Natural Heritage & Endangered Species Program

Commonwealth of Massachusetts
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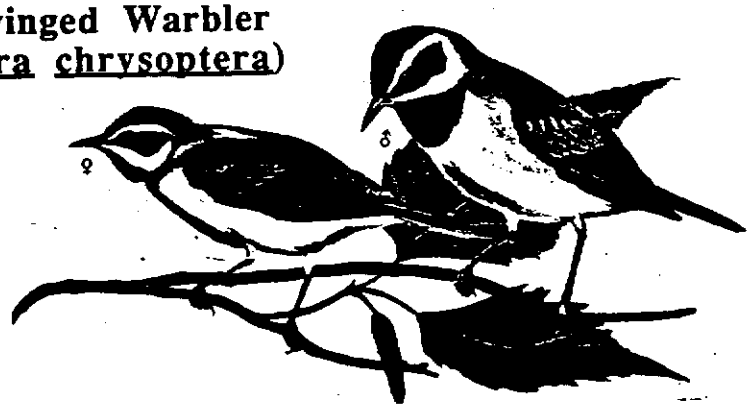
MASSACHUSETTS ENDANGERED SPECIES

Golden-winged Warbler
(Vermivora chrysoptera)

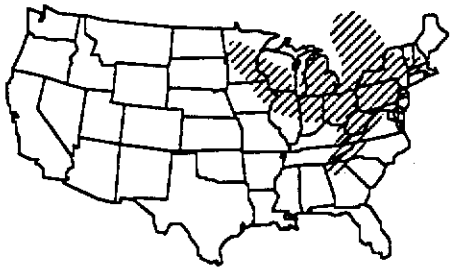


Robbins, Chandler; Bruun, Bertel; Zim, Herbert; Birds of North America, 1966

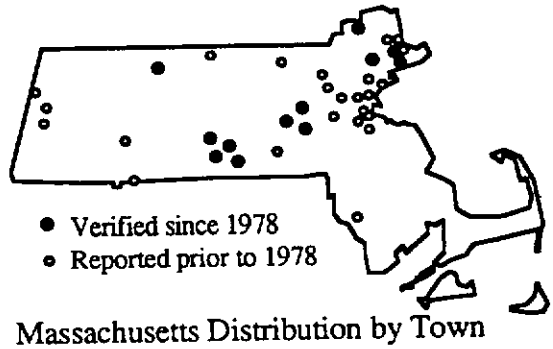
DESCRIPTION: The Golden-winged Warbler is a beautiful bird, about 11 cm (4.5 in.) in length, with a distinctive combination of colors and patterns. The male has a dull white underside and a gray back, with bright yellow patches on the crown (forehead) and upper wing surfaces, and a black throat and bill. A black "mask" extends across the eyes, with patches of white above and below the mask. The female Golden-winged Warbler is similar in appearance, but the colors are considerably duller. Male Golden-winged Warblers sing most persistently in the morning early in the nesting season. Golden-wings make use of two types of songs. One of the songs is characterized by a high-pitched buzzy phrase followed by 1 to 6 shorter buzzy phrases, and is used to attract mates. The other song consists of 3 to 5 low buzzy phrases ending with a higher buzzy phrase, and is used to defend the bird's territory against other males.

SIMILAR SPECIES: The Blue-winged Warbler is a very close relative of the Golden-winged Warbler, but its body is predominantly yellow instead of gray and white. These two species of warblers often mate and produce hybrids, one of which is known as Brewster's Warbler. It is very similar in appearance to the Golden-winged Warbler, but has a yellow patch on its chest and lacks black throat color; its mask is also less conspicuous. The other hybrid, known as Lawrence's Warbler, has a yellowish head and underside, black throat and mask, and two white wingbars.

