New distributional records of the flightless primitive carrion beetle *Necrophilus pettitii* Horn in eastern North America (Coleoptera: Agyrtidae)

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ABSTRACT. New distribution records significantly expand the known range of flightless *Necrophilus pettitii* Horn in the eastern United States.

Introduction

The only beetle in the family Agyrtidae known from eastern North America is the flightless primitive carrion beetle Necrophilus pettitii Horn, 1880. It is generally secretive, feeds on carrion, inhabits deep litter and soil in forests and cave entrances, and is most active in cool seasons or cool upperelevation habitats in its distributional core in the southern Appalachian mountains. Davis (1980) and Peck (1981) reviewed its biology and distribution. Anderson and Peck (1985) comment on general biology and repeat the distribution known at that time, ranging from southern Ontario, Canada, to northern Florida. Peck and Miller (1993) and Peck (2001) indicated additional distribution data for the states of Missouri and Louisiana but gave no details. Recently Ward et al. (2005) reported the first record of the species in the state of Vermont in New England. The Vermont record prompts me to report additional and previously unpublished peripheral records of this rarely collected beetle. The records for Missouri and Louisiana are the first from west of the Mississippi River. The specimens are in the collections indicated by acronyms following Arnett et al. (1997), or of the author. I thank the collectors and collection managers for their records or opportunity to study material under their care.

New Records

Alabama. Chambers County. 2 mi N Gold Hill, 26.X.1973 and 14.II.1974, T. French, 2 (AUEM). Lee County. Auburn, 18.X.1980, C. Oliver, 1 (AUEM); 10 mi W. Auburn, 5.II.1964, L. G. Sanford, 1 (AUEM). Illinois. Monroe County. Jacobs Cave, 13.XI-8.XII.1998, J. Lewis and P. Moss, pitfalls, 1 (SBPC). Indiana. Orange County. David's Spring Cave, Springs Valley Recreational Area,

18.V.2002, J. Lewis and R. Burns, pitfall, 1 (SBPC); Molly Cave, Springs Valley, Hoosier National Forest, 18.V. 2002, J. Lewis and R. Burns, 2, (SBPC); Cave's Cave, Paoli Country Club, 30.IV.1998, J. Lewis and S. Rafail, 1 (SBPC). Washington County. Cave near Bat Cave, 5.X.1996, J. Lewis and A. Pursell, 2 (SBPC). **Louisiana**. East Baton Rouge Parish. Mississippi River bank, 5 km E LSU Campus, 6.IV.2001, 1 (LSUC). East Feliciana Parish. Idlewild Experimental Station, 3-12.XI.1983, E. G. Riley, pitfall trap baited with human feces, 3 (EGRC). Grant Parish. 28 km N Alexandria, Stuart Lake Camp, 18-21.V.83, S. & J. Peck, forest carrion traps, 5 (SBPC). Grant Parish, 3 km SW Pollock, Stuart National Forest, 13.V-3.VI.1985, H. & A Howden & C. Scholtz, intercept trap, 1 (SBPC). West Feliciana Parish. Tunica Hills Wildlife Management Area, 30.55'N, 91.30'W, March, April, November, 4 (LSUC); Feliciana Preserve, ESE St. Francisville, 30.47'N, 91.15'W, January, April, December, 3 (LSUC). Missouri. Jefferson County. Reitter Cave, 1978-1984, J. Gardner, in small hole in wall in total darkness, 1 (SBPC). Shannon County. Davis Cave, 1978-1984, J. Gardner, under dead milliped in cave, 1 (SBPC). Ohio. Lawrence County, 20.IX.1942, R. L. Bickle, 3 (DENH). Tennessee. Franklin County. Caney Hollow Cave, 31.X.2004, J. Lewis, C. Holliday, 1 (SBPC). Grundy County. Coppinger Cave, 30.IX.2004, J. Lewis, 1 (SBPC). Skull Cave, 1.X.2004, J. Lewis, C. Holliday, 1 (SBPC). Wannamaker Cave, 30.IX.2004, J. Lewis, 1, (SBPC). Seguatchie County. Stone Cave, 2004, J. Lewis, C. Holliday, 1 (SBPC).

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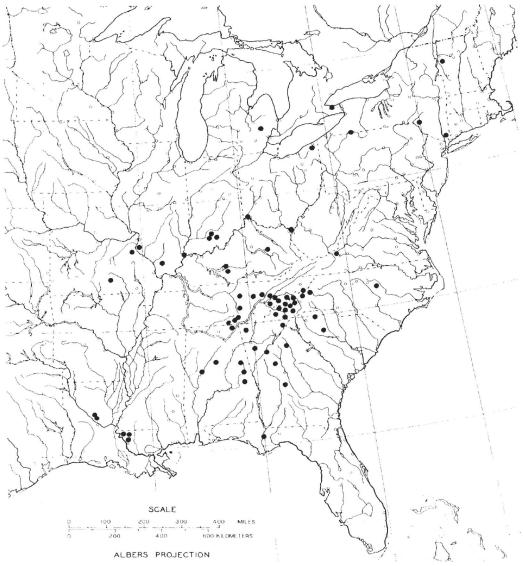


Figure 1. Known distribution of the flightless primitive carrion beetle *Necrophilus pettitii* Horn. Data combined from Davis (1980), Peck (1981), Ward *et al.* (2005) and this paper.

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Davis, L. R., Jr. 1980. Notes on beetle distributions, with a discussion of *Nicrophorus americanus* Olivier and its abundance in collections (Coleoptera: Scarabaeidae, Lampyridae, and Silphidae). Coleopterists Bulletin 34: 245-251.

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