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***CELASTRINA SEROTINA* (LYCAENIDAE: POLYOMMATINAE):  
A NEW BUTTERFLY SPECIES FROM  
THE NORTHEASTERN UNITED STATES AND EASTERN CANADA**

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**ABSTRACT.** A new light-venter Azure species, *Celastrina serotina*, is described from the northeastern United States and eastern Canada. The flight period of this univoltine spring species is interpolated (allochry) between its sympatric congeners, *C. lucia* Auctorum (not Kirby) and *C. neglecta* (Edwards). In this regard it is similar to *C. neglectamajor* Opler & Krizek in the southern Appalachians and *C. idella* Wright & Pavulaan on the New Jersey coastal plain. In a significant portion of its range, *C. serotina* larvae feed on eriophyid mite-formed galls on the upper surface of Black Cherry *Prunus serotina* Ehrh. leaves. The larvae also utilize floral primordia of several additional hosts from different plant families. Adults are morphologically distinct from the earlier flying Spring Azures, *C. ladon* and *C. lucia* Auctorum, but have a clear resemblance to *C. neglectamajor*, *C. idella*, and *C. neglecta*. Separation from these lighter phenotype species is by size, distribution, habitat, and flight period. We propose the new species may be one of several late spring allochronic species forming a chain or great arc from the southern Appalachians to northeastern United States & eastern Canada, possibly across the northern Great Lakes region to southern Manitoba & Saskatchewan, to the Foothills of the Rocky Mountains in Colorado.

## DISCOVERY OF AN UNUSUAL BUTTERFLY

During Rhode Island field surveys in 1983-84, a conspicuous sequence of *Celastrina* emergences was observed (Pavulaan, 1985). The earliest Azure to appear in early to mid-April (*C. lucia* Auctorum) consisted of small individuals with dark dusky gray venters, commonly with black discal patches (f. "*lucia*") and/or broadened margins on the hind wings (f. "*marginata* Edwards"). *C. lucia* was found widely distributed throughout the state, and was especially easy to observe in early spring along the sandy woodland roads of the Great Swamp Management Area, near West Kingston, Washington County. The Great Swamp population utilized Highbush Blueberry *Vaccinium corymbosum* L. as its host, and it was subsequently learned that *lucia* utilized several species of *Vaccinium* in Rhode Island. Shrubby plants in this genus are plentiful in the state, often forming dense thickets in old fields or a solid understory in forested habitats. Because of its association with these habitats, *C. lucia* was encountered routinely in virtually every region of the state in April. The flight reached peak numbers in late April. (See the account of *C. lucia* Auctorum ("of authors") in discussion of *Celastrina lucia* on p. 14.)

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