HABITAT IN MASSACHUSETTS: Golden-winged Warblers prefer woodland edges bordering early successional clearings (such as abandoned farmland and powerline areas), heavily overgrown with patches of grass, weeds, bushes, shrubs, briars, and small trees. Common species of vegetation found in these habitats are grapevine (Vitis sp.), goldenrod (Solidago sp.), and birch (Betula sp.).



Summer (breeding) range



Massachusetts Distribution by Town

RANGE: The summer range of the Golden-winged Warbler extends from southern New Hampshire west to Minnesota and south to Iowa and New Jersey (and in the Appalachians to northern Georgia). During the early part of the century, the Golden-winged Warbler's summer range expanded northward and eastward but it disappeared from the southern extent of its range. The winter range of the Golden-winged Warbler extends from southern Mexico to Venezuela and Colombia.

BEHAVIOR / ECOLOGY: Golden-winged Warblers usually arrive in New England in early May, the females arriving a day or two later than the males. The males immediately set up territories (which range in size from 1 to 5 acres) and sing in order to defend their territory and attract females. Males often return to the same site year after year. After pairing takes place, the females build bulky nests on or near the ground. The nest is constructed out of grasses, leaves, vine tendrils, and other fine materials, and is supported by bushes, or very frequently, by goldenrod stems. From mid-May to mid-June, three to seven creamy white eggs with brown speckles are laid, one egg per day. The eggs are incubated by the female for 10 to 11 days. Both parents feed and care for the nestlings. Although the chicks are able to leave the nest after ten days, the parents continue to care for them until several weeks afterward. The chicks acquire their winter plumage about a month after birth, and reach maturity in one year. Golden-winged Warblers begin their southward migration in late August or early September. Golden-winged Warblers feed on larvae, small bugs, spiders, ants, beetles, and caterpillars (including Gypsy Moth caterpillars). The Golden-winged Warbler's feeding behavior resembles that of chickadees: it hops from twig to twig, sometimes hanging upside down, while peering about around the branches for insects. The life span of the Golden-winged Warbler is about 2 to 5 years.

POPULATION STATUS: The Golden-winged Warbler is listed as an Endangered species in Massachusetts due to its rapidly decreasing population; in fact;, there is no longer a viable population anywhere in Massachusetts. In the 19th century, Golden-winged Warblers were rarely seen in New England. In the early 1900's, the population of Golden-winged Warblers in New England increased as many farmlands were abandoned. From then until 1940, Golden-winged Warblers were locally uncommon to common in Massachusetts, and Blue-winged Warblers were not present. Since 1940, Blue-winged Warblers increased steadily in numbers throughout the state, and have become common in many areas. At the same time, the number of Golden-winged Warblers has steadily declined to the point where they are now rare throughout Massachusetts, and completely absent over most areas. It appears that the Blue-winged Warblers may have been swamping the gene pool of the Golden-winged Warblers by interbreeding with them. The courtship calls and displays of each species are very similar. As a result, Golden-winged Warblers often mate with Blue-winged Warblers, creating hybrids instead of true Golden-wings. However, Blue-winged Warblers also seem to be declining after reaching a zenith in the early 1980's.

Cowbird parasitism and loss or impairment of wintering habitat may also be part of the problem, but no one really understands exactly what happened to the Golden-wing; it is possible that the situation could reverse itself someday. The amount of suitable habitat for the Golden-wing does not seem to be a limiting factor; there is plenty of habitat available, but no birds to occupy it; many of the sites where Golden-winged Warblers have been seen since 1978 now appear to be abandoned. The only Golden-wings currently observed in Massachusetts are stray males which establish a territory in suitable habitat, advertise (usually without success, since there are no Golden-wing females around) and depart southward in autumn. The male, if still alive, will return to the exact same territory the following spring and try again. After the male dies (in 2 to 3 years), the habitat is again vacant. The likelihood of another male turning up in the same place is extremely small; usually the next pioneering male will pick somewhere else, and the discouraging cycle will repeat itself. Lately, so few Golden-wings turn up in Massachusetts that one can no longer expect to see them anywhere without a lot of luck.