



THE UPLAND GAZETTE

North Carolina Small Game Notes

Spring 1999

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Volume 4, Issue 1

Landowners Promote Small Game Management from Mountains to Coast

This issue of the Gazette focuses on land management, the key to producing small game. First, we'll look at the efforts of several landowners who participate in the Forest Stewardship Program, which provides assistance to landowners wishing to improve the forest, wildlife, soil and aesthetic resources on their property. We hope that by reading their stories you will be inspired to evaluate the management opportunities on your lands and work to correct problems. Second, we'll review the various programs that can help you accomplish wildlife management goals on your land. Finally, this issue contains a list of our District Wildlife Biologists who can help you develop a program to improve habitat and increase populations of small game on lands you own or lease.

The following three articles were written by the Wildlife Commission's regional forest stewardship biologists.

Piedmont Region featured landowner—Harold Reddick

What is a Forest Stewardship Success? In the Piedmont it is Harold Reddick. The story starts in 1993 when I received a call from Mike Ballinger to go look at a farm in Franklin County. Mike works with Stone Container Corporation and provides assistance to landowners who wish to better manage their forest land. Mike said that he has recently been working with Harold Reddick, a landowner whose goal is to turn his farm into a "quail heaven." The timber was sold when Reddick purchased the property, and the clear cut looked like a war zone. Mike said the clear cut was replanted with loblolly pine, but the heavy hardwood regeneration threatened to outgrow the pines.

We began with 210 acres of young mixed pine, sweetgum, maple, and poplar, a washout big

enough to hold a train car, and 133 acres of fields covered with Johnson grass and erosion. I jokingly told Mike, "You have picked a real winner this time."

The Franklin County Forest Stewardship Committee had a real challenge. We determined the clear cut was going to provide quality quail habitat for the next few years. However, we felt we should plan for the time, in five to eight years, when the tree canopy will close on the young forest. We recommended 5 acres of 32-foot-wide, linear wildlife openings be installed around and through the areas. These would provide low-growing quail habitat, access to the hunting stands and a control for the prescribed fires that would be necessary to maintain the areas.

Five years later, the wildlife openings were established with one side as a 15-foot-wide strip of VA-70 lespedeza, and the remainder as Kobe lespedeza. The pines have been chemically released from the hardwood competition by aerial spray of Arsenal. The hardwood brush has been replaced by food and cover producing weeds and grasses. The erosion problem has been repaired and established in a mix of Kobe lespedeza and Partridge Pea. Ninety acres of the fields have been taken out of agriculture production and enrolled in the CRP program under wildlife habitat. The existing fescue waterways have been chemically treated to kill the fescue and planted in no-till VA-70 lespedeza.

The fields were broken into

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The Goal of Quail Management

"make all points on an area usable by bobwhites at all times"—Dr. Fred Guthrey

Dr. Fred Guthrey a long-time quail researcher and wildlife professor at Oklahoma State University conducted a thorough review of the volumes of literature devoted to quail management. He boiled down his years of experience to one statement: "Bobwhites benefit more from the creation of additional usable space than from attempts to improve the quality of currently occupied habitat."

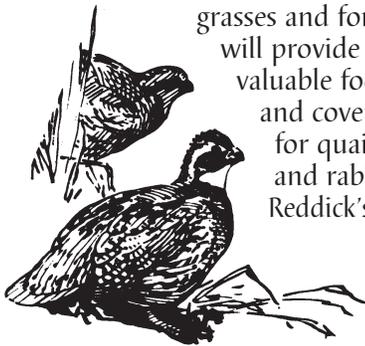
Those of us who try to increase bobwhites on our property should take this message to heart. Plowing up a ragweed field (brood habitat) to plant a food plot (winter food) will not be productive. However, converting non-habitat into usable space will help bobwhites. Our time is best spent creating quail habitat in areas overgrown with trees, choked with a fescue sod or closely mowed.

