Data Paper

Spider assemblages (Arachnida: Araneae) in five common pastures in the Black Forest Biosphere Reserve (Baden-Württemberg, Germany)

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doi: 1030963/aramit7001

Abstract. The original study of arthropods in the project "Allmendweiden im Biosphärengebiet Schwarzwald – Insektendiversität, Strukturreichtum und Folgerungen für das Management" was carried out on behalf of the Black Forest Biosphere Reserve Office of the Regional Council of Freiburg and funded by the Foundation Nature Conservation Fund Baden-Württemberg. The common pastures (Allmendweiden) in the Black Forest Biosphere Reserve are located in the montane to subalpine zone in the southern Black Forest. These grassland areas have presumably been used extensively for hundreds of years. Today they are characterised by a structurally rich vegetation of dry or moist mat-grass meadows, dwarf shrub heaths and managed by grazing with different livestock and intensities. The spiders as by-catch in pitfall traps were identified and the (dis)similarities among the spider assemblages of different habitat types within the pastures were analysed as part of a master's thesis by the first author. In 30 plots, representative locations of approximately 2000 m² within five pasture areas, 180 pitfall traps were placed. Six traps were positioned in two rows, five metres apart, in each plot and operated for a total of 84 days in April, May and June, and August and September 2021. In total, 12536 (9877 adult) spiders representing 149 species were sampled. Among them are two single-specimen records of previously unrecorded species in Baden-Württemberg (Improphantes improbulus (Simon, 1929) and Lathys heterophthalma Kulczyński, 1891) as well as several remarkable species with regard to their conservation status or rarity at least in Baden-Württemberg, such as Peponocranium orbiculatum (O. Pickard-Cambridge, 1882), Pardosa bifasciata (C. L. Koch, 1834), Pardosa nigriceps (Thorell, 1856), Arctosa figurata (Simon, 1876), Pellenes tripunctatus (Walckenaer, 1802) and Talavera thorelli (Kulczyński, 1891). All of them show a clear affinity for xerothermic open habitats.

Keywords: conservation, diversity, dry grassland, grazing, heaths, montane, new records, subalpine

The complete data sets and metadata corresponding to abstracts of a Data Paper are published electronically as Supporting Information in the online version of the article and through the ARAMOB data repository at https://aramob.de/en/data/data-exploitation/ – Filter for Project ARAMIT_Schindler2025.

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