

the
Upland
G A Z E T T E

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Person County is up to the Challenge



PERSON COUNTY IS LOCATED IN THE rolling North Central Piedmont of North Carolina. The county's primary agricultural crop is tobacco. For years farmers have been installing fescue waterways, field borders and terraces to help control soil erosion. The tobacco fields interlaced with fescue waterways, borders and terraces give the county a neat tidy appearance. The goal of Person County Quail Unlimited (QU) is to change this clean-cut look.

In 1998 the board of directors for the Person County QU initiated a program to convert the fescue borders to wildlife-friendly plants. To get the seed, a farmer or landowner has to go to the Natural Resources Conservation Service (NRCS) and see Jim Huey, the

district conservationist. It is ironic that Jim Huey and the Person Soil and Water Conservation District had worked with the farmers to create the waterways, field borders and terraces and plant the fescue for soil erosion. Today Jim is a very active member of Person QU; though he still supports soil conservation, he is using different tools to accomplish this goal.

Jim Huey with NRCS and James Poindexter with the Person Soil and Water Conservation District are cooperating with the Person County Chapter of Quail Unlimited to control soil erosion and provide wildlife habitat at the same time. To obtain seed provided by Quail Unlimited farmers, first sit down with Jim or James and plan

where to use the seed. Jim and James have also made many site visits to assist farmers and landowners in their habitat work.

With the help of the Natural Resources Conservation Service and the Person Soil and Water Conservation District, the Person County chapter of Quail Unlimited is seeing changes. To date, more than 150,000 linear feet of fescue have been replaced with a mix of kobe lespedeza, partridge pea, VA-70 lespedeza, switchgrass and Indian grass.

The program is still going strong, and the interest is still there with new farmers and landowners coming in to get seed. As the program expands, we look forward to seeing quail numbers increase. ◆

—Bill Edwards
Piedmont Forest Stewardship Biologist

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Bobwhite Success on "Down East" Farms

ALTHOUGH SOME FARM OWNERS AND managers remain uninvolved in the struggle to restore bobwhite quail and other grassland wildlife populations, a group of conservation-minded folks in Hyde, Tyrrell and Washington Counties are working hard to make a difference. Agricultural producers "Down East" have recognized that some U.S. Department of Agriculture conservation programs make the transition to wildlife-friendly farming an economical option.

In fact, the appeal of conservation programs has become so great in this region that a really positive transformation of the agricultural landscape may be occurring here. Brad Alligood, the soil conservation technician for Hyde County, reports his entire work year has been dedicated to helping landowners plan and install grassy filter strips, forested riparian buffers and shallow water areas for wildlife. "People are coming into the office and telling me they're seeing more quail than they can remember in a long time. Maybe this was an especially good year for the birds, but I hope some of the improvement can be attributed to the work we're helping folks do," said Alligood.

Does this phenomenon offer a reason to be hopeful about the future for small game in the Tidewater region? Perhaps so. Native grasses, brambles and trees are beginning to grow up along the grid-like pattern of roads

and ditches that crisscross the "superfarm" landscape at Mattamuskeet Ventures and Outfall Farms in Hyde County.

Once a 15,000-acre hardworking farm with crops planted right to the field edges, Mattamuskeet Ventures is now part farm and part wildlife haven. Since 1994, almost 7,000 acres of the farm have been restored to wetlands and protected with conservation easements by the Wetland Reserve Program. More than 2,000 acres have been planted with trees and shrubs to build forest corridors across the open fields. Native trees and shrubs are planted in mixed stands to mimic the diversity occurring in naturally established forests. Equally large areas of habitat are maintained in broom sedge, switchcane and native shrubs. The North Carolina Partners Program has also aided in developing hundreds more acres of shallow-water wetlands and moist-soil management areas. Even the roadsides outside of the easement are managed to conserve a tangle of native cover. At present, the farm manager, Jamin Simmons, has ditch-banks and roadsides mowed on a three-year rotation. This scatters young weedy growth, older grassy cover and brambles across the farm borders. Not only do the field borders provide nesting cover for quail and songbirds; they also provide lots of soft mast to feed the birds.

