

New Virginia Records of Trichoptera and Neuroptera (Insecta)

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ABSTRACT

Three caddisflies (Trichoptera) and one antlion (Neuroptera) are reported from Virginia for the first time, including the second known specimen of *Ochrotrichia weoka* Harris (Hydroptilidae), a species previously known only from the holotype described 30 years ago from Alabama. Additional Virginia records are provided for two other species recently reported from the state.

Keywords: antlion, caddisfly, distribution, new state records.

The caddisfly (Trichoptera) fauna of Virginia was recently summarized in a series of papers by Flint et al. (2004, 2008, 2009), with additional records provided by Flint (2011, 2014, 2017). The most recent tally accounts for 371 species recorded from the state, which currently ranks as the highest documented total for any US state (the figure of 383 for Tennessee includes dozens of species known from neighboring counties of adjacent states; Etnier et al., 1998). Several additional taxa are known in Virginia only from female specimens; the eventual capture of males may confirm those suspected state records. We are also aware of recent collections of several apparently undescribed species in the genera

Hydroptila, *Ochrotrichia*, and *Pycnopsyche* in the state (e.g., see Flint, 2017).

The Neuropterida fauna of Virginia was reviewed by Flint (2015), who documented 89 species (71 Neuroptera, 18 Megaloptera), including 11 antlions (Myrmeleontidae).

In this paper, we report three caddisflies and one antlion from Virginia for the first time, and provide additional records for two other species recently reported from the state. Except as noted, all specimens listed below are deposited in the collection of the National Museum of Natural History (NMNH), Smithsonian Institution, Washington, D.C., and were identified by the second author.

¹ Deceased

Trichoptera

Family Limnephilidae

Pycnopsyche sonso (Milne, 1935)

Flint et al. (2008) removed *P. sonso* from the Virginia Trichoptera list after determining that the specimens studied by Parker & Voshell (1981) and all others seen by Flint were assignable to a newly described species, *Pycnopsyche pani* Wojtowicz & Flint, 2007. However, Morse et al. (2017) retained Virginia in the range statement for *P. sonso* on the basis of the older records (see Rasmussen & Morse, 2018). Wojtowicz & Flint (2007) concluded that *P. sonso* is a southern Appalachian species, its range extending from North Carolina to Georgia, whereas *P. pani* has a more northern distribution, being known primarily from the mountains of Virginia, with two collections from high elevation sites in North Carolina.

We believe the following collection represents the first confirmed record of *P. sonso* from Virginia, constituting a range extension of more than 100 km from Sevier Co., Tennessee (Wojtowicz, 1982; Etnier et al., 1998).

Scott Co., Natural Tunnel State Park, Cove Ridge Center, N36.710 W82.743, mercury vapor light, 2 October 2017, S.M. Roble, E.C. Orcutt, Z. Bradford, R. Hypes (1♂). **NEW STATE RECORD.**

Family Polycentropodidae

Plectrocnemia remota (Banks, 1911)

Described by Banks (1911) as *Polycentropus remotus*, this widespread, transcontinental North American species was transferred to the genus *Plectrocnemia* a century later by Chamorro & Holzenthal (2011). Its range extends from Alaska and Newfoundland south to Illinois, Kentucky, Pennsylvania, and Delaware (Morse et al., 2017). It has not been recorded from Maryland or West Virginia (Tarter & Floyd, 2016; Morse et al., 2017). The Virginia locality is at or near its southern range limit.

Augusta Co., George Washington National Forest, FS42 at Maple Flats area nr. North Pond, N37.975 W78.997, uv, 10 June 2017, S.M. Roble (2♀♀). **NEW STATE RECORD.**

Family Sericostomatidae

Agarodes crassicornis (Walker, 1852)

Flint et al. (2009) listed two collections containing two specimens each of this predominantly southern species from Fort A.P. Hill Military Reservation in Caroline Co., the first documentation for Virginia. Malaise trap sampling by E. C. Orcutt at a nearby boggy wetland on the base during the period of 11 May–6 July 2017 has revealed that *A. crassicornis* is common to abundant in this habitat, with more than 50 adults having been captured.

Family Hydroptilidae

Ochrotrichia weoka Harris, 1989

Harris (1989) described this species on the basis of a single male from Elmore Co., Alabama, west of the city of Auburn. Prior to its recent discovery in Virginia, it was still known only from this unique specimen nearly three decades later. Surprisingly, the second specimen of *O. weoka* has been taken in northern Virginia, representing a range extension of approximately 1,000 km.

Fauquier Co., Arlington Outdoor Lab[oratory], N38.807 W77.723, Malaise trap, 24 May–15 June 2017, D.[R.] Smith & O.[S.] Flint (1♂; det. S.C. Harris). **NEW STATE RECORD.**

These three additions increase the number of caddisflies documented in Virginia to 374 species.

Neuroptera

Family Myrmeleontidae

Flint (2015) recorded two species of *Myrmeleon* from Virginia and noted that this large genus of antlions was being revised. The following collection adds another member of the genus to the known Virginia fauna.

Myrmeleon mobilis Hagen, 1888

City of Suffolk, South Quay Pine Barrens Natural Area Preserve, Malaise trap in longleaf pine stand, N36.5583 W76.9081, 19 July–1 August 2017, E. Orcutt (1). **NEW STATE RECORD.**

Sussex Co., Chub Sandhill Natural Area Preserve, Malaise trap in pine stand, 1–25 August 2017, N36.8711 W77.1822, M. Ayers and O. Latham (1); same but forest edge, bottomland, Malaise trap, N36.8716 W77.1875, 13 September–18 October 2017, E.C. Orcutt and O. Latham (1).

Penny et al. (1997) listed the documented range of *M. mobilis* as including Alabama, Florida, Georgia, Missouri, and North Carolina. The Virginia records represent a northward range extension.

Family Ithonidae

Polystoechotes punctata (Fabricius, 1793)

This “giant lacewing” and several close relatives were long placed in their own family (Polystoechotidae), but Winterton & Makarkin (2010) synonymized it with Ithonidae. Dowell & Penny (2019) reported that *P. punctata*, a boreal species, has disappeared from the eastern portion of its range (no records east of the Rocky Mountains in the past 60 years). Flint (2015) did not include this species in his review of Virginia Neuropterida, but the range map in Dowell & Penny (2019) suggests that the species was historically documented in the state. However, no specimens of *P. punctata* were seen by the authors (R. Dowell, pers. comm.), so the species should continue to be regarded as being undocumented from Virginia.

Family Chrysopidae

Leucochrysa (Nodita) callota Banks, 1915

This primarily Gulf Coast species was newly recorded for Virginia by Flint (2015), who cited collections from Isle of Wight, Northampton, and Sussex counties in the southeastern corner of the state. The following recent collection is from this same general area:

City of Suffolk, South Quay Sandhills Natural Area Preserve, Malaise trap in longleaf pine stand, N36.5583 W76.9081, 1–9 August 2017, E.C. Orcutt (2); same but 9–25 August 2017, M. Ayers and O. Latham (2).

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