

Wild Things in Your Woodlands

Ruffed Grouse (*Bonasa umbellus*)



The ruffed grouse is a heavy-bodied, medium-size game bird, about 17 inches in length from the beak to the tip of the tail. Males and females are similar in color, which varies among individuals from a dark gray phase to a chocolate brown or red phase, or a variety of shades in between. In a given area, the population may consist primarily of individuals of either the gray phase or the red phase, with the red phase being more common in milder climates and the gray phase occurring most often in coniferous areas and regions where winters are more severe. Both male and female birds have a black patch of feathers on each side of the lower neck, and a wide black band across the tip of the tail. On average, males weigh about 23 ounces and females weigh about 21 ounces.

A year-round resident, the ruffed grouse is a thrill to encounter in any season. As you pause to catch your breath while walking in the woods, a grouse can leave your heart racing as it explodes into the air. The startling noise created by sudden, rapid wingbeats provides an excellent mode of escape from would-be predators.

Another characteristic sound made by the ruffed grouse is the familiar, bass-like drumming sound males make during the breeding season, from late March to early May. A male chooses a favorite displaying site, typically a large log with a birds-eye view of the surrounding area, to be the center of his territory. Here he struts and drums to attract females and stake claim to his territory. With his back straight up and tail braced against the log, he cups his wings and moves them sharply forward and back in a horizontal, slightly circular motion. The drumming sound that is produced starts with a few evenly spaced thumps that increase in frequency to a whirl.

After mating, the hen selects a nest site at the base of a stump or a tree, and lays a clutch of 10-12 eggs. The chicks are able to move about and feed soon after hatching, searching for insects in forest openings and edges. Grouse eggs and chicks are vulnerable to

predation by a variety of animals including snakes, weasels, mink, fishers, house cats, red and gray foxes, coyotes, red squirrels, bobcats, skunks, opossums, raccoons, barred or great horned owls, and several species of hawks. Cold, wet, spring weather can also affect chick survival. Grouse numbers peak and bottom out in eight- to 10-year cycles, and wildlife biologists have different theories about what causes these population fluctuations. Potential factors include the weather, food supply, predation, habitat changes, or a combination of factors.

The ruffed grouse occurs across New York State in areas of suitable habitat and is generally more abundant in forests of higher elevations (above 1,000 ft). It is most common in extensive forests or wooded hillsides and ravines, especially those with young, early-successional stage forest, or scattered clearings. The grouse also inhabits abandoned farmlands and pastures that are reverting to brush and forest. Specific habitat features attractive to this bird include brush heaps, fallen timber, grapevine tangles, and conifers.

The adult grouse eats a mostly vegetarian diet. Adults consume large quantities of buds and catkins of aspen, birch and hop hornbeam as they appear in the spring. In the summer, they eat the leaves, fruits, and seeds of aspen, cherry, sedges, strawberry, blackberry and raspberry. In the fall, they feed on fruits of hawthorn, apple, cherry, viburnum, sumac, and dogwood, as well as beechnuts and the buds of apple, birch, cherry and hop hornbeam. During the winter, grouse depend on cherry, aspen, birch, hop hornbeam and serviceberry buds.

The ruffed grouse is well adapted to living in cold, snowy climates. Small feathers grow on its feet and serve as snowshoes, enabling it to walk on top of snow. A grouse may keep warm at night by burrowing into soft snow, where it is covered and protected from the wind-chilled air above. If the snow is too hard, a grouse will often roost in conifers, where it finds protection from the wind and cold.

Landowners can provide a number of habitat features to benefit the ruffed grouse. If you have enough acreage, you can create and maintain patches of young, sapling stage forest in close proximity to 10 to 25 year-old pole stands for wintering and breeding cover, and 25 to 40 year-old mature aspen for winter food resources. Having all of these forest stages present within a 6 to 10-acre area is ideal. You can also maintain patches of conifers to provide winter cover, and leave large logs on forest floor to serve as drumming logs, nesting sites, and escape cover. Encourage a diversity of food-producing shrub and understory species including grapevines, blackberries, hop hornbeam, serviceberry, dogwood, sumac, viburnum, hawthorn, and apples trees. In the overstory of the forest, encourage aspen growth for winter food, as well as American beech and black cherry. When cutting trees for firewood or when having a timber harvest, consider leave the tops of trees to provide cover. Then revisit the area again and again to enjoy your success and the surprises that the ruffed grouse promises to deliver.

Kristi Sullivan coordinates the Conservation Education Program at Cornell's Arnot Forest. More information on managing habitat for wildlife, as well as upcoming educational programs at the Arnot Forest can be found by visiting the Arnot Conservation Education Program web site at ArnotConservation.info

Ruffed Grouse photo courtesy of
Kristi Sullivan at Cornell University