

## Where is the Quail?

Bobwhite quail has long been a favorite game bird throughout the eastern United States. Unfortunately, bobwhite populations have decreased significantly in recent years, as much as 70 to 90 percent in some areas. This begs the questions, what happened to the quail and how can landowners increase their population?

Likely the biggest factor in the reduced northern bobwhite numbers is the loss of nesting and protective cover due to habitat disturbance. As land is converted to other uses such as farmland and housing, wildlife habitat can be affected. Food is rarely a limiting factor for quail, so planting food plots alone will not get you more quail. A lack of quality cover is what almost always limits bobwhite populations.

To improve habitat, a number of steps can be taken. Incorporate native grasses such as broomsedge bluestem, little bluestem, and sideoats grama which will provide excellent nesting structure for quail. The nesting habitat should be adjacent to brooding habitats. These brooding habitats generally include weedy fields, brush sites, and shrubs where quail can search for insects. Fields used for quail should be open at ground level with a canopy overhead. This allows the bobwhites to move easier, while still having the protection provided by the canopy. Some plants that provide this cover include ragweed, pokeweed, partridge pea, and smartweed.

In order to create quality cover for wildlife, non-native perennial grasses must be killed. This is most often done by spraying glyphosate herbicide in the fall. After the undesirable plant cover has been eradicated, desirable plants in the seedbank often can be stimulated to germinate by disking in October through March.

Once you have established quality early successional habitat, the best way to maintain it is by periodic burning. Disking also can be used to influence plant composition and structure. Prescribed fire is strongly recommended to manage quail habitat. Burning fields every 2–4 years consumes dead vegetation, recycles nutrients, stimulates fresh plant growth, creates an open structure at ground level, makes seed and invertebrates more available and maintains an early-successional plant community.

Perhaps the most critical aspect of northern bobwhite management is creating good habitat interspersed, or mixture of different cover types (generally within a 40 acre area). Suitable foraging, nesting, brood-rearing, loafing, and escape cover, each located within close proximity to one another, is essential to attract bobwhites and to maintain existing populations in an area. A mixture of crop fields, pastures, and meadows containing native bunch grasses, hedgerows, overgrown fencerows, and wood-land edge comprise a mixture of quality bobwhite habitat components.

Lack of diversity of suitable habitat types may reduce an area's overall potential value to northern bobwhites. Likewise, a multitude of differing habitats within one area that are not connected by a well-defined edge component is of less value to northern bobwhites than an area with a minimum of necessary habitat requirements growing adjacent to one another and containing many distinct edges between cover types.

Bobwhite quail remains one of the most popular game animals in the southeast. Quality habitat management is critical to maintaining the population of these birds. If you would like more information on wildlife management, feel free to come by the University of Tennessee Extension office in Smith County or call me at (615) 735-2900.