

## 2024 Dragonfly and Damselfly Survey Hawthorne Crossing Conservation Area

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Odonates are indicator species for wetland and riparian habitat health. The 2024 addendum to the more extensive 2023 Dragonfly and Damselfly Survey of the Hawthorne Crossing Conservation Area adds 4 species (Dragonhunter, Handsome Clubtail, Rapids Clubtail, Royal River Cruiser). This brings the survey total to 33 species.

Odonate species of Family Gomphidae (Clubtails) are especially selective of habitat. Most are riparian species and the 2024 survey concentrated on locating Clubtails foraging in the flood plain meadows along the Licking River. Three Gomphid species not observed in 2023 were observed in 2024. This brings Hawthorne Crossings documented Gomphid species to 10. This is an excellent indicator of superior habitat at Hawthorne Crossing.

Dragonhunter (*Hagenius brevistylus*), North America's largest dragonfly, previously observed both upstream and downstream, was expected at Hawthorne Crossing.

Handsome Clubtail (*Gomphurus crassus*) is NatureServe listed as *Vulnerable* in the United States. iNaturalist shows 39 Handsome Clubtail observations within Kentucky including upriver of Hawthorne Crossing. Due to its habitat preference, it would not be expected to be found downriver of Hawthorne where the river is silted and slowed by the Ohio River pool.

Rapids Clubtail (*Phanogomphus quadricolor*) is NatureServe listed as *Vulnerable* in the United States. iNaturalist, currently, holds 7 Kentucky observations. This was a good find for Hawthorne.

Green-faced Clubtail (*Hylogomphus viridifrons*), observed in 2023 was not observed in 2024. Theoretically, this could be due to the wet Spring and Cave Run Lake water releases not allowing the river to drop to levels which would trigger nymph emergence. Another possibility is that some Gomphid species tend towards heavier emergence every other year, and the Green-faced Clubtail is on the odd-year emergence schedule. Perhaps 2025 will see another emergence of Green-faced Clubtails at Hawthorne Crossing.

Future surveys at Hawthorne should be on the lookout for two more Gomphid species, the Elusive Clubtail and the Eastern Ringtail. Most Clubtails emerge in Spring. Unlike most Clubtails, these two species emerge late Summer when the flood plain meadows are difficult to access due to mature Nettle, Giant Ragweed and Common Hop. Future plans to create mowed trail access will improve biological assessment.

Elusive Clubtail (*Stylurus notatus*): Hawthorne Crossing offers perfect habitat for the Elusive Clubtail. The Elusive Clubtail was common in the Cumberland, Green and Licking rivers during the 1940s and 1950s, but nearly disappeared from Kentucky. [#37Winter2002Final.p65](#). As its name implies, this species is elusive.

Eastern Ringtail (*Erpetogomphus designates*): This bright green and yellow Clubtail, has expanded its range into western Ohio. The shallow riffles at Hawthorne Crossing would be the first suitable habitat encountered for individuals expanding into Kentucky from the limits of its known range.