

Bringing Back the

Bobwhi

BY BRUCE INGRAM, FIELD EDITOR



U.S. FISH AND WILDLIFE SERVICE, ISTOCK PHOTO



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*So that our children's children
...will hear the sweet call of
"Bobwhite" and see all the
living and nesting inhabitants
of our beautiful land.*

— Zane Grey, *Outdoor America* (1922)

The trademark mating whistle of “bob-bob-white” was once commonly heard across 38 states — from Nebraska to Texas, Pennsylvania to Florida, and the states in-between. Today, almost an entire generation of Americans has grown up without hearing the call.

What happened to the bobwhites?

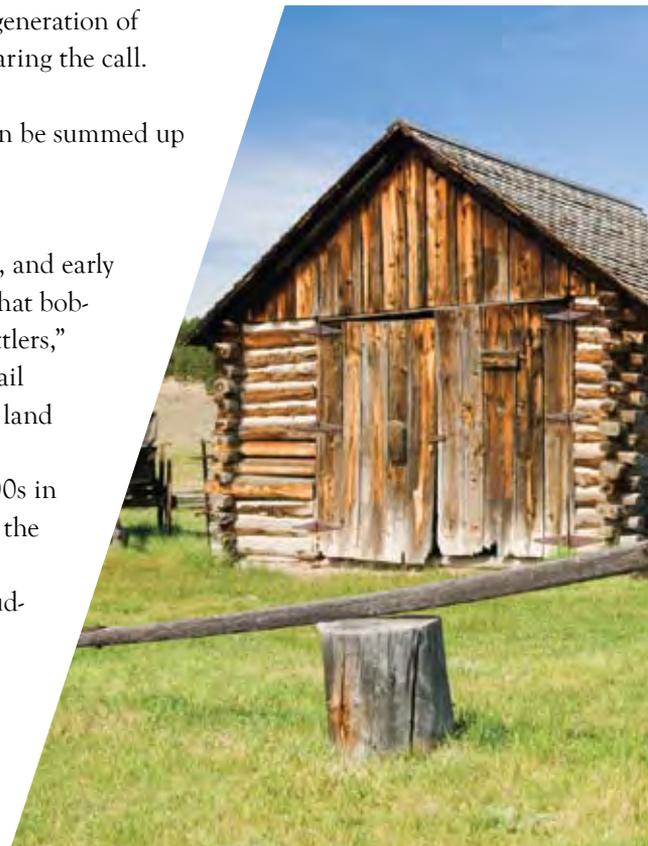
The rise and fall of Northern bobwhite quail can be summed up with one word: habitat.

Shifting Landscape

The bobwhite is a creature of grasslands, savannahs, and early successional forests. “Conventional quail wisdom says that bobwhite populations really peaked with the onset of the settlers,” says Elsa Gallagher, a biologist and Missouri statewide quail coordinator for Quail Forever. “Quail were a by-product of land use practices.”

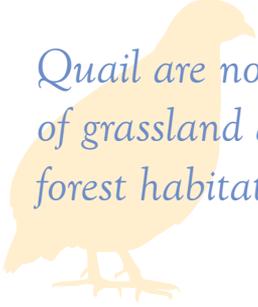
Bobwhite numbers were at their height during the mid-1800s in northern states and from the late 1800s through the 1940s in the southeast. During that time, Americans were homesteading — creating small farms and managing them for multiple uses, including crops, grazing, gardens, and fallow fields, Gallagher explains.

However, as the country shifted toward a more industrial agriculture system — larger farms, more machines, fewer hedgerows and cover crops — bobwhite numbers plummeted and have continued to decline. Wildlife managers were concerned about bobwhite numbers as far back as the early 1900s.





Quail are not the only species affected by loss of grassland and early successional forest habitats.



Over the past 25 years, bobwhite populations have dropped 60 to 90 percent across the country. In addition to the disappearance of small farms, says Gallagher, chemical control of insects, over-grazing, fire control, forestry trends, and monocultures of non-native grasses have all played a significant role in the quail decline.

Introduction of the Conservation Reserve Program (CRP) through the Farm Bill fostered a brief resurgence in quail populations in the early 1980s. “Fields came out of crop production and were allowed to remain fallow, then planted to a grass/forb mix,” Gallagher recounts. “They were weedy the first three to four years, with adequate bare ground, and quail rebounded at that point. After year four or five, however, many CRP fields became too thick for quail and provided little usable space.” The U.S. Department of Agriculture reports that from 1980 to 1999, bobwhite populations declined from an estimated 59 million birds to about 20 million birds.

