

## Neurocordulia obsoleta Umber Shadowdragon

DISTRIBUTION: Occurs over nearly all of the Piedmont and Coastal Plain, though the range is spotty near the Blue Ridge Escarpment counties and in the extreme eastern Coastal Plain, where possibly absent in a few coastal counties along the Outer Banks. No records for the mountains. The full range of the species is more northerly than most other shadowdragons, extending to Maine.

ABUNDANCE: Because of its crepuscular habits, abundance is poorly known, but based on the fact that it has been recorded from the majority of Piedmont and Coastal Plain counties within its range -- thanks mainly to older efforts by Duncan Cuyler -- and with about 145 records with dates available, it is certainly not scarce. Likely uncommon to fairly common in much of its range in NC, though Dunkle (2000) calls it "uncommon" over its range, and Beaton (2007) calls it "probably uncommon to rare" in GA.

FLIGHT: The flight periods in both the Coastal Plain and the Piedmont are similar -- late April to late July or early August.

HABITAT: Rivers, typically large and clean; less often at creeks.

BEHAVIOR: As with all shadowdragons, adults hang from twigs and vegetation in the forest shade during the day, and emerge to fly only in the last hour of daylight. Males prefer to fly patrols over riffles in the rivers.

COMMENTS: It is surprising that such a secretive dragonfly could be recorded in NC from so many counties -- 55 in total. This is especially striking in comparison with the relatively few county records from neighboring states -- 2 in GA, 4 in SC, and 10 in VA (as of 2016 on the OdonataCentral website map). This must represent intense collecting effort on the part of Duncan Cuyler or others, as it would seem unlikely to be much more numerous in NC than in VA, for example, as the range of the species is centered on these two states.