GEORGIA DEPARTMENT OF NATURAL RESOURCES
WILDLIFE RESOURCES DIVISION

BOBWHITE QUAIL INITIATIVE
BQI

# Fallow Field Management

## *Fallow fields provide early successional habitat for many wildlife species*

*First in a series on management techniques to improve habitat for quail*

*When a field is abandoned or "fallowed," it quickly begins reverting to forbs and grasses, referred to as early succession. This successional stage consists of bare ground, grasses, herbaceous plants (those with non-woody stems) as well as woody shrubs and small trees. Early successional fields provide diversity to a forested landscape and essential habitat for bobwhite quail and certain songbirds. Fallow fields also are beneficial to wild turkey, cottontail rabbit, white-tailed deer and many other species. To maintain fallow fields, disking, prescribed burning, mowing, planting and limited herbicide treatments can be helpful separately or in combinations. Maintain fallow fields by applying these techniques on a rotational basis over a two to three-year period. Note that different management techniques will produce differing results.*

Disking reverts a field to bare soil, which is especially important to quail and turkeys for brood rearing and dusting. Quail usually nest within 50 feet of bare ground, as chicks need bare soil to maneuver and find insects, a vital food source. Winter disking during the dormant season (late October through mid-February) is most effective in maximizing the desired forb/legume plant response and providing optimal brood range for bobwhite quail. This suite of plant species support high insect populations, which are an important protein source for quail, turkey and songbirds. While October-November disking produces desirable plant composition for brood range, managers should strive to conduct their winter disking as late as possible to maximize winter cover prior to spring green up. A good rule of thumb is to disk one-third of an opening or fallow field in strips each winter.

Prescribed burning can be used in fallow fields to remove thatch from dead grass, set back woody plants by "girdling" small trees and shrubs, improve browse production, and increase legume and insect abundance. Timing and frequency of burning varies depending on the objectives of the burn, however winter burning (December through February) should be avoided if possible to retain winter cover prior to spring green up. Hardwood control will be most successful if conducted during the early growing season (April through May), prior to the peak nesting season.

Mowing, although often misused, can be an effective management tool. However, repeatedly mowing the same portion of a field encourages dense mats of vegetation, an obstacle to quail, especially for chicks. Mowing hardwoods, particularly following a prescribed burn, is an effective management tool when the objective is to reduce the amount of woody cover occupying a site. This reduction in woody cover allows beneficial food and cover plants to thrive. To avoid disrupting ground-nesting birds, mow in late winter (February through mid-March). Do not mow during the April through September nesting season.

Planting can be an integral part of managing fallow fields for quail and other wildlife. Plant annual grains like corn, Egyptian wheat, brown top millet and grain sorghum in the spring and summer to provide food and cover into the winter. These plantings should be established in strips, then allowed to remain fallow the following year and rotated across the opening. Plant reseeding annuals like partridge pea, ragweed, and beggarweed, then encourage reseeding with periodic winter soil disturbance as part of the rotational disking program. Where shrub cover is needed to break up large openings, plant hedgerows or clumps of plum and/or wax myrtle. Disturbance in these areas, through prescribed fire and/or selective herbicide treatments, should occur every 3–5 years to maintain it in preferred cover. While plantings can be used to augment food and cover, they are not a magical solution. To be most effective, plantings must be used in combination with large-scale habitat management practices that are directed at meeting year-long habitat requirements.

*-BQI Biologists, updated 2019*