Quail are not the only species affected by loss of grassland and early successional forest habitats. From the Northern Harrier to the Eastern Cottontail, many species rely on the same habitats as bobwhite quail – and are declining just as widely.

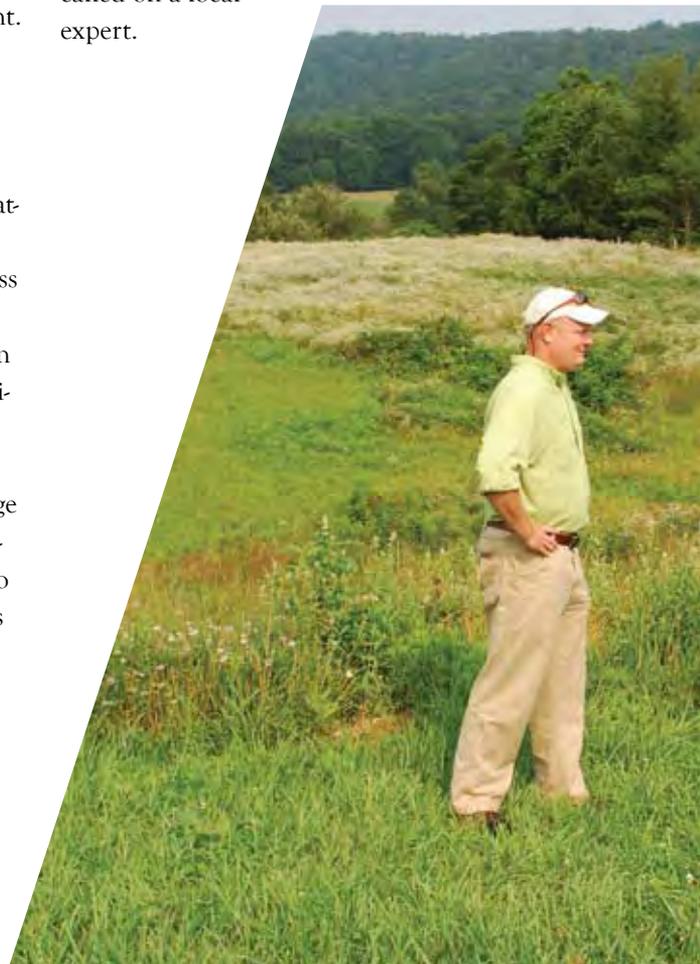
Reversing bobwhite declines depends in large part on restoring habitat, and several organizations are working to do just that. The goal is to restore the quail to 1980s population numbers by better managing public and private lands for wildlife habitat.

Quail Forever was founded in 2005 with a focus on land acquisition, conservation, and restoration to benefit quail, pheasants,

and other species. Quail Forever chapters have completed more than 20,000 habitat projects in cooperation with local, state, and natural resource agencies.

The National Bobwhite Conservation Initiative (NBCI) is a coordinated effort among state wildlife agencies and conservation organizations from 25 states. Bobwhite populations are “recreationally extinct” in many parts of the country, the group reports. To help states develop targeted plans for quail habitat management and restoration, biologists evaluated more than 600 million acres across the bobwhite’s historic range and identified 195 million acres of “priority landscapes” that have a high potential for habitat restoration success.

I wondered what type of restoration work was being done in my home state of Virginia, so I called on a local expert.



Landowners Working to Bring Back Bobs

As part of Virginia's Quail Action Plan, five wildlife biologists working with the Virginia Department of Game and Inland Fisheries are helping private land owners develop wildlife habitat. Andy Rosenberger is one of those biologists. When I called Rosenberger, he suggested we visit several homeowners whose properties are becoming great quail habitats.

I invited two other people along for the ride: Paul Hinlicky, a neighbor I knew was interested in quail restoration and what other landowners are doing, and Scot Sutherland from the League's Roanoke Chapter, with whom I've had many conversations about managing land for wildlife. We all hit the road with Rosenberger in July.

