

Title: Hybridization of Cerulean and Parula Warblers

Presenter: Ryan Trimbath

Abstract:

Hybridization between Cerulean Warbler (*Setophaga cerulea*) and Northern Parula (*Setophaga americana*) has been suggested from field observations at several sites in eastern North America, but without quantitative data to confirm this pairing. Here we present the first mensural and molecular evidence to confirm hybridization of these closely related species.

Two suspected hybrids were detected based on intermediate song types during the 2014 and 2015 breeding season in Summit County, Ohio, USA. Playback was used to lure the individuals into mist nets where they were banded, tissue samples were taken, and morphometric and plumage data were recorded. Both birds showed a combination of Cerulean Warbler and Northern Parula plumage characteristics; the overall appearance resembled a Cerulean Warbler male but with white eye arcs, a weak yellow wash on the breast, and some yellow mantle feathers suggesting Northern Parula parentage.

A mitochondrial and two nuclear genes were sequenced. Both individuals' mitochondrial sequences were identical to Cerulean Warbler sequences, indicating that both had a Cerulean Warbler dam. Sequences from nuclear genes had a total of ten heterozygous loci, confirming that they were sired by Northern Parulas. These hybrids, and other reports, come from area where Northern Parulas are expanding their breeding range into Cerulean Warbler's range, suggesting that this hybrid combination may become more common.

Biography:

has been requested