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GROUND BEETLE RANGE EXTENSIONS:
SIX NEW OHIO RECORDS (COLEOPTERA: CARABIDAE)

Foster Forbes Purrington¹, R. Chris Stanton¹ and David J. Horn¹

ABSTRACT

We newly report six ground beetles from Ohio, comprising *Badister parviceps*, *Stenolophus dissimilis*, *Harpalus somnulentus*, *Pentagonica flavipes*, *Agonum albicrus*, and *Lebia collaris*.

Blacklight and pitfall insect trapping in southern Ohio upland mixed-oak forests, underway since 1995 as part of long term ecological studies exploring the effects of prescribed burning protocols, has produced a number of new Ohio distributional records for ground beetles (Carabidae) and Lepidoptera (Purrington and Stanton 1996, Purrington and Horn 1996). This ongoing research project, a joint venture of the U.S. Forest Service and The Ohio State University, is sited in Lawrence and Vinton Counties.

Additionally, as part of an Ohio Biological Survey biodiversity assessment initiative, in 1998 we began assaying insect diversity at Deep Woods Farm, Benton Township, Hocking County with Malaise, blacklight and pitfall traps deployed in mixed hardwood forest along a steep altitudinal gradient of about 200 m.

Here we report six ground beetle species heretofore unrecorded for Ohio (Purrington and Stanton 1996, Will et al. 1995, Bousquet and Larochele 1993, Purrington et al. 1989), taken at the above sites and elsewhere. Voucher specimens of all species are retained by F.F. Purrington at the Department of Entomology, The Ohio State University, Columbus.

RESULTS AND DISCUSSION

Berlese funnel extraction of "forest litter" recovered one *Badister parviceps* Ball (Licinini) near Blue Creek in Adams County (Jefferson Twp.) on 8 August 197? (col. L.E. Watrous). It is widely distributed in eastern North America from Quebec and Manitoba to Texas; west of the Rocky Mountains it is recorded only from British Columbia (Bousquet and Larochele 1993).

A single *Stenolophus dissimilis* Dejean (Harpalini) was captured by automatic blacklight trap at Arch Rock in the Vinton Furnace Experimental Forest (Vinton Township) near Dundas, Vinton County on 18 May 1996. Another was taken by blacklight at Apple Creek (East Union Township), Wayne County, Ohio by one of us (FFP) on 10 June 1990. This species is known in the north from Missouri and Indiana but most records are from southeastern and Gulf states.

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Three *Harpalus somnulentus* Dejean (Harpalini) were taken in 1998 by pitfall trapping at Deep Woods Farm in Hocking County (23 June, 30 June, 4 August). They were captured in an open wooded floodplain along a permanent creek that borders a grassy unkempt field. Two others were taken in Wayne County, Ohio (col. FFP) [East Union Township: 1 May 1987 and (general) Wooster Township: 23 August 1988].

The range of *H. somnulentus* is transcontinental in North America; from the Northwest Territories to Alabama and Arizona at many elevations in principally open situations along watercourses and lakes, in prairie, damp pastures and mountain meadows (Noonan 1991, Lindroth 1961–1969). It seems to have well developed flight wings and probably flies. Nevertheless it is not responsive to ultraviolet light traps and so may be inactive at night (Noonan 1991). Wide distribution and considerable morphological variation in this species has generated 25 names, 19 by Thomas L. Casey, that are now reduced to synonyms (Noonan 1991, Bousquet and Laroche 1993).

A single *Pentagonica flavipes* (LeConte) (Pentagonicini) was taken with blacklight at Watch Rock in the Vinton Furnace Experimental Forest on 3 July 1997. It is known from Arkansas, South Carolina, Georgia and Gulf states (Bousquet and Laroche 1993). Several specimens were collected on grasses (13 November 1994) at a saline lagoon in coastal Veracruz, Mexico (FFP), underlining its tropical affinities.

Two *Agonum albicrus* Dejean (Platynini) were captured by blacklight at Youngs Branch (Decatur Township), Lawrence County, Ohio on 20 June 1996. Others have been caught by Kip Will (pers. comm.) treading under sweet gums, *Liquidambar styraciflua*, at Lake Hope State Park (Brown Township), Vinton County on 16 July 1994, and in North Olmstead, Cuyahoga County (Bradley Woods Reservation) on 19 June 1993 (col. H.J. Lee). This species is known from throughout the eastern states and Ontario, west to Oklahoma and Iowa (Bousquet and Laroche 1993). Blatchley (1910) lists it as rare, citing “two specimens from the margins of the cypress swamp” in Knox County, Indiana.

One *Lebia collaris* Dejean (Lebiini) was taken with blacklight at the Watch Rock site in Vinton County on 24 July 1997. It is reported from Florida, Georgia, North Carolina and Indiana (Bousquet and Laroche 1993).

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