

ABOUT THE COVER

Golden-winged Warbler

The once regionally common Golden-winged Warbler is now an uncommon or rare sight in New England. A changing landscape and competition with its sister species, the Blue-winged Warbler, are likely involved in this attractive warbler's decline. The male Golden-winged Warbler (*Vermivora chrysoptera*) is stunning, with highlights of bright yellow on both wing patches and crown. His black eye and throat patches are set against gray-brown upperparts which become light gray below. Females are similar to males, but the eye and throat patches are gray rather than black. Blue-winged Warblers have a thin black eye stripe and white wing bars, are yellow below, and lack the black face and throat patches of their sister species. The two species hybridize to produce fertile offspring — “Brewster’s” and “Lawrence’s” warblers. The former resembles a Golden-wing except that the black face and throat patches are replaced by the thin black eye stripe of the Blue-wing, and there is typically a wash of yellow across the mid-breast. The latter resembles a Blue-wing except that it has the face and throat patches of a Golden-wing. The Golden-winged Warbler has no recognized subspecies. Because the two members of this superspecies hybridize and produce fertile offspring, there has been debate about whether or not they should be considered the same species. Recent mitochondrial DNA studies, however, suggest that the genetic differences are great enough to consider them different species, even though they are not entirely reproductively isolated.

The breeding range of Golden-winged Warblers is largely confined to the interior eastern and northeastern United States and southern Canada, from northern Georgia through the Great Lakes, and from Wisconsin and Minnesota east to coastal New Jersey, with a spotted distribution to northern New England. They winter in southern Central America and northern South America. In Massachusetts, Golden-winged Warblers are currently considered rare and local breeders, and very uncommon to rare migrants. This species is listed as state-endangered by the Massachusetts Natural Heritage and Endangered Species Program. Numbers of breeding pairs appear to have peaked in the 1940s and have experienced severe decline since then. They arrive in early May and depart for their wintering grounds from late July to September.

Golden-winged Warblers are habitat specialists that require fields, marshlands, or bogs with shrubs and scattered trees and forested edges. Their territories are typically in early successional growth on abandoned farmland, burned-over areas, powerline cuts, or clear-cut patches. Territories often include woodland edge. Song is reported as being of two types. One, a *zee* followed by up to six *bee* notes, is often given by males high on perches. This serves primarily to attract mates. The second song type is described as a stutter followed by a buzzy note; this functions primarily as territorial advertisement and defense. Hybrids can sing the song of either parental species. Courtship displays by the male include flying from a perch in an arc, singing, and then gliding or flapping to the same or another perch. They sometimes make “moth flights” with exaggerated wing beats. Aggressive displays include raising crown

feathers and spreading tail feathers, along with chasing and supplanting attacks (driving a rival from a perch and then replacing him). Fighting sometimes occurs.

Female Golden-winged Warblers select the nest site and build the nest. This is usually on the ground at the base of vegetation clumps or a tree. The nest consists typically of a base of leaves with a cup of bark and woven threads of plant material; it is most often well-concealed. The average clutch is four to five pink or cream eggs, blotched with darker colors. Incubation is by the female alone and lasts until hatching, ten to eleven days. The young are then brooded by the female; fledging occurs in ten to twelve days. Both parents feed the young and continue to feed the fledglings for up to a month. Golden-winged Warblers forage largely by probing, often prying open curled leaves. They rarely hawk flying insects. They eat mostly spiders, insects, and moth larvae.

The breeding range of Golden-winged Warblers is dynamic and has been continuously changing for more than a century. It is presently expanding in the north and contracting in the south. Because they thrive in early successional habitats, as reforestation occurs Golden-winged Warbler populations decline. In areas where Blue-winged Warblers have expanded into Golden-winged Warbler range, Golden-wings have generally been extirpated within fifty years of contact, although there are a few areas where both species have maintained stable populations for more than a century. Breeding Bird Survey (BBS) data from 1966-1990 suggest a general decline for Golden-winged Warblers in the United States but possibly an increase in Canada. The causes for these changes and declines are undoubtedly complex, and suggested factors include habitat change on the breeding grounds, competitive interactions and hybridization with Blue-winged Warblers, cowbird nest parasitism, and habitat destruction on the wintering grounds. We can only hope that this combination of factors does not lead to the extirpation of this beautiful warbler from our region. 🐦

William E. Davis, Jr.

About the Cover Artist

We are pleased to again welcome **Paul Donahue** as our cover artist for this issue. His work will be familiar to our readers since he has contributed many fine covers to *Bird Observer*. Paul divides his time between Maine, California, and South America; he has been painting and drawing birds since he began watching them during his early teens. His first trip to South America was in 1972, and since then he has spent a great deal of time in the neotropics, particularly in the rainforests of the western Amazon Basin, birding, painting, tape-recording, and leading natural history trips. Since 1988, his time in the tropics has been concentrated in the rainforest canopy, where he and his wife, Teresa Wood, have constructed two canopy walkways and dozens of canopy observation platforms, and taught over two thousand people how to safely climb into the forest canopy on ropes. He can be reached via email at aracari@ptc-me.net. 🐦