Simmons indicates that wildlife use of the farm has increased dramatically since the farm staff incorporated wildlife management



techniques and implemented habitat restoration projects. They have seen more coveys of birds during the last few years than in the preceding 15 years, reports Simmons. One single pass along the perimeter of the farm revealed 22 coveys. Another benefactor has been the black bear for which this area is noted. Black bears have started feeding heavily on the berry-producing plants that develop in the 2- and 3-year-old growth.

Mike Johnson, manager of Outfall Farms, explains that although wetlands are involved, these areas do provide important habitat for "upland" wildlife because the water table usually drops below the soil surface during the late spring and summer months. Here marsh rabbits and bobwhites share seasonal habitat with heron, rail, black bear and whitetails. The old-field crowns are drier sites where brambles, myrtles and black cherry take root to form natural hedgerows down each field.

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The ground is lower and quite a lot wetter near the ditches than in the old-field crowns. A three-year rotational mowing-and-disking regime is applied to keep out woody plants in these strips. Each year as the soil dries, a flush of annual weeds bursts forth, yielding a harvest of insects and seeds. During a May survey, Mike Johnson recorded more than 100 nesting quail pairs on the 900-acre farm. In winter the ground becomes slightly flooded. The quail move off the fields into the cover of adjacent pocosin on the Gull Rock Game Lands. Waterfowl come by the thousands to feed and rest on the same fields where quail nested earlier that year. It's good to know that the birds are faring well, but it doesn't exactly produce the huntable numbers of quail the Johnsons would like to see!

Although they can be lucrative, wetland restoration opportunities involve mostly long-term commitments that many people aren't prepared to make. The average farmer, however, is more likely than not to be tempted by the promise of no-risk income that comes from enrolling field edges in conservation programs like the Conservation Reserve Program (CRP). The CRP involves

a 10- to 15-year contract with USDA for installing and maintaining native vegetation on field edges. Landowners enrolled in CRP receive annual land rental payments and additional payments to offset the maintenance. During the last two years Rufus Croom, district conservationist for Washington and Tyrrell Counties, has assisted with contracts to install approximately 26 miles of native grass filter strips averaging 75 feet wide. For this work, Croom typically prescribes planting switchgrass at three pounds per acre, mixed with a small grain for quick cover. Landowners in these two counties are also installing about 13 miles of forested buffers along streams, ditches and canals.

This is an exciting time to work in the wildlife profession. Opportunities to translate notions about landscape-level habitat improvement into action have never been better. Program payments to landowners have finally reached a level where their attraction is compelling. Perhaps the "carrot-and-stick" approach to habitat conservation is finally working. As evidenced by the accomplishments in Hyde, Tyrrell and Washington Counties the ball has really begun to roll! Maybe this beneficial phenomenon will spread to other regions of the state where the farm economy is suffering.

One or more of the "alphabet-soup" named programs like the Conservation Reserve Program (CRP), Conservation Reserve Enhancement Program (CREP) and Wetland Reserve Program (WRP) are still available in every county of the state. Wildlife Resources Commission Biologists and NRCS field office staff members are ready and willing to discuss habitat development and management as well as program options. Healthy small-game populations won't come without hard work and reliable attention to maintaining habitat quality, but its good to know that more people are starting to lend a hand and that we can help them to succeed. ♦

—Matt Flint, NRCS Wildlife Biologist

How Much Is Enough?

