

Bobwhites & Wild Turkeys: *Is Habitat Management For These Birds Compatible?*

Ninth in a series on management techniques to improve habitat for quail

Many landowners desire to have high populations of bobwhites and eastern wild turkeys on the same tract of land. This is certainly understandable since both species are outstanding game birds. However, while it is true that turkeys and quail do have some overlap in their habitat needs and good populations can occur on the same property, it is impossible to simultaneously maximize populations of each bird across the same landscape. Let's compare the habitat needs of these two birds.

Bobwhites are a grass-forb-shrub species. Generally, they need clumped native grasses, mixed with canopied (24"–60" high) weeds and legumes, interspersed with shrub, briar and other woody thickets. Together these habitat components provide nesting cover, brood range, escape cover, loafing sites and food at all seasons. Quail populations are maximized where this grass-forb-shrub habitat is contiguous across thousands of acres. Shaded woodlands, creek drains, wetlands, river bottoms, and fescue, Bahia or Bermuda grass pastures/hay fields do not provide suitable habitat for bobwhites. Additionally, these woodland and wetland cover types serve as source habitats for predators, which may negatively impact quail populations on surrounding lands.

Wild turkeys are forest birds that also utilize openings. They need mature forest stands for fall–winter foods and roost sites; patchy grass/shrub ground cover for nesting; and low-growing (12"–28" high) grass-forb dominated openings and/or herbaceous forest ground cover for insects, greenery and brood rearing. Therefore, turkeys reach their highest densities across landscapes comprised of sawtimber-sized stands of closed canopy (shaded) hardwoods and pines interspersed with openings. They prefer forests that are shaded to the point of being relatively open at ground level, but with well developed mid-layers (midstories) of shrubs and trees that produce an abundance of nuts and fruits (mast). Shaded woodlands, wetlands, river bottoms, pastures and hayfields provide excellent habitat for wild turkeys. Unlike bobwhites, wild turkeys do not frequently use the interior of fields and forest stands with extensive thick

ground vegetation. However, wild turkeys will use the edges of these sites for nesting and escape cover.

From the previous discussion, it is apparent that quail and turkeys have some overlap in their habitat requirements, but basically their needs are quite different. Some of Georgia's highest turkey densities are in the Piedmont and Upper Coastal Plain Physiographic Provinces along river and creek drainages where closed canopy forests are interspersed with improved pastures.



These same areas have very low bobwhite populations. Likewise, some of our highest bobwhite densities are across thousands of acres of heavily thinned and frequently burned pine woodlands with a high percentage of weedy openings; and these areas support relatively low turkey populations. During the last century, Georgia's landscape has changed to become less favorable for

quail and more conducive to wild turkeys. This landscape habitat change continues to be a driving force behind the increase in wild turkeys and the decline in bobwhites.

The good news is that reasonably high populations of wild turkeys and bobwhites can be maintained across large landscapes where extensive acreages of pine woodlands and/or openings and row crop fields are intensively managed for quail but also have an interspersion of closed canopy woodlands, drains and wetlands. The woodland and wetland types provide the core habitat for wild turkeys while the intensively managed uplands serve as the core habitat for bobwhites. However, under this management scenario neither species' population will be maximized.

Finally, there is a common public perception that wild turkeys are a major predator on bobwhites. While a wild turkey might randomly prey on a quail chick, there is no evidence that this ever occurs at a frequency that could impact or limit quail populations.

Like many things in life, maximizing one objective requires tradeoffs in another, but in this case it is a great "problem" to have!

-Reggie Thackston, updated 2019