

ABOUT THE COVER

Canada Warbler

The Canada Warbler (*Wilsonia canadensis*) is a beautiful, active, little wood-warbler sporting a necklace of black streaks on a bright yellow background. The male is slate gray above, without wing bars or white in his tail, bright yellow below, and has a white eye-ring that is highlighted by black facial markings and the black necklace. The female is duller in coloration and has a muted necklace and no black on her face. Juveniles resemble females but are duller yet. The Canada Warbler has a comparatively long tail that it often cocks or flips when foraging. The species is monotypic (no subspecies) and is most closely related to its congeners, the Wilson's and Hooded warblers.

The Canada Warbler breeds in the northeastern United States, across boreal Canada, and in the mountains south to Georgia. In Massachusetts it is a fairly common breeder except for the Cape and the Islands. It is a neotropical nocturnal migrant; it moves late in the spring and early in the fall. In Massachusetts, it is a common migrant, which in the spring peaks in late May. The highest numbers in the fall occur in August. It winters in northern South America, where it occupies the dense undergrowth of rainforests. It often joins mixed species foraging flocks during migration and on its wintering grounds.

A wide variety of moist habitats is used by the Canada Warbler for nesting. The most usual is mixed coniferous/deciduous forest with a well-developed understory, e.g., in rhododendron thickets in the south. The species is territorial, and only the male sings, although females as well as males utter various *chip*, *check*, and *zzee* call notes. The male's song is highly variable and has been described as a *chip* followed by a burst of loud, short notes, ending in a three-note phrase, or, for example, *chip*, *chupety swee-ditchety*. The male has a warbling flight song that accompanies a slow, flapping or wing-quivering flight. Male aggressive displays include facing an intruder with wings raised to the horizontal.

The breeding biology is surprisingly poorly known. The female builds the nest well concealed in a thicket or in fallen debris at or near the ground. Often the nest site is the root mass of a fallen tree. The nest is a bulky cup of plant fibers, bark, and twigs, lined with grass, or deer or horse hair. Incubation is by the female alone, although the male, as well as the female, will give distraction displays when threatened, with feathers ruffled, tail fanned, and wings fluttering. The incubation period is about twelve days, although the data are skimpy, and the time to fledging is unknown. It is thought to be about ten days, as is the case with similar species. Both parents feed the fledglings, but for how long is not known.

Canada Warblers are frequently active aerial foragers, sallying forth to capture flying insects or hovering to glean insects from bark and foliage. This has led to common names such as "flycatcher" and "flycatching warbler." They also glean leaves, predominately from lower branches and shrubs, and sometimes forage on the

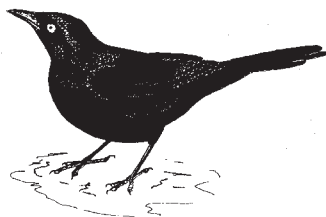
ground. Their main food is flying insects, such as mosquitoes, flies, and moths, and spiders.

Sadly, Canada Warbler populations have declined precipitously in recent decades. Breeding Bird Survey data suggest a 2.1 % per year decline between 1966 and 1996, with the decline particularly sharp in the northeast. Although Canada Warblers are frequently hosts to cowbird nest parasitism, and many are killed in migration by collisions with radio towers and other man-made structures, the major problem seems to be changes in forest structure and the draining of forested wetlands. Apparently, a critical factor is the presence of a well-developed forest understory. Regeneration of New England farmland in the twentieth century provided optimal habitat with dense understory and thickets, but many forests have now matured, and the understory is largely gone or browsed by deer to unacceptable levels. Because of the population declines, the Canada Warbler is considered a Species of Special Concern in several states, and most states now protect wooded swamp habitats, which gives some reason for optimism. Conservation initiatives are hampered by lack of information on the ecology, distribution, and population size of the Canada Warbler — monitoring programs have trouble coping with species that nest in wet and inaccessible habitats. We can only hope that the decline slopes will flatten and that this perky little warbler will continue to be a common migrant and breeding resident bird in Massachusetts. 🐦

William E. Davis, Jr.

About the Cover Artist

Julie Zickefoose, our featured artist for April, appears here again as a welcome and familiar contributor to *Bird Observer* covers. Educated at Harvard University in biology and art, she is a widely published natural history writer and artist. She worked for six years as a field biologist for The Nature Conservancy before turning to a freelance art career. Her observations on the natural history and behavior of birds stem from more than three decades of experience in the field. She has presented illustrated lectures for nature organizations and festivals across the country and exhibited her paintings at universities, museums, galleries, and in juried shows. With her husband, Bill Thompson III, editor of *Bird Watcher's Digest*, Julie lives on an 80-acre nature sanctuary in the Appalachian foothills of southeast Ohio. A 42-foot-tall bird watching tower atop their home helps them enjoy and catalogue the wildlife they protect, including 180 bird species and 66 butterfly species to date. You can find more of her work at <<http://www.juliezickefoose.com>>. 🐦



COMMON GRACKLE BY WILLIAM E. DAVIS, JR.