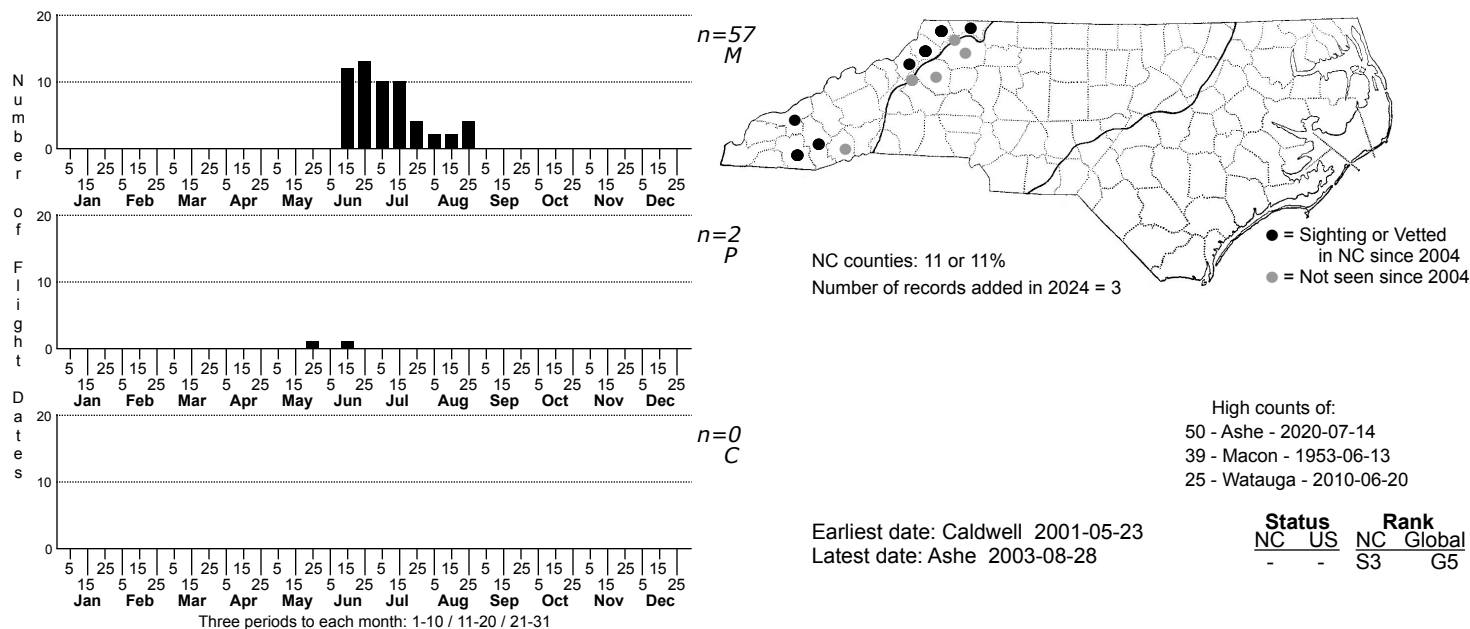


## *Enallagma hageni* Hagen's Bluet



**DISTRIBUTION:** Probably throughout the mountains, and likely the extreme upper Piedmont foothills. Not surprisingly, NC lies at the southern end of the species' range, it not having yet been recorded from SC, and just at one site in extreme northeastern GA. There is a surprisingly wide gap in records in the central mountains, and fairly heavily worked Buncombe and Madison counties lack a record. Most records are from elevations higher than 3500 feet, and it is clearly scarce below 3000 feet, partly explaining the absence of records in Madison and Buncombe counties, where there seem to be few ponds or lakes at these higher elevations.

**ABUNDANCE:** Uncommon to locally fairly common in the mountains, but very rare in the upper parts of Piedmont foothill counties. Interestingly, there is a count of 39 individuals from Macon County; thus, it isn't overly rare in parts of the southern mountains. Paulson (2011) says "Often most common species at large northern lakes." Of course, such is not the case in NC, at the southern edge of the range. However, in the northern mountains, it can be common at some high elevation ponds.

**FLIGHT:** The NC records in the mountains fall between mid-June and late August, though the flight there likely starts in May. The few Piedmont records are only for late May and mid-June.

**HABITAT:** Ponds, small lakes, and other open water with much emergent vegetation; often at bogs and marshes.

**BEHAVIOR:** Males are not inconspicuous along pond margins, though females stay relatively hidden in vegetation, as with other bluet species.

**COMMENTS:** Though there are numerous dragonflies that occur in NC only in the mountains, there are very few such damselflies with this type of range. The lack of records in the central mountain counties is puzzling, though this may represent poor coverage in its pond-like habitats; much of the coverage in these counties centers on the French Broad River and its tributaries (i.e., riverine habitats), sites perhaps too low and/or warm for this higher-elevation species in the state.