

ABOUT THE COVER: SPRUCE GROUSE

The Spruce Grouse (*Dendragapus [canadensis] canadensis*) is a middle-sized grouse of the northern coniferous forest and boreal bog. These glamorous grouse are absurdly tame, so unafraid of man that they are easily caught with a noose of string on a pole or hit with a stick, earning them the nickname "fool hen." This is a dimorphic species, the male sporting a black throat and breast, outlined in white, the face highlighted with crimson combs above the eyes. The female has brown barring instead of black. Both sexes have a blackish tail with a chestnut terminal band, shorter than the tail of the Ruffed Grouse with which they might be confused. Spruce Grouse are built for winter, with leg feathers that reach to their toes, and arboreal habits that keep them above the deep snow. Their taxonomy is currently under revision. Five subspecies are recognized, but although the generic name *Canadensis* is still recognized by some, most authorities now place the Spruce Grouse in the genus *Dendragapus* together with the Blue Grouse of western North America and the Sharp-winged Grouse (Siberian spruce grouse) of Asia.

The Spruce Grouse is a bird of the northern wilderness, confined largely to the coniferous forest belt from Alaska across Canada to Newfoundland. In the United States they are found in the far west in Idaho, Washington, Montana, and Wyoming, in the Great Lakes region in northern Minnesota, Wisconsin, and Michigan, and in the northeast in northern New York, Vermont, New Hampshire, and Maine. The Spruce Grouse may at one time have occurred in Massachusetts. Nineteenth century records exist from Gloucester and Roxbury, but Griscom and Snyder (*Birds of Massachusetts*) indicate that the specimens are lost and suggest that the records are spurious. Spruce Grouse are resident throughout their ranges, although they may wander in winter, presumably following food supplies.

The Spruce Grouse is a promiscuous species with males establishing display territories that females visit, and after mating the females move on to nest and raise the young alone. The male displays are elaborate, variable, and spectacular. Males produce a "drumming" sound that can occur as a bird departs on a display flight from one low branch to another, flies up from a tilted display tree, or launches itself from the ground straight up in the air fifteen or twenty feet. The drumming, which is basically a rapid fluttering, has been described as resembling distant thunder. The males also "wing clap" during display flights. Males also have an elaborate strutting display, where they tilt up and partially fan their tails, and with wings drooping slightly, neck and breast feathers ruffed, and combs expanded, strut before a female. The birds are largely silent, but produce various low whistles, chucks, and hissing notes during aggressive encounters.

The female nests in a depression in the ground, often in moss, lined with conifer needles, leaves, and sometimes a few feathers. The nest is well hidden, often under a low conifer branch. The eggs are light cinnamon in color with brown spots. Older reports suggest clutch sizes of ten to twelve, but recent data suggest clutches of about five to eight are more usual. Incubation lasts for about three weeks. The young birds develop quickly and are able to fly after ten to twelve days. The female aggressively defends the young, possibly attacking humans that wander too near or giving distraction displays. Females defend territories against other females.

In summer Spruce Grouse feed heavily on buds, leaves, and berries, and will eat animal food including spiders and grasshoppers. In winter they apparently feed exclusively on conifers. They specialize in spruce buds and needles and other short-leaved conifers, but will eat long-leaf pine needles as well. Their physiology is geared to this specialized diet, as their intestines become enlarged during the winter months.

The Spruce Grouse has become extirpated from much of the southern part of its range due to contact with man. Their tameness makes them easy prey to hunters, although in winter their diet of spruce needles gives them a flavor of turpentine, and most people would have to be pretty hungry to eat one! They are still relatively common in more remote areas, and although cryptic and hard to find, the thrill of encountering one in tangled spruce bog is long remembered, and well worth the trek into the wilderness.

W. E. Davis, Jr.

MEET OUR COVER ARTIST

Paul Donahue's artwork has been widely published in the bird literature. Paul spends about half of the year leading tours or working in the rainforest canopy of Manu Lodge in Manu National Park, Peru. The remainder of the year he resides in Machias, Maine, where he paints during the winter after a fall of hawkwatching. Paul can be reached at P.O. Box 554, Machias, Maine 04654.

The Spruce Grouse drawing first appeared in a catalog of Victor Emanuel Nature Tours, Inc. (VENT). *Bird Observer* appreciates the permission granted by VENT to use Paul's drawing for the cover. VENT conducts birding tours around the world. Their address is P.O. Box 33008, Austin, Texas 78764.

M. Steele