

**CERULEAN WARBLER (*Setophaga cerulea*) OCCUPANCY OF
PUBLIC LANDS IN NORTHEAST IOWA**

Submitted to:

- Iowa Ornithologists' Union

Submitted by:

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Jon Stravers has worked with birds of the Driftless region since 1982. The information that he gathered about Red-shouldered Hawks and Cerulean Warblers helped to support the Bird Conservation Area (BCA) in northeast Iowa being recently designated as a Globally Important Bird Area. However, much is still unknown about the bird species found here, including their relationships with the unique habitat of the Driftless. The goal of this project was to continue and expand the surveys conducted in the BCA and to analyze the data collected in regards to Cerulean habitat use. Support from the IOU Projects Committee made this research possible through the purchase of a GPS unit and weather Kestrel.

A total of 60 ten minute point count surveys, 402 five minute point count surveys, and 152 inter-point observations yielded over 300 Cerulean detections in Yellow River State Forest (YRSF). From the 334 Cerulean detections we mapped a total of 182 active male Cerulean territories. New locations for Ceruleans were discovered within YRSF and we also expanded the range of specific clusters of Ceruleans when new territories were located adjacent to previously documented territories. Similar to our findings in previous years, Cerulean territories were often clustered together with several active territories in close proximity to each other. Typically Ceruleans detected at inter-point locations were adjacent to monitoring points where we had previously observed territorial males.

From these observations it appears that many of the active Cerulean territories in YRSF were centered in riparian habitat on the lower portion of various valleys where there either was a stream, or an intermittent stream, or moist soil conditions during May and June. These territories usually included topographic diversity in that they were near a bluff or steep incline. They also often included vertical stratification with large mature trees with open patches in the upper branches. It appears that there may be a correlation between clusters of Cerulean territories and the presence of mature (+28" dbh) black walnut (*Juglans nigra*) trees but further vegetative data must be collected to confirm this. An Upper Iowa University student is currently working on a geospatial analysis of landscape and forest stand features to better understand the associations between Ceruleans and their habitat.

Of particular note from the 2015 field season was the first confirmed Cerulean nest in the years of this study. The nest was found in a territory that was being monitored in the Paint Creek Unit along Paint Creek. During an Iowa Young Birders field trip in June the group stopped to observe a territorial male that had been seen previously carrying food. After a few minutes of careful observation one of the parents was tracked through the branches as it returned to its nest, providing looks for all of the field trip attendees and an experience they will likely never forget. We are very grateful to the Iowa Ornithologists' Union for their support of this project over the years. Each field season provides new information about this species of conservation concern.

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