Our first stop was the 67-acre farm of Brian and Martha Murphy in Craig County, Virginia. The Murphy farm lies in the "fescue belt," Rosenberger explained — a section of the eastern United States where tall fescue has prospered. This non-native grass, which has little wildlife value, crowded out native grasses that bobwhite

quail and other small wildlife need for nesting and cover. Restoring habitat in this part of the country often means eliminating tall fescue and re-planting native grasses and forbs. And that's exactly what Brian and Martha Murphy are doing.

"When we came here 17 years ago, quail still lived in this valley," says Brian. "But they became fewer and fewer. Then everyone up and down the road stopped hearing or seeing them. So we decided to try to help change that."

With Rosenberger's guidance, the Murphys eliminated fescue, planted native seeds, and conducted prescribed burns — all of which allowed native warm-season grasses and flowers to emerge. Patches of switchgrass, big and little bluestem, and Indian grass dot the landscape. Partridge peas, bee balm, jewelweed, coneflowers, black-eyed susans, button bushes, milkweed, and pokeberries grow in profusion. The couple also planted mast-producing trees such as paw paws, hazelnuts, and silky dogwood to benefit wildlife.

Brian is an avid birdwatcher, and he and I quickly made note of a dozen or so species. "We've counted 103 species of birds here, with our most exciting one being a Northern Harrier,"

BRUCE INGRAM (2), ISTOCK PHOTO (3)



Far left: Brian and Martha Murphy show biologist Andy Rosenberger where they transformed a field of fescue into a meadow replete with native warm-season grasses and wildflowers.

Left: Brian Murphy shows Andy Rosenberger escape cover he created for foraging quail.

beams Brian. “And the deer and turkey hunting has been better since we did the habitat work.”

As we stop to pick some blackberries and dewberries, Martha comments that quail love the berries too. Although quail have not yet returned to the valley, the Murphys are doing what it takes to create ideal habitat for them.

Our next stop was a 580-acre farm owned by Wysor Smith. “The farm started off heavily forested, and it borders the national forest,” says Rosenberger. “Wysor opened up around 80 acres that are now being managed for quail. On top of that, he just did a pretty big cut to create more of an oak savanna setting that will ultimately be beneficial to quail.”

Smith explains that his farm used to host ruffed grouse and quail. But gradually, as the forest matured, both species slowly disappeared. “I think one of the best habitat projects that Andy helped me with was creating the hedge rows bordering the savannah,” Smith says. “When the forest was thinned, we had the stumps and debris pushed into rows. These hedgerows make great escape cover for quail.”

Indeed, blackberry vines, pokeberry plants, and briars, brambles, and vines of all kinds choke the hedgerows to such a degree that the woody debris is not even visible. Rosenberger remarks that many modern landowners would regard the rows as an eyesore and

something to be removed, but to quail they are a sanctuary from predators.

We next visit an area where Smith conducted a controlled burn last November. Fire lines protected the hedgerows, but the ground cover was seared. Now, Indian grass, big and little bluestem, partridge peas, and various wildflowers grow in such abundance that no evidence of a fire exists.

“Many people don’t like to cut the number of trees that Wysor did,” says Rosenberger. “But what he has accomplished goes to show that a landowner can still have a lot of trees but have a lot more wildlife, including quail and many songbirds that need early successional habitat. We’ll do more prescribed burns in the coming years to keep the property like this.” Such burns are often part of managing land for wildlife because land managers now suppress the fires that used to turn over habitat.

Of the three farms we visited, this was the least likely to attract wild quail because it borders a mature national forest — yet it was the first one to have quail return. Even Rosenberger was surprised by this result. Restoring wildlife seems to require a bit of luck too.

Our last stop was at the 330-acre Botetourt County farm of James Hancock. Upon our arrival, Hancock tells me that some 20 years ago he used to be in my hunting and fishing club as a student at Lord Botetourt High School, where I still teach English.

A landowner can still have a lot of trees but have a lot more wildlife.





A hedgerow that Andy Rosenberger designed for landowner Wyor Smith as cover for quail.

Hancock carried a bucket of seeds out his front door and over to a flower garden a few yards away. “Before I started my habitat projects, I went around my farm searching for the last clumps of native warm season grasses still here,” he said. “I stripped their seeds and used them to re-establish stands of Indian grass, Eastern gamagrass, and big and little bluestem. I wanted to plant not only native grasses but seeds from plants that had adapted to this particular land.”