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blocks by VA-70 lespedeza hedges or native warm season grass plots. Each block was then divided into three areas planted in a rotation of either Kobe lespedeza, Partridge Pea or an annual of Mr. Reddick's choice (wheat, buck wheat, milo). The result of this work is far better than Reddick, Ballinger or the committee ever expected. Rabbits and quail have already taken up residence in the areas. The number of coveys has continued to increase each year. Reddick now believes there are 12 to 13 coveys of birds on his farm, which we believe hasn't reached its full potential.

The canopy is beginning to close in the young pine plantation, but Reddick has agreed to begin a control-burning rotation on seventy-five acres of the pines. He will be burning pines at age six, when the pines are 10-feet tall. Mr. Reddick's pines will grow faster without the hardwood competition. The understory grasses and forbs will respond faster when initial burns are conducted early in the life of the forest. The

grasses and forbs will provide valuable food and cover for quail and rabbit. Reddick's



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Subsidized Practices

A variety of practices are subsidized through various state and federal cost-share programs. Contact your local Natural Resources Conservation Service office or district wildlife biologist to determine if opportunities are available in your area. Listed below are some practices for which landowners may obtain cost-share:

- noncommercial thinning
- creation of openings or firelines
- establishing cover
- prescribed burning
- riparian buffers
- filter Strips
- establishing hedgerows/borders/corridors
- conversion of exotic grasses to native grasses
- mowing or discing to set back plant communities to a desirable condition

efforts are producing hunting opportunities as well as positive results for the environment.

—*Bill Edwards (Piedmont Forest Stewardship Biologist)*

Mountain Region featured landowner—David Bowers

Located in northeastern Wilkes County, the 85-acre Bowers Farm is nestled in a rural valley in the foothills of the Blue Ridge mountains. It's not exactly prime quail country, but that didn't stop David Bowers from doing all he could to manage for this beleaguered species. David and his dad, Ralph, who purchased the farm in 1951, were already making habitat improvements for wildlife when they heard about the Forest Stewardship Program from their new neighbor, District 7 wildlife biologist David Sawyer. Sawyer had placed his property in the program the year before to demonstrate to other landowners how to integrate timber management with maximum wildlife habitat benefits. Natural resource professionals such as Sawyer and county forester Jody Brady have been instrumental in making the program so successful in Wilkes County, with 38 landowners committing over 2,800 acres to the program. In 1996, working closely with the district biologist and foresters, the Bowers were able

to develop a small game-management plan for their property.

Back in the 1950s, their farm and neighboring lands supported a healthy population of quail. Folks would come up from Winston-Salem to hunt the lespedeza hayfields. Back then, land use was not as intensive, and birds had plenty of areas in which to nest and feed. However woodlots, heavily grazed pasture and hayfields are now predominant, and small game habitat is almost nonexistent. Weedy or brushy areas have to be deliberately created and maintained for quail use.

The Bowers have dedicated or recently established 10 fields and forest openings for nesting and brood rearing. The two largest fields, totaling 7 acres, had previously been used as crop fields or leased out for silage. They have since been converted to switchgrass, lespedeza and a variety of annuals including sunflower, millet, Egyptian wheat, milo and wildflowers. Rotational discing and prescribed burning are the main management tools the Bowers use to maintain diversity in these openings. Another eight fields range in size from half an acre to three acres and are scattered across the tract, interspersed with the existing woodlands and hayfields. These

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12 acres were initially planted in switchgrass, bluestems and native forbs such as partridge pea. The Bowers use a rotational burning program to maintain the warm season grasses and promote the development of beneficial natural vegetation within these habitat blocks. The Bowers family was recently recognized by the Forest Stewardship Program for the land management activities they have accomplished.

As an adjoining property owner, Sawyer has noted the changes on the farm during the last two years, and agrees the Bowers have a long-range vision. "He is doing what he can because he believes it's the right thing to do and because he wants to influence other landowners to do the same," Sawyer said. "He has consistently challenged the plan's timetable and is about two years ahead of schedule on all of his work. His level of enthusiasm has not waned. I wish all the landowners in my district had half his energy to put into on-the-ground habitat improvements."

