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RESEARCH ARTICLE

ADDITIONS TO THE BEETLE (COLEOPTERA) FAUNA OF THE GEORGE WASHINGTON MEMORIAL PARKWAY, INCLUDING NEW STATE RECORDS

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ABSTRACT

Twenty-three beetle species are reported for the first time from the George Washington Memorial Parkway, Virginia. Three species, *Centrodera sublineata* LeConte (Cerambycidae), *Quedionuchus longipennis* (Mannerheim) (Staphylinidae), and *Zenodosus sanguineus* (Say) (Cleridae) represent the first published records for Virginia.

Keywords: Anthicidae, Arlington County, biodiversity, Cantharidae, Carabidae, Chrysomelidae, City of Alexandria, Curculionoidea, Fairfax County, national parks, Potomac Gorge.

INTRODUCTION

Continued sorting of Malaise trap samples (sensu Steury, 2018a), plus sorting of samples from an additional four Malaise traps set under a powerline in meadow-like habitat in Turkey Run Park in 2019, and occasional collecting by hand, has added 23 beetle species in nine families previously undocumented from the George Washington Memorial Parkway, a national park site in northern Virginia. Three of these species, *Centrodera sublineata* LeConte, *Quedionuchus longipennis* (Mannerheim), and *Zenodosus sanguineus* (Say) are first records for Virginia.

LIST OF SPECIES

VIRGINIA

Family Aderidae

This record raises the total of ant-like leaf beetles reported from GWMP to 11 species (Steury, 2019a).

Vanonus piceus (LeConte) – Fairfax Co.: Little Hunting Creek, Malaise trap, 2–30 June 2017, B. Steury, (George Washington Memorial Parkway [GWMP], 1 ♀).

Family Anthicidae

Steury et al. (2013) reported *Tomoderus* sp. from GWMP based on female specimens. This specimen is the first male *Tomoderus* discovered in GWMP and was identified by examination of the genitalia.

Tomoderus constrictus (Say) – Fairfax Co.: Great Falls Park, quarry, Malaise trap, 23 May–5 June 2008, D. Smith and B. Steury, (GWMP, 1 ♂).

Family Cantharidae

This record represents the forty-first species of soldier beetle documented from GWMP (Steury, 2019b, Steury, 2020).

Silis percomis (Say) – Fairfax Co.: Little Hunting Creek, Malaise trap, 11–30 April 2018, B. Steury, GWMP (1 ♂).

Family Carabidae

These records raise the number of carabid species documented from GWMP to 201 (Steury, 2018b).

Chlaenius tomentosus (Say) – Fairfax Co.: Collingwood Picnic Area, curb of parking lot, 23 October 2020, B. Steury, GWMP (1).

Lebia pectita G. H. Horn – Fairfax Co.: Turkey Run Park, powerline, Malaise trap, 1–17 June 2019, B. Steury, GWMP (1). *Lebia pectita* has not been reported from the Potomac Gorge area (3 km northeast of this collection site) since 1905 (Erwin, 1981).

Family Cerambycidae

The following three records increase the number of cerambycid beetles documented from the GWMP to 94 species and the number known from the Potomac Gorge 103 species (Brown, 2008; Steury, 2018b.)

Centrodera sublineata LeConte (Fig. 1) – Fairfax Co.: Little Hunting Creek, Malaise trap, 30 April–18 May 2018, B. Steury, GWMP (1). **NEW STATE RECORD.** This is the first published record for Virginia according to the personal database of T. C. MacRae, which is compiled from existing literature on North American Cerambycidae (T. C. MacRae, pers. comm., January 2020). This database records *C. sublineata* as being widely distributed across eastern North America but rarely encountered. States where it has been previously documented in the literature are Georgia, Iowa, Maryland, Mississippi, Missouri, Nebraska, Ohio, Pennsylvania, South Carolina, Texas, and West Virginia.



Figure 1. *Centrodera sublineata*. Collected at Little Hunting Creek in a Malaise trap set from 30 April–18 May 2018. Collector B. Steury. Body length 13.9 mm.

Oncideres cingulata cingulata (Say) – Fairfax Co.: Turkey Run Park, river, Malaise trap, 19 September–21 October 2008, D. Smith, GWPM (1).

Xylotrechus nitidus (Horn) – Fairfax Co.: Turkey Run Park, powerline, Malaise trap, 1–17 June 2019, B. Steury, GWPM (1). This is the first record for the Potomac Gorge.

Family Chrysomelidae

These three records increase the number of chrysomelid beetles documented from the GWMP to 113 species (Steury, 2018b.)

Capraita scalaris (Melsheimer) – Fairfax Co.: Little Hunting Creek, Malaise trap, 30 April–18 May 2018, B. Steury, GWMP (1).

