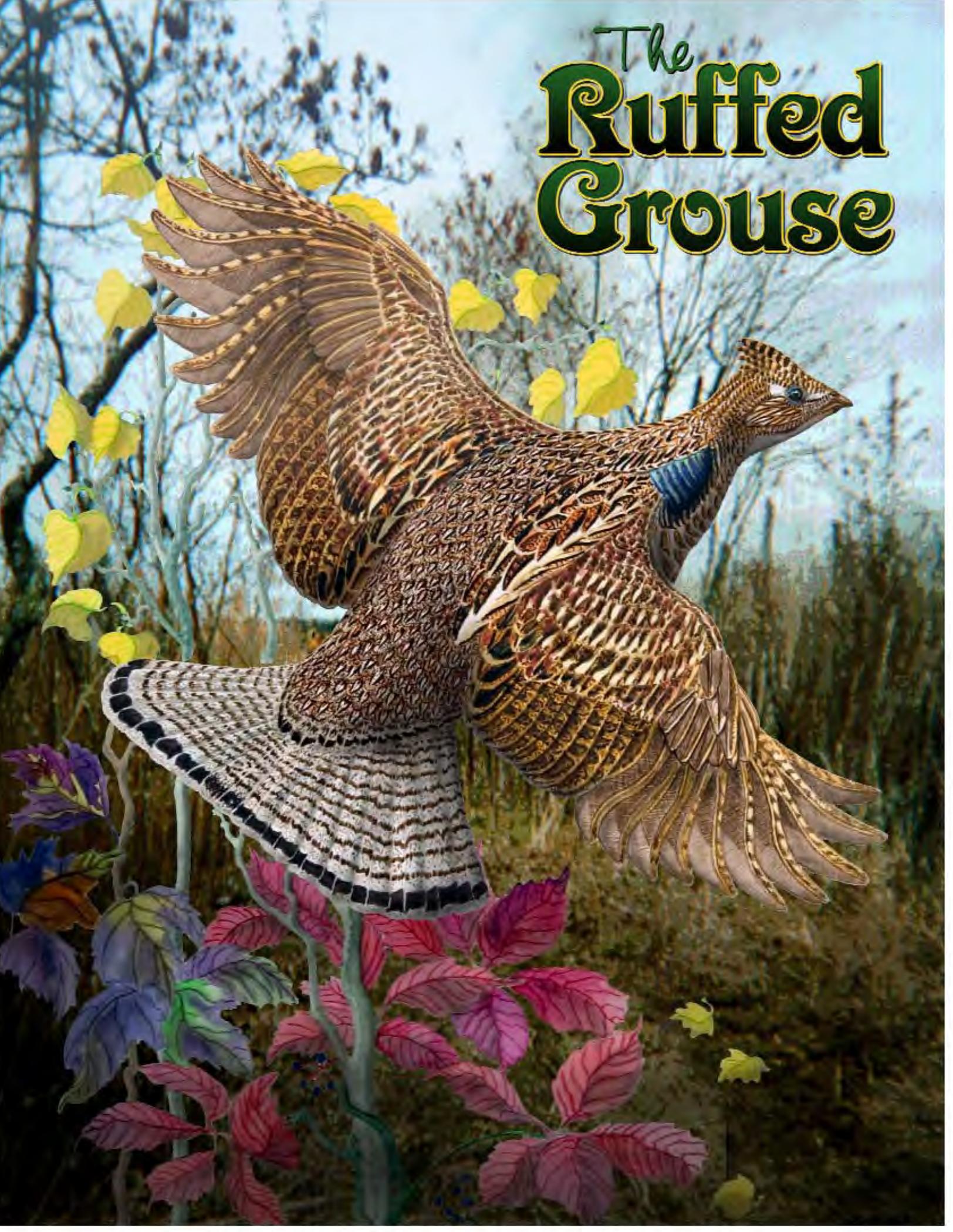


The  
**Ruffed  
Grouse**





# The Ruffed Grouse

By Timothy J. Post

**R**ound, plump birds a little larger than pigeons, ruffed grouse are a favorite of birders and hunters alike. Also known as partridges, they are year-round residents of New York State. Though these birds go unseen by many, the familiar drumming performed by males, especially in spring, lets people know they are there.

A forest species, ruffed grouse prefer young forest habitats and are generally found in areas with active forestry, in recently abandoned agricultural areas that have reverted to early successional forest, or in areas affected by fire. Grouse can often be seen along the sides of gravel roads near these young forest thickets where they pick up grit (small stones) to aid them in digestion.

## Description

Ruffed grouse come in two basic color phases. Gray phase birds tend to occur in colder northern areas, while brown phase birds occur in warmer southern areas. Some birds, however, exhibit a combination of both colors. Grouse feathers are mottled with white and black which helps them blend into the forest floor and hide from predators. Grouse have broad, flat, fan-shaped tails with a dark band near the tip. Though similar in appearance, male grouse are slightly larger than females (hens) and have long shiny black neck feathers. Males will puff up these feathers and fan out their tails to attract females or warn off other males.



Grouse are well-suited for snowy climates. In the fall, they grow a series of comb-like rows of fleshy bristles (called pectinations) along the sides of their toes. These bristles act like snowshoes, helping the birds to travel over deep soft snow. The pectinations are shed in spring.