While we were all still marveling at this level of dedication, James showed us his front yard. Instead of the omnipresent blight of fescue, Hancock has a section devoted to native warm season grasses and wildflowers. “When people come here, the first thing I want them to see is my idea of a flower garden,” he laughs. “My family has farmed this land since the 1940s. When I was a child, I rambled around and occasionally would shoot a grouse or a quail. I moved back in 2010 and have not seen a quail or grouse since. It weighed on my mind that I had to change that.”

Just beyond his front yard is Hancock’s major project. He clear-cut a stand of mature Virginia, pitch, and table mountain pines that had started to die and removed poplars, white ashes, red maples, and other non-mast-bearing trees. This released a smorgasbord of indigenous grasses, forbs, and berries from the seed bank that — along with some of the new seeds he planted — now flourish among the remaining white and chinquapin oaks and shortleaf pines.



Landowner James Hancock proudly displays a bucket of native warm-season grass seed that he gathered to plant on his land.

“Now this is quail habitat,” says Rosenberger. “The quail can eat the acorns from the white and chinquapin oaks. There’s brooding and escape cover. Look at all these things to eat: Blackberries, dogwood and sumac berries, beggar’s lice, partridge pea, and rose hips from those native roses. And look at that grasshopper on some little bluestem. Can’t you just imagine a mother quail leading her poults through here and coming across hoppers?” Although no quail have appeared yet, the stage is set for their return.

It can take many years for wild quail to happen upon restored habitat, as I’ve found out myself. On a 30-acre parcel of mine in Craig County, I started wildlife habitat improvements more than a decade ago. I planted mast-bearing trees, created a clear cut, and let a fence row and a field become overgrown. Although I made these changes to benefit multiple species of wildlife, I did hope that bobwhites would be one species that benefitted. It took 10 years, but I finally have a covey of bobwhites on that property.



By moving a whole wild flock together, biologists can minimize stress on the birds, which are flock animals.



Research for Recovery

Tall Timbers Research Station and Land Conservancy in Tallahassee, Florida, conducts the longest-running game bird population study in the United States (it has been running since 1969). Biologists conduct field studies on wild bobwhites to understand how the quail interact with their environment, which helps biologists develop management recommendations.

“We have radio-tagged more than 25,000 wild quail over the past 15 years in 7 southeastern states to understand limiting factors and correct them,” says Dr. Bill Palmer, Tall Timbers president and CEO. “Tall Timbers has developed management techniques that, when applied correctly, have proven to increase wild bobwhite populations. This includes habitat management, prescribed burning, predation management, translocation of wild bobwhites, supplementation of food, genetic health, timber management, agricultural management, and more.”

Palmer’s mention of translocation immediately intrigued me. More than half a century ago, state wildlife managers began using the trap-and-transfer method to reintroduce wild turkeys to their former range. Entire flocks were captured in nets and relocated into areas with suitable habitat. By moving the whole flock together, biologists could minimize stress on the birds, which are flock animals. This method – a vast improvement over releasing tame turkeys into the wild, which ended with full-bellied predators – restored wild turkey populations to huntable numbers in many states. Could quail restoration succeed using the same model?

“After 10 years of research, we proved that when enough suitable habitat is created, along with appropriate management of the habitat and predation, translocating bobwhites is highly effective for establishing new huntable populations,” says Palmer. This cutting-edge quail research was kept under wraps

while Tall Timbers evaluated the long-term results. There are dozens of success stories, says Palmer, including a location in Georgia where Tall Timbers conducted the first translocation of wild quail in that state. The effort was such a success that the site is now being used as a source for wild quail to locate to new areas. Pen-raised quail, on the other hand, have an estimated mortality rate of 99 percent within a month of release.

The Battle Before Us

Bobwhite recovery faces an uphill battle against habitat loss. According to a report by the Southeast Quail Study Group (now the National Bobwhite Technical Committee), every 100,000-person increase in the U.S. population is accompanied by conversion of 150,000 acres of rural land to urban use. In addition, record-breaking crop prices, subsidized crop insurance premiums, and a lack of conservation

Wild quail released by biologists as part of the Tall Timbers research project.





