

Golden-winged Warbler

Vermivora chrysoptera

Federal Listing	N/A
State Listing	SC
Global Rank	G4
State Rank	S2
Regional Status	Very High

Justification (Reason for Concern in NH)

The Golden-winged Warbler has been undergoing a significant population decline and range shift in the Northeast since at least the 1980s (Confer et al. 2011). From 1966 to 2013, BBS data indicate a range-wide decline of -2.3%/year, although from 2003-2013 the trend is a non-significant 0.2%/year (Sauer et al. 2014). The latter likely reflects stable to increasing populations in the north and west, where the bulk of the current population occurs. In the northeastern United States, the declines have been dramatic: -10.82%/year in BCR 30 and -7.78%/year in USFWS Region 5. It is now almost extirpated from New England (Renfrew 2013, MassAudubon 2014), and occupancy declined by over 50% in New York (McGowan and Corwin 2008). The last breeding records for New Hampshire are from the 1990s, and there have been only seven records in the state (including migrants) since 2000. Golden-winged Warbler is considered an SGCN in all states where it occurs, as well as an RSGCN in USFWS Region 5. It is also on the Partners in Flight Watch List and the focus of a working group dedicated to range-wide and full life cycle conservation of the species.

Distribution

The Golden-winged Warbler currently breeds across much of the Midwest (southern Manitoba and northern Minnesota to western New York) and discontinuously in the Appalachians from northern Georgia to western Massachusetts (where extremely rare) (Confer et al. 2011). It winters on the Caribbean slope (primarily) of Central America from Guatemala to Panama, and in northwestern South America. It apparently colonized New Hampshire in the early 20th century, where it was generally limited to the extreme southeastern portion of the state (Foss 1994). During the 1990s it began to disappear from this region while showing up more regularly elsewhere. The last reliable locations through the 1990s were in Durham and Hanover, with the latter hosting the last confirmed nesting in the state in 1993. Since 2000 there have been only three breeding season records (late May through July, none since 2006), and there have been only four additional records of migrants. Given this long absence from the state and increasing distance from possible source populations, the Golden-winged Warbler is best considered extirpated from New Hampshire.

Habitat

Like all shrubland birds, this species occurs in habitats dominated by shrubs or young trees. Specific habitat features tied to Golden-winged Warbler occupancy include dense shrubs, a significant herb component, and scatter taller trees (Confer et al 2011). These conditions are often present on regenerating clear cuts, especially if a few trees are retained, and also appear to benefit from fire. The species also breeds locally in swamps with dense shrubs and scattered trees. In New Hampshire, most breeding-season records have been in abandoned fields or clearcuts in an early stage of succession and along powerlines.

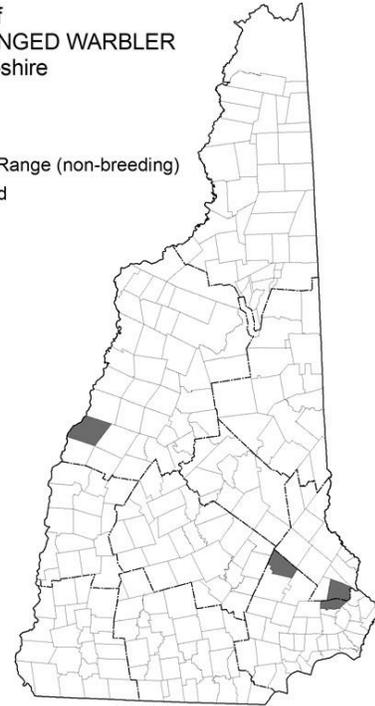
Appendix A: Birds

NH Wildlife Action Plan Habitats

- Shrublands

Distribution of
GOLDEN-WINGED WARBLER
in New Hampshire

■ Current Range (non-breeding)
▨ Localized



Distribution Map

Current Species and Habitat Condition in New Hampshire

Generally declining, but some increases at extreme northwest edge of range. Extirpated from New Hampshire.

Population Management Status

Management is not currently in place for this species.

