What will be the Future for Vermont's Shrubland Birds?

Student Research Conference

Abstract

My Undergraduate thesis for the UVM Environmental Studies Program looks at the habitat requirements for the Golden-winged Warbler, a neo-tropical song bird that is currently being petitioned to be listed under the Federal Endangered Species Act. My research looks into the Golden-wings response to various habitat cover types and how they affect presence. I am also looking into their relationship with the closely related Blue-winged Warbler, with which it actively competes and hybridizes. Based on breeding surveys taken between 1966 and 2003, populations of Golden-wings have experienced, on average, a decline of 2.4% across their entire range (1966-2003; Sauer et al. 2004). The steep reduction in population is likely due to shrinking habitat from forest regeneration in the northeast along with competition and genetic swamping from Blue-winged Warblers. Current surveys have only revealed 20 possible breeding pairs within the entire state of Vermont, which is why I believe more research needs to be done in order to protect this iconic bird of Vermont's shrublands.

While working alongside Vermont Audubon and UVM Graduate Student Christine Peterson, I conducted breeding surveys along a 240 mile stretch of VELCO power line running from Colchester to West Rutland. Along these sections of managed lands, we conducted bird and habitat cover type surveys based on 20 m integrals. Overall our surveys revealed 8 successfully identified Golden-winged Warblers, 16 Blue-winged Warblers and 3 hybridized Brewster's and Lawrence's Warblers. Cover types were sectioned off into 6 separate habitat categories (Herbaceous, Shrub, Brush, Sapling, Wet and Grass) with percentages collected for each focus area. From the data collected, we concluded a significant positive trend of brush cover along with a surprisingly negative trend of shrub cover for all three species of birds. The implications of these habitat preferences are still unclear and could warrant further research.