Introduction

White-tailed deer (*Odocoileus virginianus*) once were nearly eliminated in the state of Georgia, but through diligent wildlife management efforts deer were successfully restored throughout the state. In fact, the current deer population exceeds 1.2 million. Deer are a valuable natural, recreational, and economic resource in Georgia, bringing in more than $800 million per year in hunting license fees, sporting equipment sales, food and land leases. However, deer densities in some localized areas have the potential to inflict significant damage to forestry, agricultural or horticultural crops, home gardens, and shrubbery. But because deer are important both biologically and economically, management of their numbers requires consideration on numerous levels.

Biology

Scientific studies of white-tailed deer in recent years have provided much knowledge of deer biology and behavior. For example, adult deer in Georgia range from 70 to 250 pounds with bucks (males) typically weighing more than does (females). Breeding season (called "the rut") extends from October to January and peaks in November. Gestation period is 200 days. Newborns, called fawns, are spotted and range from 4-8 lbs. Most are born between May and August with a peak in June. For the first month or so, does spend very little time with fawns, hiding them for hours at a time and returning to nurse them only 4 or 5 times per day. This tactic helps keep scent levels very low so predators are not attracted to newborns. Young deer begin foraging on plants within a month and are completely weaned in three months.

Deer home range sizes in Georgia vary from 150 acres to more than 1,200 acres with does having smaller ranges than bucks. Smaller ranges also are found in higher deer populations in better deer habitat such as that found in the Georgia Piedmont and Upper Coastal Plain. Deer are most active around dawn and dusk. This is called a crepuscular activity pattern.

Although most hunters think in terms of bucks, it is the doe segment of the herd that determines most of the differences found in deer populations. For example, depending on the food supply and the total deer population, does can produce twins, singles, or not bear any fawns at all. If births exceed the total death rate from hunting and other causes in any particular year, then the population increases. Eventually, the population reaches a size where it exceeds the available food supply ("carrying capacity" of the land) resulting in lower birth rates, poor antler development, lower body weights and eventually a lower population as the remaining food supply is permanently damaged.

The deer herd is the result of a complex interaction of food supply, population size, births, deaths, movements, weather, and past history. Hunting is the one tried and true method for managing deer populations in order to reach desired deer herd objectives.

Deer Antlers

Antler development is important to many hunters and deer observers. Buck antler development is controlled by age, nutrition, and genetics. However, in Georgia genetics do not appear to be an important factor. For most deer in this state, age is the single most limiting factor for antler development, followed by nutrition. Under heavy hunting pressure, bucks simply do not live long enough to produce large antlers. In parts of the Lower Coastal Plain and Mountains, bucks live much longer but nutrition levels often are poor which limits antler development. Likewise, poor nutrition also occurs in the Piedmont when deer herds get so large that their food supply is reduced in quality or quantity resulting in poor antler growth.

Food Habits

Deer are the only native animals that routinely browse plants 4 to 5 feet above the ground. They eat about five pounds per day (dry weight) of hundreds of species of both native and non-native plants but have definite preferences for certain plants, fruits and nuts. Some of their favorites include Japanese honeysuckle, acorns, grapes, apples, persimmons, greenbrier, blackberry, maple, blackgum, grasses, corn, clover, summer weeds, and sumac.

Habitat

Deer are known as generalists because of their ability to thrive in a wide variety of habitats including forests, woodlots, suburbs, golf courses, extensive agriculture, swamps and coastal marshes. High deer numbers are a serious concern because they can destroy their own habitat and that of dozens of other species, even causing extirpation of plant species. The best deer habitat contains mixed ages of pine and hardwood forests interspersed with openings and agriculture. This provides the optimum combination of food, cover, and water that are the essential components of any habitat.

Additional WRD Publications

- Deer Herd Management for Georgia Hunters
- Controlling Deer Damage in Georgia