Regulatory Protection (for explanations, see Appendix I)

- Migratory Bird Treaty Act (1918)

Quality of Habitat

Not relevant; species no longer occurs in the state.

Habitat Protection Status

Not relevant; species no longer occurs in the state.

Habitat Management Status

Not relevant; species no longer occurs in the state, and is unlikely to occur even if appropriate habitat management were implemented.

Appendix A: Birds

Threats to this Species or Habitat in NH

Threat rankings were calculated by groups of taxonomic or habitat experts using a multistep process (details in Chapter 4). Each threat was ranked for these factors: Spatial Extent, Severity, Immediacy, Certainty, and Reversibility (ability to address the threat). These combined scores produced one overall threat score. Only threats that received a “medium” or “high” score have accompanying text in this profile. Threats that have a low spatial extent, are unlikely to occur in the next ten years, or there is uncertainty in the data will be ranked lower due to these factors.

Habitat conversion due to development and impacts from fragmentation (Threat Rank: High)

Ongoing residential and commercial development results in permanent loss of habitats for wildlife. Because many of the habitats used by shrubland birds are already embedded in developed landscapes (e.g., right-of-way, old fields) or viewed as “undesirable” or “waste” habitats, they may be more vulnerable to this threat.

Habitat degradation and conversion due to natural succession or lack of active management (Threat Rank: High)

In the absence of disturbance or management, the early successional and edge habitats preferred by this species generally revert to closed forest systems that are not heavily used, and as a result forest maturation is generally considered the most significant threat facing birds that use shrublands and young forests. See shrubland habitat profile for more information.

Habitat degradation from aspects of right-of-way management (Threat Rank: Medium)

Rights-of-way need to be maintained as short vegetation so as to reduce risks associated with trees and powerlines. As a result these corridors are regularly treated by mechanical (rarely chemical) means to remove or cut back vegetation. In general, such practices create habitat suitable for shrubland birds, although in extreme cases a site may be rendered unsuitable for 1-2 years large areas of vegetation are completely removed. If management occurs during the breeding season, reproductive success will be reduced. See also shrubland habitat profile.

Habitat and species impacts from introduced or invasive plants (Threat Rank: Medium)

Non-native plants, particularly shrubs, have been demonstrated to have several negative effects on birds using shrubland habitats. Insect prey (particularly caterpillars) are usually less common on non-native shrubs (Burghardt et al. 2008, Fickenscher et al. 2014), while data on the nutritional value of fruit are more equivocal (e.g., Davis 2011). In some cases, birds experience lower reproductive success in non-native shrubs, although there is considerable variation (Rodewald et al. 2010, Schlossberg and King 2010), and local predator communities play an important role as well. In all cases, the effects of invasives on shrubland birds depend to a large extent on their relative abundance. If plant diversity is high, the negative effects are diluted and less likely to impact bird populations. However, if the habitat tends toward a monoculture, reduced insect supplies and/or higher predation may reduce reproductive success to the extent that the habitat becomes a sink.

Mortality from subsidized or introduced predators (Threat Rank: Medium)

Many predators (e.g., skunks, raccoons, feral cats) occur in relatively high densities in developed landscapes, often because of direct association with humans or food that is provided either intentionally or unintentionally. Most early successional birds nest on or near the ground, and as a result are more susceptible to nest predation. The problem is compounded because much early successional habitat is near human population centers.

Appendix A: Birds

List of Lower Ranking Threats:

None.

Actions to benefit this Species or Habitat in NH

See shrublands habitat profile for actions

References, Data Sources and Authors

Data Sources

Trend data from Breeding Bird Survey (Sauer et al. 2014, above). NH distribution data from NHBR/NH eBird

Data Quality

Detection of Golden-winged Warblers is complicated by hybridization with Blue-winged, which has resulted in a complex array of songs sung by parent species, hybrids, and introgressed individuals (Confer et al/ 2011). It is generally considered impossible to conclusively identify a Golden-winged Warbler by song alone in New England, meaning that all non-seen birds cannot be assigned to species.

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Literature

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Appendix A: Birds

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