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NOTEWORTHY BEETLE RECORDS FROM VIRGINIA, MARYLAND, AND THE DISTRICT OF COLUMBIA (COLEOPTERA: CARABIDAE AND CHRYSOMELIDAE)

## **VIRGINIA**

Calligrapha floridana Schaeffer – Arlington Co.: Roaches Run Waterfowl Sanctuary, 25 and 26 June, 9 and 15 July 2014, Steury (George Washington Memorial Parkway [GWMP], 8). **NEW STATE RECORD.** 

At least 600 C. floridana imagos were observed on 25 June 2014 severely defoliating seven shrubs of Cornus amomum Miller over an area of approximately 25 x 15 m. On 9 July 2014 the population was still at least 390 beetles, but by 15 July only 190 were observed. Two Ulmus americana L. and two Alnus serrulata (Aiton) Willd., known hosts of morphologically similar Calligrapha species were adjacent to the C. amomum population but contained no Calligrapha beetles. Known host plants of C. floridana are species of Cornus (Cornaceae) and questionably Illicium (Illiciaceae) (Clark et al., 2004). Published records for C. floridana are from Florida and South Carolina (Riley et al., 2003; Ciegler, 2007). Records of Calligrapha knabi Brown from North Carolina and Maryland by Gómez-Zurita (2005), Gómez-Zurita et al. (2006), and Staines & Staines (2009) are based on mistaken identifications of C. floridana (J. Gómez-Zurita, pers. comm). The Maryland record was found on C. amomum (Gómez-Zurita, 2005).

Despite being macropterous, these beetles were not observed to fly. Wing color varied from pale brown with a reddish base to mostly reddish. The reddish wing color did not show through the elytra as is typical in many Calligrapha species. Lengths ranged from 6.8 to 8.5 mm (mean = 7.7; n = 8), which is similar to the range of 7-8.4 mm cited by Ciegler (2007). The beetles preferred the underside of C. amomum leaves, either singly or in groups up to four, and exhibited no capture avoidance, except falling to the ground when repeatedly touched. No mating was observed and all specimens collected were female indicating that this population may be parthenogenetic, a trait reported for other Calligrapha species (Gómez-Zurita et al., 2006). The general range of C. floridana is southeastern North America east of the Appalachians, with records in addition to those cited above known from Alabama and Georgia (J. Gómez-Zurita, pers. comm). This record from Arlington County is the northernmost in the species' distribution.

Calosoma wilcoxi LeConte – Fairfax Co.: Turkey Run Park, 12 May 2014, Steury (GWMP, 1).

A specimen of C. wilcoxi was hand-collected on the exterior wall of the Resource Management Building, apparently attracted to lights at night. This represents ground beetle (Carabidae) species the 256th documented from the vicinity of the Potomac River Gorge (PRG) located between Fairfax County, Virginia, and Montgomery County, Maryland. Despite records of ground beetles from PRG dating back nearly 100 years (Erwin, 1981) and more recent surveys (Stork, 1984; Steury & Messer, 2014), C. wilcoxi was previously unrecorded from PRG. There was a large emergence of C. wilcoxi, a known predator of lepidopteran caterpillars, in Fairfax County during 2014. This event coincided with an unusually high abundance of Alsophila pometaria (Harris), fall cankerworm (Geometridae), as noted by Fairfax County Urban Foresters (Virginia Department of Forestry, 2014). That group conducted aerial spraying of the lepidopteran insecticide Bacillus thuringiensis in an effort to reduce reputed cankerworm defoliation of large canopy trees. On 3 May 2014, B. Steury observed 22 live C. wilcoxi on store fronts in the Hollin Hall Shopping Center along Fort Hunt Road in Fairfax County. Dozens of elytra and other residual body parts were observed on sidewalks in the area, presumably the result of bird predation. Tree crews were conducting canopy tree pruning activities along Fort Hunt Road on 2 May 2014. This disturbance may account for the large number of these arboreal, nocturnal, beetles being displaced and later attracted to store front lights.

However, large congregations at lights (presumably not associated with nearby tree pruning activities) is a behavior reported for *C. wilcoxi* (Larochelle & Larivière, 2003).

## **MARYLAND**

Anisodactylus dulcicollis (LaFerté-Sénectère) – Calvert Co.: Cove Point, 12 May 2012, Steury (USNM, 1). **NEW STATE RECORD.** 

A specimen of *A. dulcicollis* was found under driftwood on the sand dune barrier that separates Cove Point Marsh from the Chesapeake Bay. Bousquet (2012) did not include Maryland in the extensive geographic distribution known for this species. It occurs from extreme southern Ontario to eastern Nebraska, south to southeastern Texas and west-central Georgia. It was recently reported for the first time from the District of Columbia (Steury & Messer, 2014).

Scarites vicinus Chaudoir – Baltimore Co.: Woodstock, 10037 Davis Drive, 30 July 2013, Steury (USNM, 1). **NEW STATE RECORD.** 

Scarites vicinus was collected from a swimming pool skimmer at a residence bordering Patapsco Valley State Park. Fourteen other carabid beetles comprising nine species were recovered from the skimmers on the same day, including Anisodactylus rusticus (Say) (1), Chlaenius tomentosus tomentosus (Say) (1), Cicindela punctulata punctulata Olivier (1), Cyclotrachelus sigillatus (Say) (2), Dicaelus elongatus Bonelli (1), Harpalus pensylvanicus (DeGeer) (1), Harpalus actiosus Casey (1), Poecilus lucublandus (Say) (1), and Scarites subterraneus Fabricius (5). The documented range for S. vicinus is from southern Ontario to eastern North Dakota, south to northeastern Texas and northern Alabama (Bousquet, 2012). The species was recently reported for the first time from Virginia and the District of Columbia (Steury & Messer, 2014). This is the first published record for Maryland.

## DISTRICT OF COLUMBIA

*Tachys oblitus* (Casey) – District of Columbia: Theodore Roosevelt Island, 22 September 2014, Steury (GWMP, 1). **NEW DISTRICT RECORD** 

This tiny (2.5 mm) macropterous carabid was shaken from a moist log found under a boardwalk along the floodplain forest/marsh ecotone. It is distinguished from sympatric species of *Tachys* by the following combination of anatomical features: Pronotum with side

nearly straight before obtusely rounded hind angles, basal border moderately oblique laterally, and base behind transverse impression almost smooth (without row of rugae). Elytron with only first two striae well-impressed and without distinct dark cloud. Head almost black with rest of dorsum usually much paler (rufotestaceous to rufopiceus) but occasionally as dark as head. Microsculpture iridescent and equal on the pronotum and elytra. This record is not unexpected because the District of Columbia is near the middle of the East Coast range for the species. The known range for *T. oblitus* is from Québec to Georgia, along the Gulf Coast to Texas and in the Midwest to Iowa and Wisconsin (Bousquet, 2012; Messer, 2014).

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