



Guest Lecture

Dr. Hannah Burger

Universität Ulm – Institute of
Evolutionary Ecology and
Conservation Genomics

Univ.-Prof. Dipl.-Biol. Dr. Stefan Dötterl

Conservation measures to promote wild bees – Key results of the BienABest project

Wild bees are amongst the most important pollinators of flowering plants, but have suffered severe declines in recent years. A major driver of the recent pollinator decline is the shortage of food plants. To counteract the lack of floral resources, the establishment of new habitat structures such as the establishing of flower strips have become a popular measure to support wild bees. However, many seed mixtures for environmental focus areas promote only few abundant crop pollinators, as the conditions do not match the needs of diverse bee species. Besides floral nutrition, the availability of nesting resources influences the persistence and survival of bee populations. Nesting aids are regularly provided for aboveground-nesting but not for underground-nesting bees which form the majority of bee species. Beside local food and nesting resources, bee communities are driven by the quality of the surrounding landscape and climatic conditions. To promote the species diversity and abundance of wild bees, the project “Standardisierte Erfassung von Wildbienen zur Evaluierung des Bestäuberpotenzials in der Agrarlandschaft” (BienABest) was initiated. Wild bee populations were examined by a systematic monitoring at 20 study locations in Germany for five consecutive years (2018-2022). In total, we recorded ca. 130,000 bee individuals of 390 species and their interactions with flowers.

The aim of the large monitoring initiative was to evaluate the established flower strips and nesting hills, identify key-plant species, reveal drivers of bee decline, and determine pollination success of wild bees. I will present the key results in the announced talk.

Friday, November 15, 2 PM

NLW-Faculty, Room 436, 3rd floor