## Behavior

Ruffed grouse spend most of their time on the ground and will often run and hide to avoid detection. When closely threatened, they explode from their hiding place in a powerful burst of flight. Many a person has been startled by this loud unexpected flurry of wings. Though good fliers, grouse seldom fly more than a couple hundred yards before either landing in a tree or on the ground to run into a thicket to hide. Interestingly, sometimes when they land in a tree, they will back up, stretch out their necks, and flatten out against the tree trunk, apparently trying to camouflage themselves from predators.

During winter, grouse will burrow or dive into soft, powdery snow when available. This not only helps keep them warm, but also hides them from predators. In times of extreme cold, temperatures beneath the snow can be as much as 25 degrees warmer than the air.

Male grouse are aggressively territorial throughout their adult lives, defending a 5-20 acre patch of forest. Males claim their territory by standing on a log, rock, or mound and beating their wings against the air. Called drumming, it sounds like a distant lawn mower engine slowly starting up and then increasing to a rapid beat. Drumming is most frequently heard during the spring mating season, but it can occur throughout the year.

## Reproduction

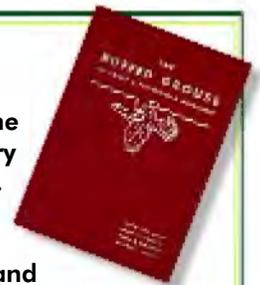
Each spring, male grouse ruffle their neck feathers, fan their tails and drum in an attempt to lure hens to their territory. Generally solitary birds, ruffed grouse do not develop pair bonds, and one male may breed with several hens. Following mating, hens construct nests and lay 8 to 14 cream-colored eggs. If the nest is destroyed, hens will often attempt to re-nest.



Nests are shallow depressions in the leaf litter, often at the base of a tree, stump or bush, and normally located in second growth hardwoods. Eggs are incubated by the hens and hatch in 24-26 days. Chicks are precocial (highly independent from birth), and leave the nest soon after they hatch to follow the hen and start feeding. Hens stay with their broods until they are grown. During autumn, juvenile birds can disperse from natal habitats up to two miles or more.

### Ruffed Grouse Book

From the late 1920s through the early 1940s, NYSDEC carried out the most extensive study of the life history of the ruffed grouse ever completed. This was a monumental undertaking that greatly advanced scientific knowledge of ruffed grouse biology and management. Published in 1948, *The Ruffed Grouse: Life History, Propagation, and Management* is still considered to be the premier reference for questions about ruffed grouse. Copies are available through aftermarket book dealers.



## Diet

Young grouse chicks eat insects and small invertebrates, gradually switching over to adult diets. Adult grouse eat a wide variety of fruits, seeds, leaves, buds and insects. During winter when snow covers the ground, grouse rely on eating the buds and catkins of trees and shrubs such as aspen, cherry, birch, ironwood and apple.

## Predation/Mortality

Short-lived, most ruffed grouse rarely live a full year, though a few will make it to three years. Mortality from the time the chicks hatch (early June) until they are fully grown (around mid-August) is often more than 50 percent.

Most grouse succumb to predation, providing meals for a number of predators, including hawks, owls, fox and coyotes. Some grouse die of disease or exposure to severe weather. Good habitat that provides adequate cover and food resources greatly increases the survival of ruffed grouse.

## Popular Gamebird

One of the state's most popular native game birds, ruffed grouse have been a favorite target for generations of New York bird hunters. Despite declines in their numbers, ruffed grouse are still common, particularly in younger forests, and provide excellent hunting opportunities. Grouse attract thousands of hunters with their shotguns and bird dogs who spend many days walking old woods roads eagerly anticipating the exciting



- ❖ Spend most of their time on the ground
- ❖ Seldom fly more than a couple hundred yards, but can hover and make complete turns in the air when flying through thick brush
- ❖ Do not migrate; spend their entire lives within a few acres
- ❖ In fall, grow fleshy bristles (called pectinations) along the sides of their toes which act like snowshoes to help the birds travel over snow. Pectinations are shed in spring
- ❖ Males make drumming sounds with their wings to attract females and warn off other males

flush of a grouse bursting from cover. Grouse are challenging quarry, rapidly flying and dodging through trees and thick cover. Those hunters lucky enough to bag one are rewarded with a sumptuous gourmet meal.

**GROUSE ART - JEAN GAWALT / LAYOUT GRAPHICS & DESIGN - FRANK HEREC**

## Managed Forests—Key for Grouse

Ruffed grouse depend on early successional tree and shrub species which occur in forested areas that have been recently disturbed, such as by fire or active forestry. This disturbance opens the canopy, allowing full sunlight to reach the ground and promote vigorous new growth.

In New York State, the reluctance to cut forests, and suppression of fires has greatly reduced the amount of early successional forest habitat available to ruffed grouse, as well as a host of other bird and wildlife species. In fact, 67% of the bird species that rely on this habitat are in serious long-term decline. While ruffed grouse are still a common bird in most forested areas of the state, their populations have declined more than 80% since the 1960s.

Part of the reluctance to cut trees is based on the misconception that cutting trees is bad for birds and other wildlife. In fact, properly planned forest harvest can increase abundance and diversity of birds and most other wildlife in a forest. For grouse, this typically involves cutting small 5-10 acre patches or strips through the forest, creating a mosaic of different age forest stands with diverse structure. This provides the food and cover needed for grouse to prosper.

As long as New Yorkers maintain their forest lands as suitable habitat, we will always have the pleasure of hearing the drumming of ruffed grouse in spring, of seeing a hen and her chicks scurry across a back country road, or of being unnerved by the sudden explosive burst of a grouse taking flight.



*The Ruffed Grouse*