## **Cerulean Warbler** (Setophaga cerulea)

The Cerulean Warbler migrates through Florida every fall and spring but is rarely seen. It migrates by night and forages for insects in the upper canopy of mature forests early in the morning when the sun is just beginning to warm the trees and insects are becoming active. It's a small bird, only 4.3" - 4.6" long, with a 7" wingspan. It has a dark, thin pointed beak and a short stubby tail. Males are sky blue above with dark streaking and two white bars on their wings. They have a white belly with dark blue-black streaking on their sides and a dark blue-black neck band.



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Females are dusky bluish green above with a slight yellowish tint to their belly, face, throat, and eyebrows. They lack the streaked sides and the neck band.

Cerulean Warblers breed in areas of southern Quebec and Ontario and in the midwestern and southeastern regions of the United States from the lower Great Lakes and New England south to northern Louisiana and northwest Georgia. About 80% of the population breeds in the mature forests of the Appalachian Mountains. The Cerulean Warbler prefers northeast facing slopes near water and small clearings in the forest called "Canopy Gaps." Their habitat consists of mature deciduous forests where they nest higher than most birds and forage for insects in the upper third of the tree canopy. They are insectivorous, enjoying flies, beetles, weevils, and, especially, caterpillars.

Both male and female Cerulean Warblers choose the nesting site together. They try to choose a site among clumps of leaves to conceal it from above so that they are protected from hawks and owls. They prefer to nest in tall mature white oak, cucumber magnolia, butternut hickory, and sugar maple trees. They avoid red maple and red oak trees. The female builds their cup shaped nest by weaving bark fibers, grass stems, moss, and hair and binding them together with spider silk. She decorates it with lichen. The male helps gather the spider webs and spends his time guarding and protecting their territory. The female attempts to hide the location of the nest using a bungee-jumping strategy. Rather than flying directly away from her nest, she drops over the side of it with her wings folded and does not begin to fly until she is well below the nest.

Cerulean Warblers have only one brood a season. The female lays 1-5 grayish-greenish tinted white eggs that are speckled with brown. Incubation takes 11 - 13 days and chicks fledge after another 10-12 days but remain dependent on their parents for a while. Both parents feed their young. Breeding season begins mid-May to early June and usually ends in July. Mating pairs stay together for the season but separate after the young are independent. They do not necessarily mate with the same partner every breeding season. The life span of the Cerulean Warbler is about six years.

Cerulean Warblers are early migraters. They usually begin leaving their breeding grounds sometime in August and return in early May. Males migrate about a week before females. Cerulean Warblers spend their winters from Columbia south to Bolivia. There they can be found in mixed species canopy flocks in the forests and shade coffee plantations on eastern slopes of the Andes Mountains. While Cerulean Warblers' diet consists primarily of insects, they add nectar and some vegetation during their nonbreeding season.

The Cerulean Warbler is one of the most threatened migrant songbirds. It was once the most commonly found warbler in the Appalachian Mountains and one of the most abundant breeding warblers in the Ohio and Mississippi Valleys. Over the past 40 years, its population is estimated to have declined by approximately 70% to about 570,000 birds! Much this steep decline is attributed to habitat degradation and forest fragmentation in both their breeding and winter grounds. Shade coffee plantations are switching sun grown coffee farms; forests are cut down to become cattle ranches and farmland. Mountaintop mining in Virginia, West Virginia, Tennessee, and Kentucky have threatened their habitat there as has poor forestry practices in Canada and Wisconsin. Reversing this decline is vital to preserving this beautiful species.

Several conservation groups in both North and South America are working together to save the Cerulean Warbler and other migratory songbirds by promoting science-based forest management practices. They are conserving tall trees and making small clearings in the forest to allow more light to reach the forest floor fork and hickory saplings. In 2008 the American Bird Conservancy partnered with Fundacion ProAves, a Colombian conservation foundation, to create the Cerulean Warbler Conservation Corridor. They continue to work together along with other groups to preserve and manage acres of bird habitat across the Americas.

Mary Jo Davis is the Chair of the Birds, Butterflies, Bats and Bees Committee.