Although his intensive management has resulted in more rabbits, songbirds, turkey and deer on the property, David Bowers has not seen the quail population rebound to the same degree. He admits he is troubled by this, but vows to continue working toward his goal. Realizing that a landscape approach is needed to make a real difference in the quail numbers, Bowers hopes to influence other landowners in the community by setting an example they can follow. He has recently gotten friends and neighbors involved in prescribed burning and field management on their own lands. He plans to continue his efforts to promote and restore small game habitat in this area so the bobwhite's call will once again echo up and down the valley.

—*Kelly Hughes (Mountain Forest Stewardship Biologist)*

Coastal Region featured landowner—Dr. Glenn Hair

Build what? For who? In the case of one Forest Stewardship participant, the answers to these two questions are: habitat and bobwhite quail. Dr. Glenn Hair is determined to prove that the implementation of this philosophy through the Forest Stewardship Program is working on his 478-acre tract located in southeastern Cumberland County.

Dr. Hair enrolled the tract in the Forest Stewardship Program in hopes that he could have a management plan to increase the quail habitat available as well as address timber, soil, water, and recreation issues. In 1993, when his Forest Stewardship Plan was approved, the property was comprised of approximately 200 acres of leased cropland and 278 acres of drainage canals and pine-dominated woodland. Other various open areas in early-succession vegetation included a powerline and some abandoned fields. Until the late 1970s, one could easily flush 10 to 15 coveys of quail a day on the farm. However during the 1980s, Dr. Hair noticed an apparent decline in the bobwhite quail population and, by 1993, there were only 2 known quail coveys remaining.

By examining the land management history, several reasons for the quail decline were possible. First, most of the standing timber on the property was harvested during the 1970s and, as the areas grew, they shaded the plants needed by quail. Second, the hedgerows and filter strips along the ditches, which had subdivided the fields, were removed to increase field size and allow for increased crop production. Consequently, the quail had plenty of open areas, but the amount of adjacent grassy and brushy cover was greatly reduced. Third, many of the fields were being

immediately plowed under after harvest. Subsequently, the insects often associated with crop residue were absent, which in turn decreased the quail's food base in the fields. In addition to the above changes, predation may also have increased since the number of raccoons and Cooper's hawks had increased during the time period, as well. Shortly after determining that the alteration of the habitat was a probable cause of the observed decline, Dr. Hair adopted the philosophy: "If you build it, they will come," and enrolled his property in the Forest Stewardship Program.

Dr. Hair has spent the last five years diligently implementing the various practices recommended in his Forest Stewardship Plan and has observed an increased amount of wildlife on his farm. Just during the past summer, he has observed five separate coveys of quail on the farm including two broods of quail containing 10 or more chicks. Wild turkeys have also taken up residence on the farm this year, with a group of four gobblers and two different broods containing at least six poults each. There are even a few bucks who have been named by Dr. Hair's sons due to their size and apparent good health. The increased observations of wildlife indicate that the "Build it and they will come" philosophy is working. So, now the only question that remains is, "How has Dr. Hair managed to build habitat during the past five years?"

Dr. Hair has initiated several practices that he believes contributed to his progress towards his management objectives. These practices are varied and most of them have had a positive impact on the other resources present on the farm as well. Another important aspect of Dr. Hair's management philosophy is that he real-

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Negotiating the Maze—Federal Conservation Incentives Programs

There are many federally funded programs to assist landowners with conservation projects. Benefits include technical guidance from wildlife management, forestry and soil conservation specialists to cost-share money for installing certain practices and annual payments for maintaining these practices. Each program has national objectives that are refined at the state and county level to meet specific local needs. How do these programs operate? Who is eligible to participate? Why should you sign-up?

These are voluntary programs. Their purposes are to provide benefits to the landowner and the overall public good. Benefits include increased wildlife populations, improved water quality, wetlands protection and soil erosion abatement. So if you sign-up, you are required to install the specified practice(s) and to maintain

them for a specific length of time.

