’s forest to produce forest benefits and quail? How could we engage private forest owners to be interested and act? The answer was by zeroing in on practices that bring that sunlight to the ground in ways that benefit the forest and by providing incentives to those who own the land. Through collaborative efforts between DOF and DGIF, the Forestry Quail Habitat Recovery Cost Share Program was created. Available in the fifteen quail recovery focus counties, the program was launched in February of 2013, with practices that provide a reimbursement of a portion of the costs of the practices (see attached flier for program details).

The goal is simple: to provide cost assistance to landowners to implement practices that will help their woods be more productive for forest benefits like healthy and valuable trees **and** quail and open habitat species. Healthy and vigorous trees need lots of room to grow and in doing so grow closely together and crowd each other. Thinning by cutting or using selective herbicides to remove trees opens the forest stand, making more light for the best trees to grow, and at the same time allowing more light on the ground. Light on the ground quickly allows for weed and brush growth, which provide food and cover for quail. As another option, prescribed burning in forests reduces heavy fuel accumulations, takes out some of the low-growing woody plants...



Precommercial Thinning © Ken Sterner, DOF

## Dean Cumbia: Guest Writer, Virginia Department of Forestry continued...

and results in more sun to the forest floor which again equals weedy growth and cover for quail. At the same time, the burn can release important nutrients for tree and plant growth, make the forest less vulnerable to damaging wild fires, and can lead to enhanced tree growth as there is less competition for water, nutrients, and light. For landowners who are thinking about retiring open land and planting to a wildlife-friendly forest, they may choose planting of shortleaf or longleaf pine. Both of these species are well-adapted to fire and fit in well with our equation: fire = sun on the ground = weedy growth = quail. The acreage in shortleaf and longleaf pine has been greatly-reduced over the years, and restoration is a goal of DOF and many landowners. Both types of trees produce high quality wood and their related plant communities are rich in animal life.

Since the program started, DOF foresters, Private Lands Wildlife Biologists, and landowners and private contractors have worked together to improve the forest and improve the habitat. To date, 40 landowners have been or are currently engaged in implementing practices on over 1100 acres. Participation has been highest in the eastern and central counties of the Commonwealth. In July of 2014, the practices were broadened to include active management in both pine and hardwood forests. Initial results and outcomes have been encouraging, with quail heard calling around these projects. There is still plenty of potential to grow the program and the positive outcomes we all hope for. Funding for the program remains strong and available, so please take advantage. Remember trees, forests, sunlight, and quail!



Longleaf Pine © Ken Sterner, DOF

## **Habitat Management Tips from the Quail Team**

Much of what landowners do to manage habitat for quail and other early successional wildlife species is manage succession. In most of the eastern United States, plant communities naturally progress toward a climax forest vegetative community in a process of successional states known as ecological succession. Starting with bare ground, annual plants will start to come in from the seed bank, followed by perennial herbaceous communities of grasses and forbs i.e. wildflowers, then woody plants that are dispersed by wind-blown seeds (sweetgum, maples, elms, pines) to woody plants that are dispersed by animal-carried fruits (black cherry, persimmon, black gum), and finally plants that are dispersed by animal carried nuts (oaks, hickories, beeches). While each state has specific benefits to wildlife, in the quail world we are most interested in the early stages known as early successional habitats. Since these stages are not static, however, they require disturbance to maintain the status quo. Natural disturbances such as fire, wind storms, floods, and pest infestations do the trick in our ecosystems, but often the actions of landowners are required to keep these declining habitats alive.

Landowners create some of that early successional habitat when they thin or harvest timber, but that habitat is short-lived as succession progresses and woody plants establish themselves. Landowners also create that early successional habitat by allowing succession to occur in old fallow fields and progress from annual plants to perennial grasses and forbs. They also develop that habitat by seeding native grasses and forbs on field borders or in entire fields. The challenge for landowners who want to manage their land for quail, rabbits, grassland songbirds, and pollinating insects is maintaining that early successional habitat once it has been created, whether on purpose or just as a byproduct of actions like timber harvest.

The strategy that must be employed is the same as the strategy used by farmers and foresters to control pest plants, that is, integrated vegetation management. That strategy is grounded in scouting the land for the vegetation that is undesirable. What is 'undesirable' may vary depending on the situation. For example, landowners may want to control any woody plant in a grass and forb area or maybe any woody plant that will become a tree in shrubby blocks and hedgerows. Others may want to kill any hardwood tree in a pine forest, while still more may desire to thin excess pines in pine forests that are too dense. As you can see, management is a very goal-centric business.