IMPROVING HABITAT BENEFITS BOBWHITES AND MORE

Habitat improvement projects can benefit bobwhite quail as well as a wide variety of wildlife species. I put a call out to several League chapters engaged in large-scale habitat improvement and heard back from two in Maryland with promising projects underway.

Mike Worden, general manager of the Woodmont Chapter in Hancock, Maryland, says he grew up chasing quail and has retained his enthusiasm for this game bird. However, quail no longer roam western Maryland. “Locals speak of seeing them up until the early 1980s, which is about the same time that the pheasants disappeared in this area,” he explains.

The chapter has planted approximately 60 acres with food plots, mainly grain sorghum that goes unharvested as wildlife food and cover. In addition, the chapter has planted about 30 acres of warm-season grasses – primarily

switchgrass – to benefit wildlife. “We attract lots of deer, turkeys, and rabbits,” says Worden, “along with hawks, coyotes, foxes, and other predators. We are always hopeful that eventually the quail will reappear, but this kind of comeback would probably require significant habitat improvement on a much larger scale to sustain a viable population.”

The Bethesda-Chevy Chase Chapter also has a landscape approach to habitat improvement on the chapter’s 623-acre farm in Poolesville, Maryland. “The question of quail re-introduction is asked several times a year at our chapter,” says Larry Anderson, the chapter’s wildlife management committee chairman. “Our management philosophy is to provide diverse, healthy wildlife habitat for many species, including non-game species. Our farm’s ‘cash crop’ is getting as many members

as possible outdoors to enjoy and appreciate nature. Our management practices – including invasive control, food plots, buffer maintenance, and diversity – do not exclude quail. We realize that our farm is but a small island of suitable habitat and that sustainability is an issue.”

Bob St. Pierre, vice president of marketing for Quail Forever, is very enthusiastic about the possibility of Izaak Walton League and Quail Forever chapters cooperating on habitat projects. “All kinds of opportunities exist for partnership between Quail Forever and the League,” says St. Pierre. “We would welcome Ikes working with us on field days and local habitat improvement projects, among other activities. A way to start would be to find out where local chapters of both groups exist and see what projects they could work on for their mutual benefit.”



requirements have combined into an incentive for farmers to turn native grasslands into croplands — resulting in even less quail habitat.

“We’ve lost almost an entire generation of folks interested in quail,” says Bob St. Pierre of Quail Forever. “The challenge here is to reach a generation that is unfamiliar with the joys of quail hunting.”

As someone who didn’t begin hunting until 1985, I can still recall the one and only time that I killed a bobwhite, which was in 1989. The bird hunters who had been mentoring me in the art of quail, bird dogs, and upland gunning stopped going afield for quail. One of my mentors told me that he simply didn’t have the heart to shoot the few bobs left that we were flushing.

Rethinking our own land use is one part of restoring bobwhites. Another is ensuring federal laws encourage habitat conservation and restoration. “Bobwhites have an important place in our landscape and culture, and there’s a lot we can do to help these native birds flourish again,” says Mike Leahy, the League’s conservation director. “Congress needs to pass a long-overdue Farm Bill with full funding for conservation programs and a nationwide Sodsaver program to reduce incentives to plow up dwindling native grassland.”

League director of chapter relations, Earl Hower, encourages chapters to consider habitat restoration projects as part of their land management plans. “Any chapter with property

obviously needs to manage its grounds properly. What better way than to create a community showcase for land management while also benefiting wildlife and fisheries? Habitat improvements such as planting native grasses, grains, and forbs; enhancing riparian buffers; and protecting wetlands benefit not only targeted species such as quail but many other wildlife species, both game and non-game.”

A few weeks after the farm tour with Rosenberger, I planted Quail Forever’s Bird & Buck seed mix in the food plot on my 38-acre property in Botetourt County. The mix is designed to both attract big game and to provide quality habitat for bobwhites and other upland birds. I’m hopeful that this planting and the timber stand improvements I’ve made could eventually bring quail back to my land. I feel more optimistic now about the future of bobwhite quail than I have in years.

— IWLA life member Bruce Ingram has written four books on river smallmouth fishing and writes a weekly outdoors blog at www.bruceingramoutdoors.com.

FOR MORE INFORMATION

National Bobwhite Conservation Initiative:
www.bringbackthebobwhites.org

Quail Forever: www.quailforever.org

Tall Timbers Research Station:
www.talltimbers.org