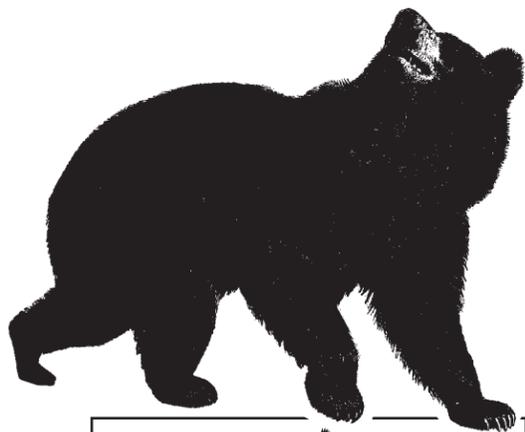
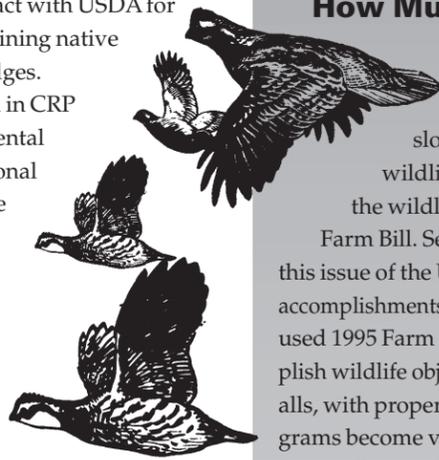
"How much is enough?" That's the slogan adopted by the wildlife community to address the wildlife aspects of the federal Farm Bill. Several of the articles in this issue of the Upland Gazette highlight accomplishments by landowners who have used 1995 Farm Bill programs to accomplish wildlife objectives. Though not cure-alls, with proper planning, Farm Bill programs become vehicles for accomplishing small-game habitat improvements. The current 1995 Farm Bill (the federal Agriculture Improvement and Reform Act of 1996) is authorized through 2002. During the upcoming year, lawmakers will gather information and input that will be used to formulate a new Farm Bill. This is our window of opportunity to inform lawmakers that we support the improvements for wildlife included in the 1995 legislation and to ask them to strengthen wildlife provisions in the upcoming Farm Bill.

Specific wildlife goals for the 2002 Farm Bill include the following:

- Link agricultural support payments to conservation compliance.
- Keep wildlife habitat improvement as a co-objective to soil and water conservation.
- Build upon the 1995 Farm Bill by maintaining funding for important programs such as the Wildlife Habitat Improvement Program, the Conservation Reserve Program, and the Wetlands Reserve Program.
- Establish an easement program to promote old-field and shrub habitats important to early succession wildlife.

The Division of Wildlife Management has a limited supply of the publication "How Much is Enough for 2002?" Call (919) 733-7291 and request a copy if you would like to learn more about improving the 2002 Farm Bill's wildlife benefits. Inform farm leaders, farm agency personnel and lawmakers that wildlife considerations in the 2002 Farm Bill are important.

—David Rowe District 1 Technical Guidance Biologist



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Pass It Along...

We are working to expand our mailing list to include other interested landowners and sportsmen. Please pass along your copy to friends who may be interested. Send names of others who may find the information useful to The Upland Gazette, Division of Wildlife Management, N.C. Wildlife Resources Commission, 1722 Mail Service Center, Raleigh, NC 27699-1722

(Note: Hunters who participated in last season's Avid Quail and Grouse Hunter Survey will automatically be included in future mailings and do not need to reply.)

Name _____ Name _____
Address _____ Address _____
City _____ State ____ Zip _____ City _____ State ____ Zip _____

debris make up less than 25 percent of the coverage, disk the field border. Disk in the late winter or very early spring. Rotate disking so that only about one-third of field edges around each field are disked each year.

Herbicide Selection and Application

One might think that managing field borders for wildlife would be a fairly simple task. There probably is not one optimal method for controlling the shrubs and trees that invade these borders while maintaining the beneficial grasses and forbs. Different types of field edges, such as ditches between two agricultural fields, woodland edges and road edges, present different challenges for the farmer or landowner. Also, different species of trees and shrubs require different methods of control.

CONTROLLING PINES

In areas with scattered pines, a 25 percent solution of Garlon*4, mixed with an oil-dilutant and applied to the bottom 10 to 12 inches of the tree with a backpack sprayer, has been effective. This basal spray kills individual trees, leaving grasses and forbs needed for wildlife food and cover. The diesel fuel allows the herbicide to penetrate into the bark of the pines and results in a kill rate greater than 95 percent. This method also kills wax myrtle, silverlings and sweet gum. Backpack application is labor-intensive and ideal for small, isolated areas with scattered trees. For large areas

that are numerous and thick, disking is more efficient. Disk in the late winter or very early spring so beneficial quail cover will grow back that year.

