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Data Paper

Spider assemblages (Arachnida, Araneae) in conventionally managed versus extensively used or restored grass- and farmland sites in Mecklenburg-Vorpommern

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Abstract. The Ministry for Climate Protection, Agriculture, Rural Areas and the Environment in Mecklenburg-Vorpommern prepares a strategy for insect conservation. One module within the program "More respect for the insect" aimed to compare sites with completed or ongoing conservation measures with conventionally managed reference sites in order to obtain data-based recommendations for future actions. Study sites comprised organically managed arable land (vs. conventionally managed fields), stripes of grassland fallows (vs. used grassland), re-wetted and/ or abandoned peatland meadows (vs. managed grassland on drained peatland), restoration of salt marshes by relocation of dikes (vs. diked grassland) and initial stages of xerothermic grassland as a substitute for management in protected areas (vs. later succession stages). The localities were in the surroundings of Greifswald, Anklam and Pasewalk. Arthropods were sampled with pitfall traps according to the guidelines for the nationwide insect monitoring which applied at that time. At each plot six pitfalls were positioned in linear transects with Renner solution as preservative. Carabid beetles and spiders were identified to species level and included in the assessment. Concerning spiders, a total of 22902 specimens (20765 adults) from 189 species were recorded. The study provided the first records of Porrhomma campbelli, Prinerigone vagans and Robertus heydemanni in Mecklenburg-Vorpommern. Further six species are critically endangered (category 1) according to the latest version of the Red list of spiders in Mecklenburg-Vorpommern: Diplocephalus dentatus, Euryopis laeta, Micaria dives, Pellenes nigrociliatus, Psammitis sabulosus, Silometopus ambiguus.

Keywords: arable land, grassland, habitat management, insect monitoring, organic farming, peatland meadows, restoration, salt marsh, Germany

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.

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