The N.C. Wildlife Resources Commission works with other state and federal agencies to set priorities for these programs and provide technical assistance to landowners. The emphasis of the Wildlife Resources Commission is the creation and maintenance of early succession vegetation such as grasslands and shrub habitats, which benefit bobwhite quail, loggerhead shrikes, grasshopper sparrows and a host of other imperiled species.

Conservation Reserve Program (CRP)

CRP began with the 1985 federal Farm Bill, which focuses on reducing soil losses on highly erodible land by taking these fields out of crop production and converting them to a permanent vegetative cover. The Wildlife Commission is promoting the planting of native warm season grasses and forbs

where an open landscape is desired, or widely spaced pines with 15 to 20 percent in wildlife openings where timber production is the goal. Other eligible practices include planting hardwoods, establishing permanent wildlife habitat, restoring wetlands and longleaf pine ecosystems. The more environmentally-friendly practices have a better chance of being accepted into the program. Sign-ups for CRP are announced once or twice a year, although some highly beneficial practices, such as filter strips, may be entered at any time. The program pays a portion of the installation costs, as well as an annual per-acre payment for the life of the contract. Interested landowners should contact the USDA Natural Resources Conservation Service for more information.

Environmental Quality Incentives Program (EQIP)

This is a new federal program that replaced the Agricultural Conservation Program (ACP), Water Quality Incentives Program (WQIP) and others. Periodic sign-up periods are held. The primary goal of the program is to improve water quality while producing permanent wildlife habitat. The priorities for EQIP expenditures are set at the state and local levels, and include the handling of livestock waste, controlling soil erosion and producing early succession wildlife habitat (e.g., grasslands and fallow areas). In some cases, many or all of these objectives may be met with a single project. For example, a cattleman may wish to fence his cattle out of a creek and provide an alternative water source. The result is that the water quality of the stream improves; streambank erosion is abated; wildlife habitat develops; and the cows water in a trough

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Getting Started

Listed below are the District Biologists who can help you take that all-important first step. Technical assistance is only a phone call away.

Mountain Region

David Sawyer (336-957-4855)—Ashe, Alleghany, Forsyth, Iredell, Stokes, Surry, Watauga, Wayne, Yadkin
Jack Mason (704-396-5363)—Avery, Burke, Caldwell, Cleveland, Gaston, Lincoln, McDowell, Mitchell, Rutherford
Mike Carraway (828-645-1122)—Burke, Cherokee, Clay, Graham, Haywood, Henderson, Jones, Macon, Madison, Polk, Swain, Transylvania

Piedmont Region

Mike Scruggs (704-704-045)—Edgecombe, Franklin, Halifax, Johnston, Nash, Northampton, Wake, Warren, Wayne, Wilson
George Strader (919-471-1743)—Alamance, Caswell, Chatham, Durham, Granville, Guilford, Lee, Orange, Person, Randolph, Rockingham
Ken Knight (704-982-1600)—Anson, Cabarrus, Davidson, Mecklenburg, Montgomery, Moore, Richmond, Rowan, Stanley, Union

Coastal Region

David Rowe (252-221-4053)—Bertie, Camden, Chowan, Currituck, Dare, Gates, Hertford, Hyde, Martin, Pasquotank, Perquimans, Tyrrell, Washington
Robbie Norville (252-523-8540)—Beaufort, Carteret, Craven, Duplin, Greene, Jones, Lenoir, New Hanover, Onslow, Pamlico, Pender, Pitt
Thomas Padgett (910-645-4115)—Bladen, Brunswick, Columbus, Cumberland, Harnett, Hoke, Robeson, Sampson, Scotland

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, 512 N. Salisbury Street, Raleigh, N.C. 27604-1188.

(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 _____



Landowners *(continued)*

izes the management of quail is a slow process and requires a continual effort of implementing and maintaining the practices. A few of the practices that Dr. Hair has implemented and maintained are highlighted below.

Thinning: He thinned approximately 40 acres of pine stands, which improve the growth rate of the standing timber and opens the tree canopy, allowing for enhanced herbaceous growth in the understory. In the winter time, Dr. Hair typically finds the quail deep in these thinned areas.

