







*The Decline of*  
**BOBWHITE  
QUAIL**  
*in the South*

**BIG PROBLEMS DON'T COME WITH EASY ANSWERS.**

*Written by Mark D. Jones*

*T*he last 100 years has been full of wildlife success stories. Species such as white-tailed deer, wild turkeys and black bears are thriving in our state and throughout the country. In the West, elk, pronghorns and many other game species have increased to numbers unknown since before the continent was settled by Europeans.

However, throughout most of the range of the bobwhite quail, the decline of this magnificent game bird remains one of wildlife management's major unresolved problems.

An experience I have had in eastern North Carolina is indicative of the decline of quail. I first hunted quail in North Carolina about 20 years ago in Beaufort County. At that time, there were still good quail populations on farms owned by my friends. In the short 20 years since, I have witnessed quail populations decline in those areas. The populations of that era were good by today's standards, but were already on the downward spiral, and the decline I experienced is nothing compared to the drop-off seen by older hunters



KEN TAYLOR/NCWRC

**This scene, so emblematic of decades of quail hunting, is seen much less often than 30 years ago.**

who remember the heydays of the 1950s and 1960s. This same story could be told for countless areas throughout the South and has been well documented in the entire region.

Theories regarding the causes of the decline of bobwhites are as abundant as the birds themselves once were. Ask any quail hunter, farmer or armchair biologist and you will hear theories blaming fire ants, hawks, fescue, diseases, weather, coyotes and dozens of other factors. Each month it seems that I hear a new reason proposed for the quail decline. Many folks attest the problem must result from something “unusual” because “nothing has changed” relative to habitat over the period quail have been declining.

How does one address the assertions that the problem must be something other than habitat? Many smart folks truly believe the landscape has changed little over the last 40 to 50 years. Well, like the tree growing in your front yard over a lifetime, sometimes slow and subtle changes are not as noticeable

as we might expect. That sapling you planted when you were young might now be so tall that you fear it will fall on your house in a storm. You don’t notice the changes. Basically, this same thing has occurred with quail habitat throughout most of the nation. If you are a skeptic, facts and statistics tell a different truth. Every available statistic on land use and land management tells us that, throughout most of the range of bobwhite quail, we have experienced dramatic landscape-level negative changes since the glory days of quail following World War II. Most of these changes have not been good for the game bird we all love.

Fescue and other sod-forming grasses have replaced native grasses and plants in most of our cattle pastures, hay lands, roadsides, powerline rights-of-way, ditches, field borders and grassed waterways. Many of these grasses were not even around following World War II, and were more recently developed as effective erosion-controlling plants that are easy to grow in poor soil and with low moisture. While the merits of these grasses for stopping erosion cannot be denied, they are no friend of quail and other ground-nesting birds. Most birds simply cannot and will not nest or raise chicks within the habitat provided by these grasses.

Mowing has become a normal practice on most farms throughout North Carolina and the South. Mowers did not even exist on Southern farms like the Virginia farm my grandfather worked in the years before the Great Depression and were rare when my father worked part-time in the summers in the 1950s-1960s. Oh, how times have changed! The operator of my own Craven County farm laments each year that I won’t let him mow my ditches because he’s “afraid the neighbors will think he’s not a clean farmer.” Ask any North Carolina farmer, and I would bet at least 95 percent will tell you that mowing of “weeds” and cleaning of ditches is critical to their farm operations—

especially if they rent land from an owner who expects his lands to be well groomed. In many areas, well groomed farms are a selling point for farmers wishing to lease additional lands from other landowners. In the South, there is now a real social stigma attached to having ill-kept farms. This simply was not the case when quail were abundant.

