



**Common Name:** GOLDEN-WINGED WARBLER

**Scientific Name:** *Vermivora chrysoptera* Linnaeus

**Other Commonly Used Names:** Golden-winged flycatcher, Golden-winged Swamp Warbler, Blue Golden-winged Warbler

**Previously Used Names:** *Motacilla chrysoptera*

**Family:** Parulidae

**Rarity Ranks:** G4/S1

**State Legal Status:** Endangered

**Federal Legal Status:** Not listed

**Federal Wetland Status:** N/A

**Description:** A small warbler about 12-13 cm (5 in) long with medium gray back, chest and belly, and white vent. The male has a thick wedge-shaped black stripe or patch that broadens as it runs from the base of the bill to the back of the head. It also has a black chin and throat. The black is replaced by gray on the female. Both sexes have a yellow forecrown and fairly large yellow wing panel on the upper wing near the shoulder; this yellow coloration is generally brighter on the male. The upper surface of the outer tail feathers is white in both sexes.

**Similar Species:** The yellow-throated warbler (*Dendroica dominica*) could look somewhat similar at a distance, but it has a darker blue-gray back, bright yellow throat, white chest with grayish streaking on the flanks, white wingbars, and it lacks yellow on the top of the head. The yellow-rumped warbler (*Dendroica coronata*) could also appear somewhat similar to the golden-wing, but has a darker gray to blue-gray back, white chest and belly with black streaking on the flanks, white wingbars, white throat, a large yellow patch on the flank at the base of the wing, a yellow rump, and no yellow on the upper surface of the wing. The only time the yellow-rumped warbler and golden-winged warbler might overlap is in late spring before the yellow-rumped warbler migrates north.

**Habitat:** Nesting habitat for this warbler varies somewhat across its range, but generally includes areas with patches of herbs, shrubs, and scattered trees along forest edges. Populations in the southern Appalachians historically inhabited naturally occurring higher-elevation open oak woodlands, open brushy areas created by beavers, and some mountain bogs. Today this species typically inhabits early successional habitats that include a combination of dense stands of seedling and sapling trees interspersed with relatively open patches of grass and weeds. Surrogate habitats such as regenerating clear-cuts, roadsides, and brushy abandoned pastures are the most common habitats used in the southern portion of its range. Most golden-winged warblers are found at elevations between 850 m and 1,200 m in the southern Appalachians and primarily occupy regenerating clear-cuts that average about 6 years of age. Wintering habitats in the tropics tend to be semi-open woodlands, more sparsely stocked forests, and forest edges and gaps.

**Diet:** Adult moths and moth pupae and caterpillars, other winged insects, spiders; occasionally nectar in winter.

**Life History:** The breeding season in Georgia begins in mid to late April. Males arrive 2-7 days before females and establish territories. Nest building starts a few days after the females arrive, usually in late April. Only the female builds the nest, which is placed on or near the ground in a clump of herbaceous vegetation, often near small woody stems. She constructs the nest in 1-3 days using tree leaves as the base and weaving coarse grasses and other plant fibers to form the loose outer cup. The inner cup is woven from fine grasses and other fine plant material. A clutch of 4-6 eggs is laid and incubated by the female only for 10-12 days before hatching. Both parents feed the young in the nest and they fledge 9-10 days after hatching. Most young have fledged by the third week of May. Both adults and young have been observed near nest sites into late July, and they may remain in early successional habitat throughout the summer.

**Survey Recommendations:** Point counts conducted in May in early successional habitats, including recently burned areas, clear-cuts, and similar sites, in the Blue Ridge Mountains. At

larger sites it might be possible to run these counts along forest roads or transects. Spot mapping could be used to delineate male territories and get an estimate of the number pairs using a site. Nesting success and productivity could be measured as well.

**Range:** In the U.S. the golden-winged warbler breeds throughout the eastern half of the Midwest, southern portions of the Northeast, the western Mid-Atlantic, and down the Southern Appalachians to very northern Georgia. It also breeds in southern Ontario, Canada. In Georgia, it presently breeds at just a few sites in the Blue Ridge Mountains in Fannin and Union counties. Wintering sites occur throughout much of Central America and northwestern South America where suitable habitat exists.

**Threats:** Prior to European settlement, habitat was fairly common throughout the southern Appalachians in the form of open oak woodlands created and maintained by frequent lightning-generated wildfires or by fires set by Native Americans. After colonization settlers maintained areas as open oak woodlands, and golden-winged warblers were considered characteristic of this habitat. Logging of the southern Appalachians in the early 20th century created an abundance of suitable early successional habitat for this bird and golden-winged warblers were probably common in recently cutover areas. Continued logging and severe wildfires following the demise of the American chestnut probably sustained populations throughout the southern Appalachians. Farm abandonment about that time also provided habitat at lower elevations. Despite several years of intensive surveys, only a few sites are known for this species in the state. Populations have declined throughout much of this bird's range, with a 2.8 percent annual decline in the eastern BBS region from 1966-2007.

**Georgia Conservation Status:** Chattahoochee National Forest, particularly Ledford Gap and Brawley Mountain in Fannin County and an area north of Suches in Union County.

**Conservation and Management Recommendations:** Since the latter half of the 20th century the southern Appalachian population of the golden-winged warbler has shown significant declines and it is likely that the Georgia population is now at an all-time low. Nearly all suitable habitat in Georgia is owned by the U.S. Forest Service, and decades of fire suppression coupled with recent reductions in timber harvest on these lands has eliminated most of the remaining habitat. Most nesting sites in Georgia are at lower elevations, and golden-winged warblers nesting at these sites are vulnerable to hybridization and competitive exclusion by blue-winged warblers (*Vermivora pinus*) which nest at these lower elevations. A female Lawrence's warbler (golden-winged warbler x blue-winged warbler hybrid) was seen at least three times at Brawley Mountain in 2002. This bird was carrying food on one date indicating that it was likely nesting at this site. A significant amount of effort will be needed to maintain populations of this species in the state. Timber harvest and prescribed fire at appropriate elevations provide the best tools to effectively manage habitat for the golden-winged warbler.

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