CONTROLLING HARDWOODS

Two tractor-mounted machines are designed to treat hardwoods without disturbing the remaining vegetation. The WEED/SWEEP® scrapes the bark of the sapling and wipes herbicide directly to the scraped area, allowing for quick penetration into the tree. Roundup is one herbicide often used in the WEED/SWEEP®. One downfall has been the need for a more aggressive scratching blade on the lead edge of the device. The other option is the Foam Brush, developed recently as an improvement on the WEED/SWEEP®. Similar to the WEED/SWEEP®, The Foam Brush scratches the sapling with a metal bar, injuring the tree. A foaming agent then carries the herbicide directly to the tree's scratched surface. The foaming agent is designed to avoid killing low-growing grasses and forbs. The choices of herbicides used in the Foam Brush, however, are limited because of antifoaming agents in many of the more effective herbicides. A mixture of Accord® and ARSENAL AC® can be effective on both pines and hardwoods in some areas, but have limited effect in others. The herbicide of choice needs to have an aquatic label if there is standing water in the ditches along the borders. For more information on the WEED/SWEEP® and Foam Brush, contact Reddick Equipment Company, Williamston,

North Carolina, (252) 792-1191. Individual stem treatment by directed foliar spray is another option that may work well in removing scattered trees. This method uses a hand sprayer fed by backpack or tank-mounted on a four-wheeler or tractor. For best results, spray while the target plants are less than six feet tall. Herbicide selection will vary depending upon target species and whether or not water is present.

LONG-TERM MAINTENANCE

Every two to four years burning or disking, or both, may be needed to bring the field borders back to better quail habitat. Disking encourages the sprouting of ragweed and other forbs that provide both food and cover for quail. This will remove thatch from dead grasses and forbs, as well as provide some bare ground for quail chicks moving through these borders during the summer. Rotate disking to maintain the availability and quality of habitat for nesting and brood-rearing quail.

Remember that there is probably not a clear, single, optimal method for managing field borders. An integrated pest management approach that incorporates annual planning will facilitate regular and routine management of these borders.

Always carefully read and follow label directions when applying pesticides. Use of trade names is not an endorsement to the inclusion of any other suitable product. ♦

—Stacey West, Research Technician North Carolina State University

CREP—An Evaluation of the Habitat Being Created for Wildlife

THE NORTH CAROLINA CONSERVATION Reserve Enhancement Program (CREP) has been available for landowners about a year, and it's time to take a look at its progress in terms of acreage enrolled and the quality of the wildlife habitat created. But before we look at the numbers, let's take a minute to review what CREP is, the areas that are eligible and the practices available to the landowner. After the review, I'll attempt to draw a picture of the program's current status, the benefits of the various practices, and my spin on their effects on wildlife—now and in the future.

CREP is a state, federal and local partnership that combines the existing Federal Conservation Reserve Program (CRP) and state funding from the Clean Water Management Trust, Agriculture Cost Share Program and the North Carolina Wetlands Restoration Program. Under CREP, up to 100,000 acres of environmentally sensitive land in the Chowan, Neuse and Tar-Pamlico river basins as well as the Jordan Lake watershed area will be taken out of production.

Landowners can voluntarily enroll eligible land in 10-year, 15-year, 30-year and permanent contracts. They can employ various practices designed to rebuild valuable stream and wetland buffers. Those practices eligible for the program are hardwood tree planting, filter strips, riparian forest buffer and riparian wetland restoration.

Now that we have covered the background information, let's take a look at the practices and some of the program guidelines important to establishing and maintaining the practice, and the number of acres currently signed and approved. Please bear in mind the numbers being reported were accurate at the time this article was written in late December 2000. Because the program is open for continuous sign-up, however, the number of acres have likely increased since this article was written.

