GEORGIA DEPARTMENT OF NATURAL RESOURCES
WILDLIFE RESOURCES DIVISION

BOBWHITE QUAIL INITIATIVE
BQI

Escape/Thermal Cover for Bobwhites

Establishment and Management

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

Bobwhite nesting and brooding cover are often the habitat components most limiting quail populations across the landscape and therefore the first to be addressed through management. Brooding cover is characterized by bare ground with a canopy of native grasses, legumes and forbs above, which typically occurs the first year after a prescribed fire or winter soil disturbance. Nesting cover is comprised of clumped grasses mixed with forbs and bare ground and usually occurs during years two or three after disturbance. These clumped grasses and herbaceous vegetation also provide a degree of predator avoidance for bobwhites, especially during summer to early fall. However, woody cover is also important particularly for escaping predators during late fall to spring and for shade or thermal regulation during the hot summer months.

This woody escape/thermal cover may also be referred to as a "covey headquarters" or thicket and is characterized by an overstory of woody shrubs or vines with an open understory that quail can easily move into and through. This cover provides protection from predators, especially avian predators, allows for quail mobility and loafing, and can provide food in the forms of soft mast, seeds and greenery. Also, these thickets provide protection from environmental stresses like extreme heat, sub-freezing temperatures, rain, snow and wind. Ideally, escape/thermal cover should comprise about 30% of bobwhite habitat. In fact, a good rule of thumb is the rule of 1/3's (i.e., manage the landscape for 1/3rd each of nesting cover, brood cover and escape cover).

Protecting areas from disturbance and allowing natural succession to take place can establish thickets in three to five years. Desirable plants that often volunteer naturally include; blackberry, trumpet creeper, sumac, wild plum, waxmyrtle and honey suckle. Thickets can also be established by planting commercially available shrubs such as waxmrtyle or wild plum on a 3ft x 3ft spacing and should cover an area of approximately 1,000 square feet. Thickets should be distributed 150–200 yards apart so that a covey is always a short flight from quality escape cover. Brush piles constructed from treetops, limbs or logging slash can be used as escape cover temporarily, but after two or three years these piles begin to rot and provide cover for predators.

Escape/thermal cover can become too thick or too large to hunt. Periodically, renovate thickets by mowing, burning, disking or with selective herbicide treatments to prevent trees from invading, taking over and shading out the desirable cover.

Establishing and maintaining escape/thermal cover should be a part of every quail management plan in every landscape. Before establishing thickets, inventory the existing conditions to determine the most limiting factor(s); then develop and implement a plan with realistic goals. As Aldo Leopold once said, "A thicket without the potential roar of a covey of quail is just a thorny place."

-BQI Biologists, updated 2019