Leptinotarsa decemlineata (Say) – City of Alexandria: Jones Point Park, community gardens, 15 July 2019, B. Steury, GWMP (1).

Pachybrachis pectoralis (Melsheimer) – Fairfax Co.: Little Hunting Creek, Malaise trap, 20–30 June 2017, B. Steury, GWMP (1). Barney (2019) provided an excellent taxonomic key to the *Pachybrachis* of Eastern North America and an illustrated key specific to the *pectoralis* species-group (Barney, 2018).

Family Cleridae

This specimen increases the tally of clerid beetles documented from GWMP to 19 species (Steury & Leavengood, 2018).

Zenodosus sanguineus (Say) (Fig. 2) – Fairfax Co.: Little Hunting Creek, Malaise trap, 30 April–18 May 2018, B. Steury, GWMP (1). **NEW STATE RECORD.** Wickham & Wolcott (1912) reported this species from West Virginia, Pennsylvania, and the District of Columbia and Wolcott (1947) reported that its range extends south to North Carolina, however there are no known published records which specify Virginia. This species is sometimes placed in the family Thanerocleridae (e.g. Bouchard et al., 2011).



Figure 2. *Zenodosus sanguineus*. Left, dorsal habitus; right, face. Collected at Little Hunting Creek in a Malaise trap set from 30 April–18 May 2018. Collector B. Steury. Body length 6.1 mm.

Family Curculionidae

These specimens of curculionid beetles increase the number in this family from GWMP to 114 species (Steury et al., 2020).

Donus zoilus (Scopoli) – Fairfax Co.: Collingwood Picnic Area, in white clover patch, 20 April 2020, B. Steury, GWMP (1); same data but 12 May 2020, GWMP (1). This is a non-native species introduced from Europe (Downie & Arnett, 1996).

Naupactus leucoloma Boheman – Fairfax Co.: Collingwood Picnic Area, in parking lot, 5 September 2020, B. Steury, GWMP (1). This is a non-native species introduced to Virginia from South America (Evans, 2014).

Sphenophorus inaequalis (Say) – Fairfax Co.: Collingwood Picnic Area, in turf grass, 21 October 2020, B. Steury, GWMP (1).

Family Staphylinidae

The following records increase the number of staphylinid beetles found in GWMP to 222 taxa (184 identified to species) (Brattain et al., 2019; Steury & Brattain, 2020).

Cedius zieglerei LeConte – Fairfax Co.: Little Hunting Creek, Malaise trap, 30 April–18 May 2018, B. Steury, GWMP (1).

Carphacis dimidiatus (Erichson) – Fairfax Co.: Little Hunting Creek, Malaise trap, 14–28 June 2018, B. Steury, GWMP (1).

Leptusa cribratula (Casey) (Fig. 3) – Fairfax Co.: Little Hunting Creek, Malaise trap, 16–30 June 2018, B. Steury, GWMP (1). This is the first *Leptusa* identified to species from GWMP and it is not the same species as the specimen of *Leptusa* sp. reported from GWMP by Brattain et al. (2019).

Meronea venustula (Erichson) – Fairfax Co.: Turkey Run Park, deer dung, 29 November 2019, B. Steury, GWMP (1).

Platydracus mysticus (Erichson) – Fairfax Co.: Collingwood Picnic Area, curb of parking lot, 23 October 2020, B. Steury, GWMP (3).

Quedionuchus longipennis (Mannerheim) – Fairfax Co.: Turkey Run Gulch, June 19–30 2009, B. Steury, GWMP (1). **NEW STATE RECORD.** *Quedionuchus longipennis* was formerly treated as a synonym of *Quedionuchus plagiatus* Mannerheim. The record of *Q. plagiatus* from Maryland in Brattain et al. (2019) is this species. The range of *Q. plagiatus* is restricted to the western United States and Canada. *Quedionuchus longipennis* is broadly distributed in North America but absent from the prairies, west of the Rocky Mountains and the far southern tier of the continent (Brunke et al., 2019). This species is represented by three color morphs with black, rufous, and yellowish elytra (see Brunke et al., 2019 for an image of each color morph). This Virginia specimen is the black morph.

Quedius laticollis (Gravenhorst) – Arlington Co.: Roaches Run Waterfowl Sanctuary, 15 April 2013, J. R. Fisher, GWMP (1).

Rhexius ferrugineus Casey – Fairfax Co.: Little Hunting Creek, Malaise trap, 5–19 May 2017, B. Steury, GWMP (1); same data but 30 April–19 May 2018 and 17–31 August 2018 and 1–28 October 2018, GWMP (3).



Figure 3. *Leptusa cribratula*. Top, dorsal habitus; bottom, lateral view. Collected at Little Hunting Creek in a Malaise trap set from 16–30 June 2018. Collector B. Steury. Body length 1.9 mm.

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