

Determining Densities of Cerulean Warblers in Northeastern Iowa

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Collaborators: Iowa Department of Natural Resources
Duration: September 2008 to December 2009
Funding Source(s): U.S. Fish and Wildlife Service
Goals and Objectives:

- Estimate the density of Cerulean Warblers in each of the two areas in Northeast Iowa
 - Determine the general types of habitat used by Cerulean Warblers within this landscape and the potential territories of the birds
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Introduction:

The justification of this proposal as it relates to U.S. Fish & Wildlife Service priorities is that this project will assist in determining where Cerulean Warblers are in the Iowa driftless area, specifically focusing on 2 properties with known concentrations of Cerulean warblers. This project will assist in addressing Action #4 “Reducing critical knowledge gaps” of the Conservation Action Plan for the Cerulean Warbler (http://www.fws.gov/midwest/eco_serv/soc/birds/cerw/cerw_actionplan_30june07.html, Last accessed 11/26/07). Because Iowa is a state heavily dominated by agriculture, it has not been considered a breeding stronghold for interior-dependent neotropical migrants such as the Cerulean Warbler (Kent and Dinsmore 1996, Jackson et al. 1996). However, at the time of European settlement, Iowa was composed of 6.7 million acres of forest. By 1875, this acreage had decreased to 2.2 million acres, and has since increased to 2.8 million acres (Zohrer 2006).

The recent models of Thogmartin et al. (2004) suggest that the Iowa driftless area should support a low to moderate number of Cerulean Warblers. In 2006, the Iowa Department of Natural Resources (DNR) implemented a pilot survey at Sny Magill Wildlife Area (Clayton County) prior to beginning habitat manipulations to increase early successional habitat for Ruffed Grouse and American Woodcock – 2 species of greatest conservation need in the Iowa Wildlife Action Plan (IWAP). During this survey (consisting of 3 to 6 visits to randomly chosen bird point count locations), an unexpected number of Cerulean Warblers was documented. Cerulean Warblers were documented at 4 locations and were seen each time the property was visited (Figure 1). If the same birds were seen repeatedly, there were a minimum of 8 birds spread across the 4 bird point count locations. Cerulean Warblers were seen at points 12, 15, 16, and 17, near property boundaries. It is likely that the surrounding private lands also host breeding Cerulean Warblers.

Progress:

Pilot fieldwork was initiated in late May 2008 and completed by August 2008. The student technician conducted point counts, mapped Cerulean Warbler territories, and collected preliminary habitat data during the 2008 field season. All data have been entered into a computer for future analyses.

Future Plans:

A student will be hired in May 2009 to revisit both sites and complete point counts and habitat sampling. This will be completed by August 2009 and a final report with analyses addressing both study objectives will be completed by December 2009.