

WILDLIFE

management guide



Wildlife Management Section
South Carolina Department
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Ruffed Grouse

Ruffed grouse occur in huntable populations in the Northwestern part of South Carolina. They are usually found above 2,000 feet in the southern portion of their range, although historically they have also been found at lower elevations.

Grouse typically inhabit the thickets, brushland and forests of rugged mountains and of canyon-lined plateaus as well as abandoned agricultural lands.

Grouse are a product of early stages of forest succession. Interspersion and a variety of timber classes enhance the quality of ruffed grouse habitat. Ruffed grouse profit as much as any leading game species under short rotation, even-aged silviculture, with the best grouse habitat found in clearcuts on mesic sites.

HABITAT REQUIREMENTS

▲ Cover

The major cover requirements are for escape, nesting, brooding and winter protection. Escape cover is normally thickets, vine tangles, young timber, and dense shrubs - the thicker, the better.

Nesting cover is generally second growth, fairly dense hardwoods where the undergrowth is sparse and is usually closely associated with brood-feeding grounds. About three-fourths of the nests are located within 100 feet of an opening, and near drumming log sites. Drumming logs are large, mossy decayed logs near the top of a knoll with dense, overhanging shrub cover.

Brooding cover is characterized by forbs, grasses, low shrubs and insect production. It occurs on overgrown lands, in recently cut-over areas, and where overstory crown cover is sparse.

Winter cover is usually evergreens such as laurel, greenbriar, and rhododendron, or dense young conifer stands an acre or more in size. Regenerating hardwood stands (3 to 20 years old) can also provide excellent winter cover.

Grouse avoid extensive, pure conifer stands (*except the edges*), preferring old fields beginning to revert to forest.



▲ *Food*

Although omnivorous, grouse are primarily plant eaters. They use over 334 known plant species and eat the fruit, seed, buds, catkins, and green parts. Insects are essential food for broods from late May through July.

FAVORED FOODS OF THE RUFFED GROUSE

Spring

apple
shadbush
yellow birch
sumac
strawberry
hophornbeam
various catkins
mountain laurel
partridgeberry
hawthorn
succulent forage

Summer

strawberry
mulberry
jewelweed
grapes
acorns
insects
black cherry
raspberry
blackberry
dewberry

Fall

sumac
birch
dogwood
mountain laurel
clover
hepatica
teaberry
Christmas fern
gold seal
Japanese honeysuckle
hawthorn
apple
viburnum
beech
huckleberry

Winter

greenbriar
hazelnut
sumac
birch
hophornbeam
grape
apple
acorns



▲ *Water*

Grouse fulfill their need for water from dew and succulent plants and standing water is not generally essential.

▲ *Home Range*

Most adult male grouse have a home range of 10 to 50 acres. Females with broods, however, will range over 40 to 100 acres. Home range is determined by the quality of habitat. High quality habitat will support more grouse and home range size of individual birds will be smaller. Dispersal of young grouse during the “fall shuffle” results in newly improved grouse habitat being occupied by juveniles seeking a new range.

STANDARD MANAGEMENT PRACTICES

▲ *Regeneration*

Diversity is the essence of good ruffed grouse habitat, and is best provided by clearcutting, although group selection or shelterwood cuts may also provide suitable habitat. Discourage extensive stands of one or two species.

Regenerate one or more small stands (*10 to 40 acres*) per 160 acres each cutting period where suitable markets, stands and access exist.

Benefits for grouse brood cover from clearcutting and site preparation persist about seven years, then habitat quality declines rapidly. Distribute small regeneration cuts and spread their brooding, nesting, and food producing influence to as much of the range as possible.

▲ *Rotation*

While short rotations can favor grouse, effective management can be achieved under any appropriate sawtimber rotation.

▲ *Prescribed Burning*

Prescribed burning may be used for site preparation on slopes with gradients less than 20 percent, and to set back succession in natural openings. With these exceptions, do not burn habitat managed for grouse.

DIRECT IMPROVEMENTS TO HABITAT

Plant roads and log decks primarily in white clover mixed with orchard grass. Daylight logging roads during intermediate treatments (*15-40 feet each side*) where extensive pole timber stands occur and regeneration cuts can not be made.

Keep spring seeps free of logging slash. Avoid them in road construction.

Retain openings such as old house sites, orchards, or portions of fields reverting to timber up to one per 160-acre unit. Prune, release and fertilize old fruit and nut trees and thickets of dogwoods, viburnums, grapes, or comparable fruiting shrubs. Plant soft mast species where they are lacking.



Maintain or establish small, dense evergreen patches of conifers, rhododendron, or laurel (one to five acres) for winter cover.

Create one to five acres in openings per 160 acres where no regeneration cuts and openings occur or are planned.

OTHER SPECIES THAT BENEFIT FROM RUFFED GROUSE MANAGEMENT

Numerous other game and nongame species with habitat requirements similar to ruffed grouse benefit from grouse management. Rather than focusing solely on grouse, management plans should emphasize the communities of which grouse are only a part. Grouse associates that will also benefit from the management practices outlined include:

black bear
rabbit
songbirds

white-tailed deer
fox



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