Each type of undesirable vegetation can be managed by a variety of control methods and each type of plant community that is desirable can tolerate certain control methods without damaging the desirable plants. A thorough knowledge of those control methods and their effects on both the undesirable and the desirable plant communities is required for success and cost efficient vegetation management.



© Ken Sterner, DOF

## Habitat Management Tips from the Quail Team continued...

**Woody Plants in Herbaceous Stands:** The most common undesirable vegetation situation is woody plants in herbaceous stands of vegetation. Most young woody vegetation can be readily controlled by prescribed burning. Burning stands on a 3-year cycle goes a long way towards controlling woody plants without harming the herbaceous vegetation. In stands of solid grass, the woody vegetation can also be controlled by broadcasting herbicides designed to control woody vegetation that will not harm the native grasses. Triclopyr (in the products Garlon and Pathfinder, for example) is one of the herbicides listed in the Virginia Tech Pest Management Guide to control woody plants and it will not harm native grasses when used as labeled. Controlling woody plants in mixed stands of native grasses and forbs without prescribed burning is difficult.

Spot treatment of individual plants with triclopyr is the only effective method of controlling woody plants in herbaceous stands without prescribed burning. The herbicide may be applied as a foliar herbicide when the woody plants have leaves on them, but foliar applications will also harm the native forbs. Woody plants may be controlled with triclopyr mixed with fuel oil, diesel fuel or kerosene and applied to the lower 18 inches of the trunks or to freshly cut stumps.

Most of the woody plants in herbaceous stands are from species whose seeds are light and are dispersed by wind (pine, sweetgum, maple, elm, boxelder, ash, and tree-of-heaven). Removing those species from the edges of herbaceous stands will decrease the opportunities for the seeds to become established in those herbaceous stands.

As a final note in this section, **MOWING ALONE WILL NOT CONTROL WOODY VEGETATION.** Instead, the woody plants will produce more and more sprouts every year from the same stump and root system. The proper combination of fire and/or herbicides should do the trick.

**Broadleaf Woody Plants in Pine Stands:** Another common situation that exists is the need to control woody plants in pine stands. Good site preparation before planting new pine stands goes a long way towards preventing populations of broadleaf woody plants that will inhibit the development of pine stands. That site preparation typically includes an application of herbicide as well as a prescribed burn before planting the pines.

Prescribed burning in mature pine stands will help suppress broadleaf woody plants (many times in combination with at least one starter herbicide treatment), but only longleaf pine is tolerant of fire in its early life. Longleaf pine is fire tolerant when the plants are in the 'grass stage' of growth and look like grass plants for their first two to three years. After those first few years, longleaf pine is very susceptible to damage from fire..



Bear Oak Managed But Not Killed By Burning © Bob Glennon

## **Habitat Management Tips from the Quail Team continued...**

during its bottlebrush stage when the plants have a dense growth of pine needles along its tall narrow trunk. As the longleaf pine plants approach a 10 foot height and the bottlebrush appearance disappears, the plants tolerate fire again. Unlike longleaf, loblolly pines – Virginia’s most common pine species – are susceptible to damage from fire until the branches are higher than the flame heights will be.

The only herbicide that can be applied over the top of pine trees that will kill hardwood trees and shrubs without harming the pines is imazapyr (in the products Arsenal, Chopper, Stalker, and Polaris). Imazapyr is effective at controlling woody plants, but it will also kill native grasses and forbs except legumes such as partridge pea and suppress native plants for up to a year after the herbicide application. When the pine trees are tall enough for ground application to operate, triclopyr can be applied and will only kill broadleaf woody plants and forbs. Triclopyr will not harm native grasses.

Spot application of any herbicide labelled for broadleaf woody plant control is always an option. Spot application also gives landowners the opportunity to retain desirable stands of shrubs that provide low woody cover for bobwhite quail.

All in all, undesirable woody vegetation can be managed, but it does take timely scouting and selection of the most effective control strategy for a landowner’s needs. In open fields, disking, burning and herbicides all have their place. In a forested situation, things are a little trickier and herbicide choices especially must be correctly matched to a landowner’s goals. Nonetheless, with time and effort we can manage early successional habitat – even in a forest – for the good of the quail that we love.

*Note: Please remember that when using herbicides, the label is the law. You may also want to contact your local extension agent, biologist and/or forester for more information.*



## **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](http://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 450 likes, but we know there are way more than 450 people 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!





