



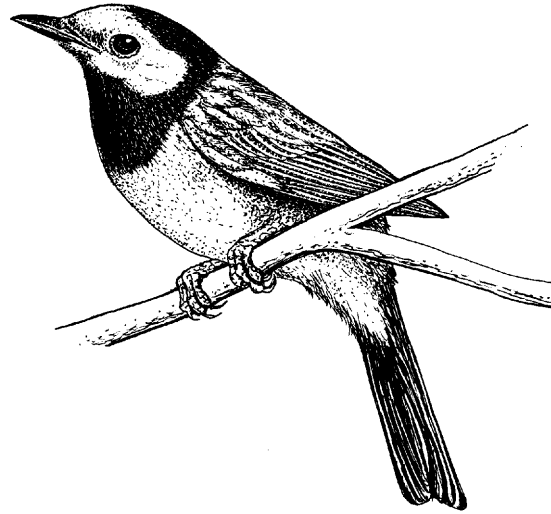
## Hooded Warbler

*Wilsonia citrina*

This small but striking songbird breeds in southern Canada and the eastern United States. The hooded warbler seems to prefer shaded habitats, and closely associates with understory components of Southeastern forests. Perhaps related to this poorly lit habitat type is the size of the hooded warbler's eyes, which are among the largest of warblers breeding in the United States. They stand out boldly on the bird's yellow face. Part of its scientific name, "citrina," refers to its dazzling yellow color. The adult males have a distinctive black hood and maintain their plumage coloration year-round. On the wintering grounds these birds maintain distinct feeding territories. Individuals segregate by sex during winter, with males usually found in mature forest and females in scrubby habitats. Males have individually distinct songs and have been shown to be able to recognize the songs of other males near their territory from year to year. The hooded warbler is declining in only a few parts of its breeding range, and in the east is increasing according to Breeding Bird Survey (BBS) data.

### History and Status

On the breeding grounds, this bird typically inhabits mixed



hardwood forests in the north and cypress-gum swamps in the south. In North Carolina, it favors moist, deciduous woods with a diverse understory. It is considered to be a forest-interior species but is also found in smaller woodlots and near gaps and edges in larger forest patches. It is a neotropical migrant that winters in southern Mexico, Central America, and parts of the Caribbean.

Neotropical (New World) migratory birds migrate north each spring from wintering areas in Mexico, Central or South America, or the Caribbean. They breed during our summer in temperate North America and then fly south.

According to the BBS, the highest densities of hooded warblers are generally found with a more extensive shrub layer and larger areas of contin-

uous forest. The BBS shows an insignificant increase in population on a continental basis, but a significant increase in the eastern part of this bird's range over the past 30 years.

### Description

This species is sexually dimorphic (males and females look different) in plumage color throughout the year. Adult males are

olive green above and bright yellow below, with a black hood and throat. The forehead and cheeks are bright yellow. Females are also olive green above and bright yellow below, with varying degrees of black around the crown or throat. Some older females may look a lot like males, but their hoods are never as complete or extensive.



## Habitat and Habits

The hooded warbler inhabits a variety of forested habitats on the breeding grounds. Typically, territories usually include small clearings or gaps where a thick understory provides nest sites. It is a nocturnal migrant, and during winter it populates brushy fields, shrubby areas and second-growth and mature forest.

Sexes show distinct segregation by habitat on the winter range. Individuals are also strongly territorial during winter. Males are most likely found in mature forest and females in scrub, second-growth and disturbed habitats. Habitat segregation is thought to result from male dominance over females. Experiments with hand-raised birds and field data indicate each sex has innate habitat preferences, and that verticality of vegetation may be a cue for habitat selection. This winter habitat segregation was first detected in hooded warblers and also is now known to occur in other neotropical migrants such as American redstart, Northern parula and black-throated blue warbler.

Males defend nesting and feeding territories, and most attract a single mate. However, some males remain unmated, and some have two females nesting on their territory at the same time. Extra-pair matings are a common and important component of this mating system. DNA fingerprinting studies have shown that about one-third of the females produce offspring fathered by a neighboring male. Such a mating system is typical of most long-distance migrant songbirds and may influence habitat selection that would

exclude small woodlots where there are fewer chances for extra-pair matings.