Hardwood Tree Planting

Hardwood tree planting, known as CP3A (you know "us government types" can't breathe without acronyms), is designed to establish a stand of predominately hardwood trees in a planting that will enhance

environmental benefits. The tree species approved for these areas vary according to region, so for the sake of simplicity, I'll list

"A multitude of wildlife species can gain benefits from this practice"

the more commonly planted species: yellow poplar, sweet gum, water oak, red oaks, and green ash. Species other than those listed in National Resource Conservation Service (NRCS) guidelines can be planted if the NRCS and N.C. Forest Service approve them. Within a given area, species can be mixed to enhance diversity. Mixing species is by far the most effective way to capture the maximum benefit from a planting for water quality and wildlife. To date, about 380 acres have been either signed up or approved under 10-, 15- and 30-year contracts. A multitude of wildlife species can gain benefits from this practice during the life of the contract. In North Carolina, and especially in the Central Coastal region where I work, hardwood restoration is a relatively new science, so it is difficult to predict exactly what will happen within the restoration area. We do know, however, that seedling survival, growth rates and native plant response to site preparation and maintenance procedures all have an effect on how and when this practice benefits the resident critters. Under an ideal scenario, early succession plants (ESP) in the form of grasses, vines and broadleaf weeds will colonize the planted site the first growing year. If no measures are taken to control the native plants, the planted area will provide food and cover until the tree canopy limits sunlight penetration and begins to shade out understory plants. As the stand matures, food-producing plants will decrease, and the stand will likely be unproductive for a spell until the oaks begin producing acorns. Our native oaks typically do not begin producing acorns

until after their 20th year and usually are not consistent producers until age 40. Therefore, the stand will provide cover only for those years between canopy closure and acorn production.

Filter Strips

The next practice available to landowners through CREP involves filter strips (known as CP21). The purpose of this practice is to establish vegetative buffers along field edges, streams and ditches that will serve to remove nutrients, sediment, organic matter and other water-borne pollutants. Filter strips must be at least 20 feet wide but can be as much as 100 feet wide. By NRCS guidelines, these areas can be established by planting with tall fescue, Bermuda grass, lespedeza, switchgrass or clover. The strips also can be allowed to re-vegetate naturally. Currently there are 1,071 acres enrolled, either pending or approved, within the project area.

Filter strips can be a vital part of the landscape for wildlife if they are planted with the proper vegetation and properly maintained. Of the species approved for establishing these areas, fescue, Bermuda grass and any mix that includes either of these species are absolutely useless to wildlife. I know that's a pretty strong statement, but those of you who are avid readers of this publication have already been preached to concerning the sins of sod-forming grasses. Under the current record-keeping system, we have no way of knowing how many of the enrolled acres were planted with fescue or Bermuda. Let's hope that most of the acreage was or will be planted with wildlife-friendly species. Those sites planted with good species can be a boon for early successional critters because they will produce food and cover from the get-go. Under NRCS guidelines, filter strips must be maintained in a vigorous state through controlling unwanted woody

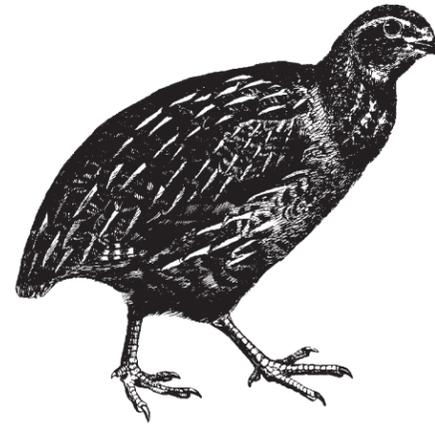


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vegetation by mowing or burning. Burning is by far the most efficient and wildlife-friendly way to maintain these areas. It will eliminate noxious woody plants and encourage native early succession plants such as ragweed, pokeberry, and various species of grasses and forbs.