# Forestry Quail Habitat Recovery Cost-Share Program

Virginia's Quail Recovery Initiative

Forestry Topic 16

[www.dof.virginia.gov](http://www.dof.virginia.gov)

June 2014



Photo courtesy of VDGIF

## Program Overview

Virginia Department of Forestry (VDOF) promotes healthy, sustainable forests for Virginians and Virginia Department of Game and Inland Fisheries (VDGIF) seeks to manage Virginia's wildlife to maintain optimum populations of all species to serve the needs of the Commonwealth. VDGIF is partnering with VDOF to advance Virginia's Quail Recovery Initiative by providing funding assistance to forest landowners for a variety of good forestry practices, which will enhance quail habitat.

Bobwhite quail populations have plummeted in recent years due to loss of appropriate habitat like brushy, weedy areas; field and forest edges, and fallow lands. Forestry practices that promote healthy and productive forests can, at the same time, create good habitat for quail and other animals and insects that prefer these sunny and open conditions.

The program is administered by the Virginia Department of Forestry with funding support from Virginia Department of Game and Inland Fisheries.

## Who Qualifies

The program is for private, non-industrial forest landowners within the 15-county area identified in the quail recovery initiative as "target" counties. These counties comprise six Soil and Water Conservation Districts—the Big Walker SWCD (Bland and Wythe); the Chowan Basin SWCD (Greensville,

Southampton and Sussex); the Culpeper SWCD (Culpeper, Greene, Madison, Orange and Rappahannock); the Halifax SWCD (Halifax); the Headwaters SWCD (Augusta), and the Three Rivers SWCD (Essex, King and Queen, and King William).

## Qualifying Practices

Cost-share is available for several approved practices, but shall not exceed 150 acres and \$10,000 per fiscal year per landowner (tax identification entity).

### Practice #1 – Herbicide Application in Managed Forests

Thinning of forest stands mid-way through their life cycle allows for increased growth and tree health. The additional sunlight initially allows many plants beneficial to wildlife to grow under the pines, but less favorable woody plants will soon dominate the understory. Controlling these woody plants with herbicides opens the forest floor again for grasses and weeds preferred by quail.

#### Specifications:

- ◆ Forest stands that have been commercially thinned for at least one season
- ◆ Ground or aerial application of a herbicide that targets certain plants and has little effect on beneficial wildlife plants
- ◆ 60% of cost, not to exceed \$50/acre
- ◆ Applicant agrees to maintain practice for five years (pine) or 10 years (hardwood)

### Practice #2 – Commercial Thinning in Small Acreage Stands

Thinning promotes healthy forests by giving trees more room to grow and also allows more sunlight on the ground, encouraging the growth of small plants for wildlife food and cover. However, it can be difficult to get loggers to thin small-acreage stands due to the cost of moving equipment to the site.



# Forestry Quail Habitat Recovery Cost-Share Program

Forestry Topic 16

[www.dof.virginia.gov](http://www.dof.virginia.gov)

June 2014



## Specifications:

- ◆ Stands from 5 acres to 40 acres, depending upon species
- ◆ First commercial thinning, moderate to heavy thinning (per forester recommendations)
- ◆ \$100/acre incentive to landowner
- ◆ Applicant agrees to maintain practice for five years (pine) or 10 years (hardwood)

## Practice #3 – Diminished Pine Species Establishment

Shortleaf and longleaf pine produce high-quality lumber and were once common in Virginia, but are now greatly diminished. Due to their growth pattern, young stands stay open longer and are more tolerant to fire, both of which benefit wildlife.



## Specifications:

- ◆ Incentive to prepare land and plant shortleaf or longleaf pine
- ◆ Tree spacing no closer than 10-foot by 10-foot spacing (434 trees/acre)

- ◆ 80% of costs, up to maximum of \$200/acre
- ◆ Applicant agrees to maintain practice for 10 years

## Practice #4 – Non-Commercial Thinning

Stands that are too thick will shade out beneficial ground plants and have lower potential for timber. Early thinning will improve tree growth, health and development of wildlife-favoring plants.

## Specifications:

- ◆ Young, thick forest stands (per forester recommendations)
- ◆ Stand thinned (pine) or crop trees released (hardwood)
- ◆ 80% of costs, up to \$100/acre
- ◆ Applicant agrees to maintain practice for 10 years

## Practice #5 – Prescribed Burning in Forest Stands


Fire, under controlled and managed conditions, is a tool that can benefit both forests and wildlife. It can reduce build-ups of hazardous fuels, opens the understory, and encourages new plant growth used by wildlife.

## Specifications:

- ◆ Mid-aged or older pine or hardwood stands (per forester recommendations).
- ◆ Conducted safely and according to burning laws
- ◆ 60% of costs, up to \$40/acre
- ◆ Applicant agrees to maintain practice for three years

## For More Information

For more information about this program and other VDOF services or programs, please contact your local Virginia Department of Forestry office or visit [www.dof.virginia.gov](http://www.dof.virginia.gov).



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