Females choose nest sites and build the nest. Most nest sites are located within the shrub layer of forest patches and often near edges of distinct shrub patches. Nests are usually close to the ground in saplings or shrubs and are an open cup of woven plant parts. The outside of the nest is often wrapped with dead leaves and leaf skeletons, making it look like a clump of dead leaves.

The main food is small insects, spiders and other small arthropods. On the wintering grounds, birds typically forage lower in the canopy on down to the ground. Males and females may forage at different heights on the breeding grounds, with breeding males usually found feeding at the highest parts of the canopy. Food is usually captured by hawking, hovering at the leaf and gleaning.

## Range and Distribution

This bird breeds in southernmost Canada and the eastern United States, and winters primarily in Central America. It breeds throughout North Carolina, usually in moist, deciduous woodlands. There are rare records of birds lingering into winter, but most birds are gone from our area by the end of October.

## People Interactions

Some birds likely collide with structures such as TV towers or buildings because this species is a nocturnal migrant. Little information exists on the effects of pesticides or other toxins on this species. Hooded warblers are considered "area sensitive,"

## HOODED WARBLER

### Average Size

Length: 5.5 in. long  
Weight: about .35 oz.

### Food

Small insects, spiders and other arthropods

### Breeding and Young

More than one brood is possible, with three to four eggs per clutch. The female builds the nest and incubates the eggs. Incubation lasts about 12 days, and the young leave the nest in about eight days. It is a common cowbird host throughout the breeding range.

### Life Expectancy

At least 8 years

### Threats

Some are likely killed from collisions with buildings and other structures during migration. Forest fragmentation may limit suitable nesting sites, and deforestation on wintering grounds could become a problem for this territorial species that segregates by sex on wintering grounds. On a continental scale, it is still widespread and abundant.

which means they are usually found in larger tracts of mature forest on their breeding grounds. Like many other area-sensitive forest songbirds, this species' nesting habitat availability has been reduced by forest fragmentation, and additional negative effects likely have been added by nest parasites and predators. Deforestation has affected parts of the winter range. Males prefer forested habitat but will also occupy shrub and disturbed habitat that is usually occupied by females and immature males. Deforestation could force mature males into other habitats, potentially displacing females and shifting the sex ratio in favor of males.

Rappole, *The Ecology of Migrant Birds* (Smithsonian Press, 1995).

## Credits

Written by Mark Johns, Partners in Flight Coordinator, N.C. Wildlife Resources Commission. Illustrated by J.T. Newman. Produced November 2000 by the Division of Conservation Education, N.C. Wildlife Resources Commission.

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## Suggested Reading

Dunn and Garrett, *Peterson Field Guides: Warblers* (Houghton Mifflin Co., 1997).

**Partners in Flight** is all about keeping "common" birds common. Begun in 1990, this international program was developed to help keep many birds from becoming rare or even endangered species. The program has been active in North Carolina since 1993.

N.C. Partners in Flight is a program designed to facilitate cooperation among partners that will result in better bird conservation throughout the state and region. Created as a dose of preventive medicine, Partners in Flight works toward saving species and important habitats before they become endangered. The main goal of the program is to help maintain populations of birds adapted to forest, early-successional and grassland habitats. This initiative brings together many partners—government and nongovernment agencies of all levels, private conservation organizations,

universities and colleges, the forest products industry and concerned citizens, to name a few.

Biologists, educators and policy makers throughout the Americas are all working together to help stabilize bird populations of all kinds, and to conserve or manage the breeding, wintering and migration habitats they use. The program in North Carolina aims to bring together people and groups concerned about birds to help further bird conservation efforts. All cooperative efforts are coordinated through the



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- National Park Service
- U.S. Army Corps of Engineers
- N.C. State Parks
- The Nature Conservancy, North Carolina chapter
- Audubon Society
- N.C. Museum of Natural Sciences
- Universities and colleges
- Members of the forest products industry
- Concerned citizens

To learn more about N.C. Partners in Flight, contact NCPIF coordinator Mark Johns of the N.C. Wildlife Resources Commission at <[johnsme@mindspring.com](mailto:johnsme@mindspring.com)>.