Prescribed Burning: He has subdivided his pine stands into smaller, more manageable units and has established a prescribed burning program to control the hardwood competition in the pine. By burning in smaller units, he is also able to create a mosaic of cover and freshly burned areas by not simultaneously burning adjacent blocks.

Establishment of Field Borders and Filter Strips: Dr. Hair has reclaimed the edges of most of the cropfields and ditchbanks and seeded shrub lespedezas in these areas. He maintains the shrub lespedeza by mowing and fertilizing it every two years. Currently, these areas are approximately 15-foot-wide. However, he plans on widening them by discing a strip in

front of the shrubs to naturally revegetate the disced strip. Dr. Hair finds most of his quail in these field borders. He occasionally shoots one in December to monitor the population's health. To date, the quail that he has killed have been healthy and their crops have been filled with shrub lespedeza seeds. These borders and filter strips have also minimized soil erosion and maintained the water quality in the ditches.

Establishment of Wildlife Plantings: Dr. Hair has also planted odd areas and the powerline in various plants beneficial to wildlife. The species planted include partridge pea, iron claypeas, sesbania, sericea lespedeza, shrub lespedeza and big bluestem. These plants all provide either food, cover, or nesting habitat for quail, as well as food and cover for other wildlife species including turkey, deer, rabbits and songbirds. Depending on the plant species, he maintains portions of these areas each year by mowing or discing.

Conversion to No-Till Corn and Soybeans: The farmer who leases the cropfields from Dr. Hair has converted some of the fields to no-till, which not only serves to minimize soil erosion, but also provides additional food sources

utilized by quail, especially during the brood-rearing season. In fact, one brood of quail that Dr. Hair observed was seen coming out of the no-till soybean field and then went into the shrub lespedeza filter strip along the ditch.

In summary, Dr. Hair saw a problem on his farm:
The bob-



white quail were disappearing. Instead of sitting back and letting nature take its course, he found a solution and turned to the Forest Stewardship Program for assistance. However, his commitment and work ethic are what made him a Stewardship Success. He knows that it will take continuous effort and that even if the quail population does return to its original numbers, the work will not end. For him, it will all be worth it to hear those first quail calls in April, see those broods of quail darting across the farm paths in July and watch his bird dogs flush a covey in December. ♦

—Bethany Whittop (*Coastal Forest Stewardship Biologist*)

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Negotiating *(continued)*

rather than the creek. EQIP offers contracts of up to 10 years and 75 percent cost-share payments for implementing conservation practices. Contact the USDA Natural Resources Conservation Service office in your county for more information.

Wildlife Habitat Incentives Program (WHIP)

The purpose of WHIP is to promote the establishment of permanent, high-quality wildlife habitat. This federal program has an annual sign-up period in which applications are received and accepted or rejected according to their value to wildlife. Priority is placed on the establishment of early succession vegetation and/or the planting of native warm season



grasses such as switchgrass or Atlantic coastal panicgrass. These grasses may be grazed, hayed or managed solely to benefit wildlife. Other preferred practices include prescribed burning, establishing riparian buffers and creating or restoring wetlands. Cost share totaling \$270,000 will be available during 1999 in North Carolina. For more information, contact the appropriate NCWRC District Wildlife Biologist or NRCS District Conservationist.

Forest Stewardship Program and Stewardship Incentives Program

The Forest Stewardship Program provides a landowner with an integrated management plan produced by a county committee with representatives of the N.C. Division of Forest Resources, N.C. Wildlife Re-

sources Commission, U.S. Natural Resources Conservation Service and the N.C. Cooperative Extension Service. The Stewardship Plan incorporates the goals and objectives of the landowner with the recommendations of these agencies, and it must address forest management, wildlife management, soil erosion, water quality and recreational use. Qualified private consultants may also prepare a Forest Stewardship plan. Certification is based on the recommendation of the county committee after completion of a majority of the plan's projects. Interested landowners having at least 10 acres of property may contact any of the above agencies in their county. ♦

—Ken Knight, Wildlife Biologist

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