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NEW RECORDS OF FIVE GROUND BEETLES FROM OHIO
(COLEOPTERA: CARABIDAE)Foster F. Purrington and R. Chris Stanton¹

ABSTRACT

Five ground beetles (Carabidae), *Carabus sylvosus*, *Elaphrus americanus*, *Cyclotrachelus incisus*, *Piesmus submarginatus* and *Amara crassispina* are reported from Ohio for the first time.

We newly report *Carabus sylvosus* Say (Carabini), *Elaphrus americanus* Dejean (Elaphrini), *Cyclotrachelus incisus* (LeConte) (Pterostichini), *Piesmus submarginatus* (Say) (Pterostichini) and *Amara crassispina* LeConte (Zabrinini) from Ohio. These captures represent new records of ground beetles for the state (Bousquet & Laroche 1993). Davidson (1995) mentions having seen specimens of *P. submarginatus* from Ohio, without noting provenience, collector, repository or collection dates. Voucher specimens of all six species are kept by F. F. Purrington at the Department of Entomology, The Ohio State University, Columbus.

Carabus sylvosus, *C. incisus* and *P. submarginatus* were taken in 1995 by pitfall trapping, and by black-light as part of a joint U.S. Forest Service/Ohio State University project in the Vinton Furnace Experimental Forest near Dundas, Vinton County (leased from Mead Paper Co.), and near Kitts Hill in Lawrence County, both locations within the Wayne National Forest, where a long-term ecological study is underway to generate information on impacts of prescribed burning upon plant and animal communities. During the trapping season (mid-May to October 1995), 43 *C. sylvosus* were taken, all at the Vinton Co. site: 23 during June, 13 in July, one in August and six in September. Like most *Carabus* it is flightless. *C. incisus* also was found only in Vinton Co., a total of eight in all months from May to September. Davidson (1995) reported *C. incisus* from forest litter in western Virginia (June and July 1991) and confirmed older Pennsylvania records, noting significant non-clinal differences in aedeagal armature between these easternmost specimens and others from Nebraska and Illinois. It is flightless like all other *Cyclotrachelus*.

We collected three *P. submarginatus*, at both the Vinton Co. site and in Lawrence Co. at Kitts Hill, during August, September and October. Davidson (1995), in newly reporting this species from Virginia, notes having seen Ohio specimens, probably referring (at least in part) to a male he identified for F.F.P. taken September 1992 in Ross Co. (Scioto Trail State Park). Kip Will (*in litt.*) collected two adults 9 October 1993 in Fairfield Co. (Madison Twp.). This uncommon ground beetle, evidently associated with a mesic forest habitat, is distributed in southeastern states (Bousquet & Laroche 1993). Since this species is not treated by Lindroth (1961-1969), we include the following notes:

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Adult (length: 13 mm) shiny brown with slight dorsal and ventral iridescence. Elytra nearly parallel-sided, each with two dorsal setiferous punctures, both situated behind the midpoint on the third interval; striae strongly punctulated; humeral tooth sharp and prominent. The pronotal base is more-or-less completely punctate, and weakening punctuation extends forward in the slight lateral explanations; pronotal sides sinuous posteriad, rear angles prominent and about right; basal foveae linear; meso-sternum laterally punctulated. Ultimate tarsomeres are ventrally non-setose. The clypeus and labrum are somewhat emarginate; mandibles slightly produced; mentum tooth prominent and simple; palps fusiform. The flight wings seem fully developed, with reflexed tips, so it may prove to be flightworthy.

Elaphrus americanus was collected 15 May 1977 in Ashland Co. by R.M. Ritter (determined by D. Shpeley) and *Amara crassispina* in Wooster, Wayne Co. by F.F.P. 10 July 1988 (det. G.E. Ball). [Note: the major portion of the R.M. Ritter Insect Collection, including many Carabidae, is maintained at The Stark Wilderness Center, Wilmot, Stark Co., Ohio (Purrington *et al.* 1989)].

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