

Update on Mass Emergence of *Lestes unguiculatus* in Central New York

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Last year we reported on a large emergence of *Lestes unguiculatus* from a small vernal pond. (*Argia* 16(4): 9-10). The final total calculated for the 15X30 meter pond approached 75,000 individuals.

As the pond dried up most of the adults moved to another pond nearby and commenced ovipositing in any vegetation available, including asters and goldenrods. Oviposition lasted until late August of 2004.

When the ice melted this spring, Sue conducted surveys by dipping for larvae beginning 15 May. No *Lestes* larvae were found then or in subsequent surveys. We kept our fingers crossed for emergence at some of the other ponds, as in past years, but as the season wore on we were woefully disappointed.

In all 10 of our ponds, *L. unguiculatus* was absent. From 75 thousand to only 1. (A single adult male was seen on 9 Sept. 2005) Evidently whatever caused the destruction of the population targeted the egg or early instar stage, as no larvae were found all summer. There was no change in predator populations.

Although the species is known to be irruptive, a total crash from one season to the next was unexpected. In addition, individuals of other midseason species of *Lestes* were also reduced in our 10 ponds and in the 21 ponds we surveyed in the nearby Finger Lakes National Forest. *L. eurinus* was plentiful in the Forest during the early season, but *L. congener* was present later at only 3 ponds. *Disjunctus*, *dryas*, *forcipatus*, *inaequalis*, *rectangularis* and *vigilax* were only sporadic singles. *Argia*, *Enallagma* and *Ischnura* were present in normal numbers.

We continue to be intrigued by the behavior of this species and welcome any discussion, theories or ideas.