



Chapter 2

HISTORY AND STATUS

There is serious concern about the status of bobwhite quail populations and the decline in quail hunting opportunities across the Southeast, including Alabama. Bobwhite numbers are declining over much of the bird's U.S. range. Traditional quail hunting is almost gone in the Southeast, where quail hunting has a storied history and bobwhites were a customary part of the landscape. What happened? And, what can we do?

No records or accounts exist that conclusively tell us of the status of the bobwhite quail in the South and East at the time of European settlement. We know that potential quail habitat was available as a result of the shifting agriculture and the widely applied burning practices of aboriginals that maintained open land and open forest. Eastern Indians cleared a great amount of landscape for farming, and even after abandonment these areas remained open from broadcast burning. Early Europeans described these open lands as "barrens," and they were by all accounts prevalent. There was little in a heavily wooded forest to attract Indians. Wherever possible they replaced them with a mosaic of open lands and open woodlands. The forest that existed was often lightly stocked and free of underbrush.³¹ Even the name Alabama is a Choctaw Indian word meaning "thicket clearers."⁵⁰

On his travels through Georgia and Alabama in the 1780s, botanist William Bartram described the central portions of these states as "diversified with hills and dales, savannas and vast cane meadows...sublime forests contrasted by expansive illumined green fields, native meadows and cane brakes...open airy groves of the superb terebinthine pines...pellucid brooks meandering through an expansive green savanna...a delightful varied landscape, consisting of extensive grassy fields and detached groves of high forest trees." South of the Tallapoosa and Alabama rivers were "expansive, illumined grassy plains...invested by high forests...which project into the plains on each side, dividing them into many vast fields...the surface of the plains clad with tall grass, intermixed with a variety of herbage. In south Alabama he encountered "one vast flat grassy savanna, intersected...with narrow forests and groves on the banks of creeks...with long leaved pines, scattering planted amongst the grass."⁴

Indians fired the woods annually for hunting and brush control to maintain open lands and open woods. There are no records of actual quail numbers occurring in these regimes. We do know that bobwhites were widely distributed, although little utilized by aboriginals. Stoddard reported studying in the 1920s an un hunted bobwhite population living under natural conditions on a 10,000-acre tract of open virgin pine forest in Florida, an area representative of much of the original piney woods of the southern coastal plain. He determined the quail population to be relatively abundant, about one bird per four to five acres in winter.⁵¹

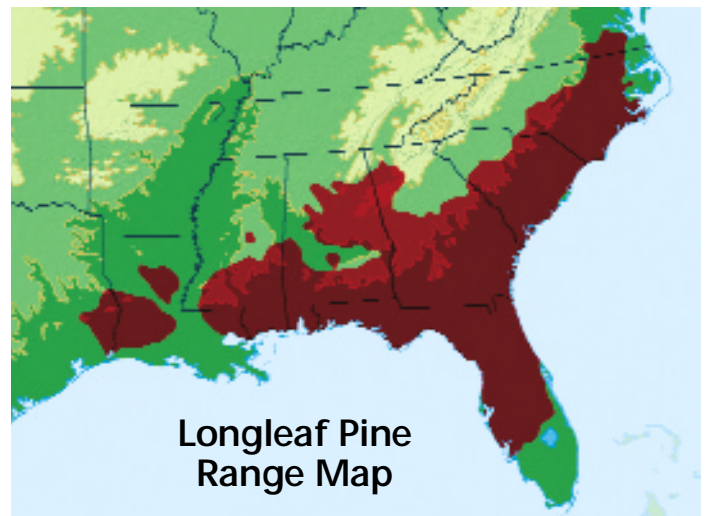
Records indicate that "virgin" forests across most of the southern coastal plain were not heavily timbered. They were not truly virgin since they already had a long history of human influ-

ence by the time of European discovery. Surveys conducted in the 1890s in Mobile County, Alabama showed that one acre of untouched forest, very open and free of smaller trees and undergrowth, contained 16 trees, most of which were 16 to 18 inches in diameter at breast height. Another one-acre plot considered exceptionally heavily timbered contained 45 trees, the majority of which were 16 to 18 inches in diameter at breast height.⁵⁰ Today, a comparable stand of trees considered fully stocked for timber production would have 50 to 65 trees per acre.

As European settlement progressed, forests were cleared and old Indian agricultural fields were adopted for the major livelihood of farming. The Europeans also practiced shifting agriculture. Sequences of slash-and-burn land clearing were followed by temporary cultivation, field abandonment and new clearing.

In Alabama, the first settlers were itinerant herdsmen. Indian burning practices were thoroughly adopted by them for hunting, grazing range improvement and pest control. An "Alabama boom" in the 1820s brought many new settlers who cleared the best land for planting cotton. Cotton farming quickly wore out the land, mandating a continual process of shifting agriculture.

Following the collapse of the plantation system after the Civil War, share cropping and "patch farming" became the norm. Burning practices continued in the open piney woods. Areas around home sites were burned annually, but cattle ranges were not burned as often, creating a mosaic of new growth and slightly older "rough."³¹ This pattern of land use continued until the end of the nineteenth century. Most of the landscape was good for quail, and they flourished in this atmosphere. Southeastern bob-



Bobwhites were relatively abundant in much of the original piney woods of the southeast. Today only four percent of longleaf forests remain.

