Westrich, P. : Observations at a nesting site of *Lasioglossum marginellum* (Schenck, 1853) (Hym., Apidae). – Entomologische Nachrichten und Berichte.

Abstract

The author describes his observations made in 2005 at a nesting site of the bee *Lasioglossum marginellum*. More than 60 females were observed nesting in a vertical, easterly exposed clay cliff, created in 1988 by an excavator doing earthworks. Pollen collecting females were found from the 29th of May, the day of their discovery, until the 31st of July. Analyses of pollen loads showed that the females had collected pollen from 6 different plant families (Asteraceae: *Achillea millefolium*; Apiaceae: *Daucus carota*; Brassicaceae: *Sinapis arvensis* ; Fabaceae: *Medicago lupulina*, *Onobrychis viciifolia*; Lamiaceae: *Salvia pratensis* ; Papaveraceae: *Papaver rhoeas*). Therefore *L. marginellum* is a polylectic species. The distance between nests and plants serving as pollen resources ranged from 1 to 200 meters. *L. marginellum* obviously prefers vertical structures (cliffs) for nesting and is therefore restricted to a specific habitat matrix. Cliffs serve as nesting sites and ruderal sites or meadows in the vicinity as foraging sites. Based on his observations and the phenological data the author considers *L. marginellum* to be a solitary bee species with one generation per year.
The first males emerged on the 3rd of July and were on the wing until the 12th of August. Males were observed constantly patrolling the cliff, at times clustering and creeping into nests where mating most likely takes place. Males only occasionally visited flowers for nectar. Their nectar resources were *Cirsium arvense*, *Picris hieracioides* and *Sinapis arvensis*.
Two parasitic bees were at the nesting site: *Nomada sheppardana* and *Sphecodes geofrellus*. Since there was no other suitable host bee species nesting, it is probable that these two species use *L. marginellum* as host which was not known before.
Due to the scarcety of the species in central Europe and its preference for vertical faces as nesting sites, *L. marginellum* ist regarded as a threatened species. Measures to protect the nesting site and the adjacent foraging sites are beeing taken.