Forestry practices may be among the most important yet almost unnoticed changes to the Southern landscape for quail. The trees



KEN TAYLOR/NCWRC

may look the same, but an important change has occurred with the groundcover. During the quail booms following World War II in the South, burning of woodlands was a normal and routine practice throughout the region. If fires did not start from natural causes such as lightning, locals often started them in order to improve browse for free-ranging livestock and to control insects and pests. An 85-year-old quail hunting friend from Beaufort County has frequently told me of the days when he could walk and hunt from Campbell’s Creek to Aurora (about 8

*The* **DECLINE** *of this* **MAGNIFICENT GAME BIRD REMAINS** *one of*



miles as the crow flies) through stands of fire-maintained forests. Anyone who knows anything about this area, or the typical forested area in North Carolina, knows that it would be nearly impossible to walk, let alone bird hunt, through large swaths of our state's forests today. You bird hunters know what I am talking about.

The simple reason is that our forests are composed of thicker stands of trees with heavy, almost impenetrable understories,



and they suffer from a lack of prescribed fire which leads to degraded plant groundcover. There have also been other less noticeable changes to common timber management practices, such as heavier tree planting rates which shade out beneficial groundcover. Throw in the use of modern forestry chemicals to kill vegetation that competes with desired trees, and you have many unintended consequences, including the loss of beneficial plants quail and other wildlife species need to survive. All of these factors combined have resulted in a major loss of forested habitat for

quail. Our average forested areas simply do not provide quality year-round quail habitat.

Development is another factor that we often forget when thinking of the quail decline. Many houses, stores, roads and other man-made structures did not exist during the quail boom periods. Many older quail hunters tell stories of watching their favorite places bulldozed for a housing development or paved for a department store parking lot. While the direct impact on quail cannot be denied, these types of developments may affect hunters more than the birds they pursue. It would be hard to measure, but there is no doubt that the amount of available hunting habitat is greatly reduced from years past.

Based on numerous research projects and experiences, most professionals around the country view habitat as the most important issue in the decline of bobwhite quail and other game birds. While my view is colored by my experiences as a professional wildlife biologist working with quail off and on for the last two decades, it is also influenced by my experiences as a lifelong upland bird hunter. I have been blessed with the opportunity to successfully hunt 11 species of wild upland game birds (including four species of quail) in eight states over the last three decades. Each and every state I have hunted had the desired upland game bird species if quality landscape-level habitat required by that particular species was available. Parts of these states suffer from the same problems we do here in North Carolina, and those areas are known by experienced hunters as places to avoid if you visit intending to hunt. But wherever habitat is found in abundance, the game bird local to the area in question seems to thrive. Whether we are talking about ring-necked pheasants and sharp-tailed grouse in North Dakota, prairie chickens in the Sandhills of Nebraska, Mearns' and scaled quail in Arizona, or bobwhites in parts of the central and southern Plains, upland game birds seem to do just fine if quality habitat is

available on a large landscape. Furthermore, we do have examples of healthy and abundant quail populations on intensively managed areas right here in the South—even a few in North Carolina. We know that the right blend of habitat will result in bobwhite numbers not seen on average landscapes these days.

The bobwhite quail is not the only grassland/shrubland bird that is declining due to habitat deterioration. Dozens of grassland/shrubland songbirds are also in decline nationwide, and the loss of habitats for these types of birds is one of the greatest conservation concerns throughout the nation. However, where these birds remain abundant, there is always a landscape of suitable, high-quality habitat to be found. What further evidence do we need to recognize that habitat really is the key when discussing the decline of our favorite game bird, the bobwhite quail? The bobwhite decline has been ongoing for decades as habitat has slowly deteriorated, and hunters are desperate for a solution. Unfortunately, easy fixes are not available. ❖

---

*Mark D. Jones is the supervising wildlife biologist in the N.C. Wildlife Resources Commission's Private Lands Program.*

**Part II:** In the next issue, we will explore a variety of solutions that have been proposed to address the decline of bobwhites and bring back the South's iconic game bird.

MELISSA MCGAW / NCWRC



**WILDLIFE MANAGEMENT'S MAJOR UNRESOLVED PROBLEMS.**