Riparian Forest Buffer

Riparian forest buffer (CP22) has generated the most interest among landowners. This practice seeks to establish forested buffers along existing waterways. Their function is to improve water quality by removing water-borne pollutants and to provide shade, which lowers water temperatures and thus improves habitat for fish and other aquatic organisms. The minimum acceptable width of a riparian forest buffer is 35 feet and may be as much as 300 feet wide. The buffers can be reforested using a combination of at least two of the following species: Atlantic white cedar, bald cypress, loblolly pine, longleaf pine, pond pine, oaks, yellow poplar, sweet gum and sycamore. (There are several more approved, but these are the most popular.) Currently there are 16,776 acres enrolled that are either pending or approved. Sadly, I must report that in the Neuse River basin, the bulk of the enrolled acres are being planted with loblolly



pine. As mentioned earlier, the buffer must contain two species of trees. To meet this guideline, landowners are allowed to plant just one row of some other tree or shrub within the buffer. Therefore, many of these acres will likely be pine plantation. Although these buffers will provide food and cover for wildlife during the early years (ages 3 to 5), they will be useless to early succession species such as bobwhite quail after that

time. As the trees mature, landowners are allowed to periodically harvest trees to maintain the buffer's function. Timber harvesting and the associated soil disturbance encourage beneficial native plants; the benefits, however, are short-lived.

Wetland Restoration

The last practice available to landowners is wetland restoration (CP23). The purpose of this practice is to restore the functions and values of wetland ecosystems that have been devoted to agricultural use. These areas can be restored through various measures ranging from timber-thinning to tree-planting. Thus far, only 450 acres have been enrolled and are either pending or approved. The guidelines governing restoration are too numerous to cover here, but we can say that CP23, like CP22, could be a boon for wildlife if restoration and maintenance favors wildlife-friendly plant species.

Well, there you have it—CREP in a nutshell. If we were to evaluate the positive impacts of the program for wildlife at this point, CREP may not get a fair shake. As you can tell by the numbers, 90 percent of the acres enrolled in CREP consist of CP22. If the current enrollment trend continues, we will have 90,000 acres of mostly pine plantation, and terrestrial wildlife will lose. A program designed to benefit many species, especially the beleaguered early succession bird species (ESBS), will fail to produce significant long-term benefits. Nevertheless, if we look at CREP solely on the basis of its benefits for ESBS, one bright spot emerges. As mentioned earlier, CP21 acreage currently comprises 1,071 acres. Based on the program minimum width of 20 feet, 1,071 acres equals 442 miles of filter strip. If the enrollment trend continues and the 100,000-acre goal is reached, 5,734 acres or 2,366 miles will be in filter strips. That's a lot of linear early-succession wildlife habitat.

If you are considering enrolling in CREP and wildlife is your number one priority, please take the time to contact your local wildlife biologist before signing on the dotted line. He or she can assist you with tailoring your plan within NRCS guidelines to gain the maximum benefit for wildlife. ♦

—Robbie Norville
District 2 Technical Guidance Biologist

Managing Field Borders For Quail

RECENTLY COMPLETED BOBWHITE QUAIL research on farms in eastern North Carolina suggests that field borders on all the tilled fields will result in more quail coveys on the farm. We have learned that typical farm landscapes lack nesting and brood-rearing cover in the spring and early summer. We also learned that after letting natural vegetation grow up in the first 15 to 30 feet from the wood-line or ditch, a good mix of grass and forb volunteers result in excellent nest and brood habitat in the second and third years. Quail use last year's dead grass to weave their nests, and their broods thrive on insects that are abundant in habitats dominated by forbs. The overhead cover protects them from predators, but structure at the ground level is open enough for the parent bird and chicks to forage efficiently. If you can visualize a billiard ball rolling on the bare ground and dead vegetation in an erratic path through the field border, then you have excellent quail habitat. A problem for quail is that excellent nesting and brooding cover deteriorates rapidly after the third growing season. A problem for landowners is that these 3- and 4-year-old borders begin to harbor pines and hardwoods that will eventually reduce yields from nearby crops. Fortunately, aggressive management can solve both problems.

Although no two farms are the same, here are some steps landowners can take to get the most out of these field border systems without spending as much time or money as it would take to mow them every year:

- **Assess the habitat of each border** in the early summer at years 2 and 3 after initial establishment or last disking. Would the field border pass the billiard ball test?
- **If pines or hardwoods are invading**, use herbicide to knock them back. Herbicides are better than cutting for most trees because the chemical kills the plant including its roots, whereas cutting can be followed by rapid regrowth of sprouts. See the notes on herbicides below.
- **If vines and grasses are so thick that** open bare ground and dead plant