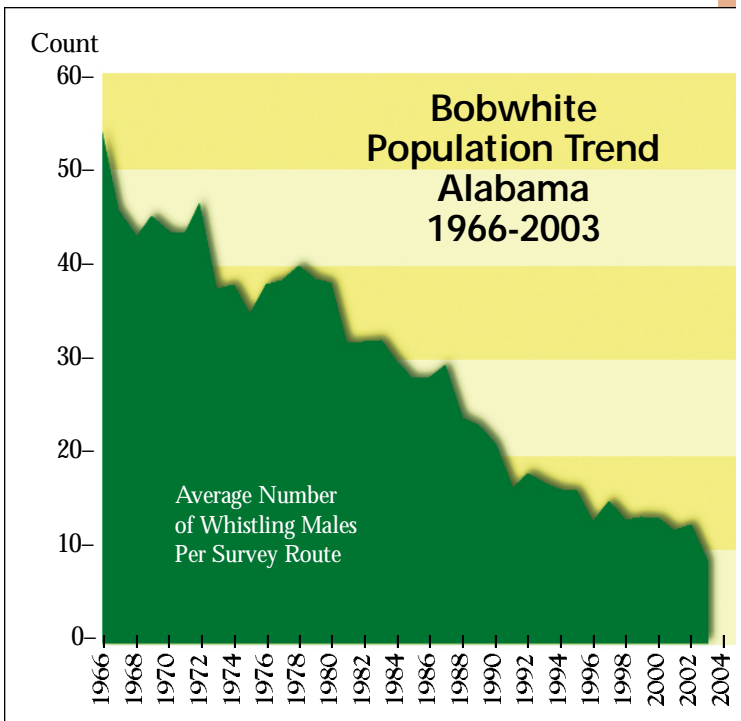
white populations peaked just prior to the turn of the twentieth century and remained at relatively high levels until about 1940.³⁷

From 1930 to 1960 farming in Alabama diminished rapidly as society industrialized. In 1930 Alabama had more than 250,000 farms with an average farm size of about 60 acres. By 1960 farm numbers had declined to 120,000 and farm size doubled. Currently, farms number less than 50,000 and average farm size is about 190 acres.³⁴ The shift from widespread crude agriculture to other land uses has had a major impact on bobwhite populations across the state. Alabamians boasted of having more bobwhites than any other state in the 1920s, with a roughly estimated 17,000,000 acres of suitable habitat.¹ A report on an inventory of the state's wildlife resources in 1942 noted a declining quail population due to loss of fallow fields, clearing of hedgerows, increases in field size, and reforestation.²

The quail population changes on a 4,000-acre quail research area in Barbour County, Alabama exemplify the quail declines of this period. Quail hunting records from the 1920s to 1940s showed that two hunters could expect to move 20 to 35 coveys in a day's hunt. During the 1940s tenant farming ended, and the land was converted over time to timber and cattle production. Research from 1954 to 1958 showed the area was then 43 percent pine woods, 39 percent hardwoods, 10 percent improved pasture, and 8 percent cropland. Census work during the study period determined that the winter quail population varied from one bird per 5.1 to 7.5 acres, and quail hunting was considered poor compared to earlier times.²⁴

Alabama's farms, presently with about 4 million acres of agricultural croplands,³⁸ have become large, mechanized operations with little idle land. Much former agricultural land has been converted to cattle forages using introduced pasture grasses, with about 5 million acres now in this land use.³ A great deal of land has naturally regenerated to dense forest or has been converted to timber production. Very little of the state's current 23 million acres of forest²¹ is good quail habitat. Following the advent of forest restoration efforts in the South, fire was generally removed from the landscape as major efforts were directed toward fire prevention beginning in 1924.⁵⁰ Population growth and increasing urbanization have further precluded use of fire.

Breeding bird survey data documents a 4 percent per year decline in bobwhite abundance in Alabama since the 1960s, and an accelerated 9 percent per year decline in the mid 1980s to mid 1990s.³⁹ Alabama's quail population in less than 20 percent of what it was when surveys began in 1966. To put this in perspective, where there were five coveys a few decades ago, there is now only one covey. And, those isolated coveys continue to disappear.



Annual quail harvests as high as 2.8 million birds in the 1960s have declined to recent harvest levels of only 160,000.⁸ Currently, quail harvests are less than 5 percent of those of the 1960s. Although equivalent data is not available, anecdotal accounts suggest that bobwhite numbers in the 1960s were only a fraction of populations in earlier times.

A landscape that once highly favored quail over large areas has now become an environment offering very few of the habitat types that quail need to flourish. Bobwhites have been in decline in the Southeast for about a century, precipitously for the past 30 years. From the historical descriptions, it is likely that bobwhites were more abundant in pre-colonial landscapes than in those of the present.

On most landscapes across Alabama, quail occurrence is incidental; chronically low, semi-isolated populations are now the rule. Bringing quail back to some level of abundance on these areas requires planned habitat developments, with emphasis on increasing the quantity and quality of reproductive habitats. Bobwhites are short-lived, annually produced animals. Eighty percent or more of the birds alive during early fall will be dead by the next fall. Population levels, therefore, are determined by annual production, which is controlled by cover and environmental conditions that prevail during each summer reproductive season. Since quail populations can vary widely from year to year, bobwhite management requires constant vigilance. On locations where appropriate management practices have been routinely applied, quail numbers fluctuate annually with environmental conditions, but have remained abundant over time.

