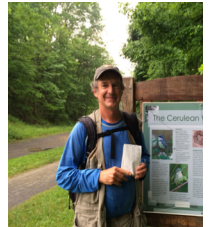


A Perfect Habitat

Lower Trail

By Nick Bolgiano, Juniata Valley Audubon Society

"Fortunately, for monitoring these birds, the Lower Trail is adjacent to the river and provides an ideal way to count them."



The cerulean warbler (*Setophaga cerulea*) is one of the wood-warblers, a New World family of small songbirds known for their beauty, diversity, and liveliness. The cerulean warbler is among the most beautiful of them; a male's back is the color of a light blue sky and it is most commonly

detected by hearing its buzzy "zray zray zray zreeee" song high from a treetop. In spring and summer, it is found in certain river and streamside forests or on steep hillsides of the Appalachians and the Mississippi River Valley, with the highest concentrations found in West Virginia and neighboring states. The commonality of these habitats is moist deciduous forest with gaps between tall trees, commonly riverside sycamores or hillside oaks.

Unfortunately, cerulean warbler numbers have been declining; the North American Breeding



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Bird Survey estimates an annual decline of 1.31% during 2005-2015. Such a rate of decline causes a population to halve in about five decades. Loss of habitat on both breeding and wintering grounds has been implicated, with the largest

extent of habitat loss in North America having occurred in the Mississippi River Valley. However, in the northeastern part of their breeding range, from central Pennsylvania eastward, cerulean warblers appear to be increasing.

Breeding cerulean warblers tend to cluster together; a handful of such clusters occur in Pennsylvania. One of these is along the Frankstown Branch of the Juniata River in south-central Pennsylvania, where Blair and Huntingdon counties meet. Fortunately, for monitoring these birds, the Lower (rhymes

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with flower) Trail, a 16.5 mile-long rail-trail, is adjacent to the river there and provides an ideal way to count them. While I've counted cerulean warblers while kayaking, I don't count as many as when walking the trail, in part due to stream noise. The northern 11 miles of the trail were purchased in 1989 and an additional five and a half miles was added in 2004.

I began surveying for cerulean warblers here in 1998, as part of Cornell's Cerulean Warbler Atlas Project. I survey by starting after dawn on an early to mid-June day and walking quietly along the grassy edge of the trail, listening for the song of a male cerulean warbler. When I hear one, I record the GPS coordinates of the nearest location on the trail. Before their singing frequency slows in late morning, I can walk five or six miles of the trail. It thus takes two mornings to walk the northern 11 miles, which I've done for a number of years. More recently, I've added the southern five miles on a third day. In addition to cerulean warblers, I tally all the birds that I see or hear, totaling about 70 species on the three days.

While cerulean warblers can be found almost anywhere of the Lower Trail, I have found the highest densities to be in the most extensive relatively flat riparian (riverside) habitat and fewer on steep hillsides. During my two earliest counts, in 1998 and 2001, I counted 36 and 43 singing males, respectively, while walking the northern 11 miles of the Lower Trail. This count declined to 22-25 in 2012-14, but rebounded to 44 in 2015 and was the highest yet in 2016, with 55. This large increase was most surprising and I'm curious to see how many I will find in 2017 and later years.



While local numbers remain high, I have also been investigating where I might find cerulean warblers away from the river.

In addition to cerulean warblers, this area is an important breeding location for these bird species: eastern wood-pewee, Acadian flycatcher, yellow-throated, warbling, and red-eyed vireos, blue-gray gnatcatcher, wood thrush, Louisiana waterthrush, American redstart, yellow-throated warbler, rose-breasted grosbeak, and Baltimore oriole. Because of the relatively intact riparian habitat here and its assemblage of breeding birds, the Frankstown Branch of the Juniata River has been designated an Audubon Important Bird Area. Directions and maps can be found at the Lower Trail website.

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