NEWS OF NOTE

Rediscovery of *Epeoloides pilosula* (Cresson) (Hymenoptera: Apidae) in New England

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*Epeoloides pilosula* (Cresson, 1878) (Apinae: Osirini), a cleptoparasite of oil bees of the genus *Macropis* (Melittidae: Macropidini), is among the rarest of North American bees (Michener, 2000; Sheffield et al., 2004). Formerly this species, the only member of tribe Osirini in the United States and Canada, was widespread, with numerous pre-1940 records from the eastern and central United States and from southern Canada (Mitchell, 1962). Sheffield *et al.* (2004) and Ascher (2005) documented additional records of this species, now known from 18 states and 4 Canadian provinces. With the exception of Sheffield *et al.*’s (2004) recent report of *Epeoloides* from Nova Scotia, the bee has only been taken twice in the past 50 yr: once in Montana in 1958 and once in Ontario in 1960 (Sheffield *et al.*, 2004; Ascher, 2005).

Viereck (1916) cited only a single Connecticut record for *Epeoloides pilosula* (as *Viereckella pilosula*): “Brookfield, 27 July (E. L. Dickerson).” Ascher (2005) recorded an additional Connecticut record from South Meriden in 1911. (Details of this record and other specimen and literature records for *Epeoloides* and *Macropis* are recorded in the AMNH and University of Kansas bee databases available through online maps at www.discoverlife.org.) The last New England report of the bee was in 1927 from Needham, Massachusetts, and the last New York record was in 1935 from Yonkers (Ascher, 2005). As recently as 2000, Michener suggested that the bee was possibly extinct, and Ascher (2005) regarded *Epeoloides*, along with *Bombus franklini* (Frison) (Apidae) from California and Oregon, to be among the bees “most worthy of listing as an endangered species in Canada…and the United States.”

On 22 June, 2006, we collected a single female *Epeoloides pilosula* (Fig. 1) in a 15 cm bee bowl under a powerline off of Route 163 in Bozrah, New London Co., Connecticut (41°29.442N, 72°10.791W). The color of the bowl (yellow, blue, or white) is not known because samples from the 24 bowls in the plot were combined. The plot where the bee was collected was one of 12 plots that were sampled in 2005 and 2006 along powerline rights-of-ways in southeastern Connecticut. Over the course of the 2-year study more than 3600 bees representing 157 species were sampled in our bee bowl and net collections (in prep.).

Host bees of the genus *Macropis* (see below) are all specialists on native yellow loosestrife (*Lysimachia*) (Lythraceae) species (Michener, 2000). In addition to pollen, female *Macropis* provision larval cells with floral oils collected from loosestrife. The known habitat of *Macropis* (and *Epeoloides pilosula*) includes swamps, wet meadows, margins of streams, ponds, and lakes, and other moist communities where *Lysimachia* grows in abundance (Ascher, 2005). However, the site where *Epeoloides* was collected was a relatively dry upland hillside meadow, created and maintained by Northeast Utilities under one of their many powerlines (Fig. 2). The only *Lysimachia* found growing on the site in August 2006 and June 2007 was *L. quadrifolia* L. Cover on the plot consisted mostly of *Spiraea tomentosa* L. (Hardhack) (Rosaceae) (39%), *Solidago spp.* (Asteraceae) (25%), grass (Poaceae) (18%), and *Rubus* (Rosaceae) (6%). *Lysimachia quadrifolia* accounted for 0.56% of the total cover. Approximately 1% of the plot was occupied by bare ground. Additional open ground occurred nearby, along the grass and dirt service road running the length of the powerline; south-facing slopes, thought to be suitable for *Macropis* nesting, were also present nearby.

*Epeoloides pilosula* is inferred to be a cleptoparasite of oil-collecting melittids of the genus *Macropis* (Michener, 2000), and is thought to parasitize multiple members of the genus (Ascher, 2005), but its life...