

Impacts of Exotic Pasture Grasses on Bobwhites

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

Three exotic pasture grasses are common in Georgia: Bermuda, bahia and fescue. These grasses were introduced for soil erosion control, hay production and as a forage crop for grazing animals. While they work well for these purposes, unfortunately they provide poor conditions for bobwhite quail and other wildlife. These grasses are also invasive, often outcompeting desirable plants.

Bobwhite quail need a mosaic of annual and perennial weeds and grasses along with shrub and briar thickets. Examples of good native weeds and grasses for bobwhites include: beggarweeds, partridge peas, ragweeds, milk peas, little blue stem, broomsedge, Indian grass, etc.

These plants provide nesting and brood-rearing cover along with food. Dead leaves from the previous year's growth of native warm season grasses provide important nesting material. With the introduction of exotic pasture grasses like Bermuda, bahia and fescue, native weeds and grasses are often out-competed and largely absent from pastures, hay fields and idle areas around farmlands.

Exotic grasses are aggressive and encroach into areas where they are not desired. Often Bermuda grass is seeded into filter strips or farm roads and continually encroaches into crop fields, requiring constant vigilance by the farmer. These grasses are hard to control and pose a continuous challenge in areas around farmlands that are managed for bobwhites, for example field borders and field corners.

Perhaps the most negative impact of pasture grasses is through the reduction of brood-rearing habitat. Brood-rearing cover consists of plants like ragweed that provide a canopy of overhead cover with open ground underneath, which facilitates mobility.

These areas provide quail chicks and turkey poults with an abundance of insects, which is important for rapid growth and development, protection from predators and shade for cooling. Hens typically will select a nesting site near quality brood habitat so chicks can quickly be led to the area to forage for insects.

When matted grasses such as Bahia are present, chicks and poults must attempt to walk or climb over these sites. This results in a reduction in insect foraging time, increased energy expenditures, increased exposure to predators and perhaps increased air temperatures. These factors work together to lead to reduced survival.

Control of Exotic Pasture Grasses

Herbicides provide the only effective method for the control of exotic grasses. Complete elimination is best, but often may be impossible to achieve.

Depending on the situation, the best approach may be to selectively treat the worst spots on a periodic basis to maintain the majority of the site in a useable condition for quail. The choice of chemical(s) to use varies by the type of vegetation present and other site conditions. For specific recommendations, contact your local County Cooperative Extension Specialist.

-BQI Biologists, updated 2019

