Dispersal abilities and breeding periods of ground beetles (Coleoptera, Carabidae) in coastal Central Norway

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Species composition of ground beetles was investigated in coastal Central Norway 2002, with emphasis on time of breeding and dispersal power. The 34 sites included open habitats as well as forest habitats. Sampling was carried out by pitfall traps. Altogether, 2091 specimens were collected representing 35 carabid species. Species supposed to have high dispersal abilities had highest species richness and abundance. Species with poor dispersal abilities were however most abundant in forests. More macropterous species were found, but brachypterous species were more abundant. Autumn breeders dominated both in species numbers and abundance, with the exception of the meadow sites. These trends may be modeled by the Atlantic climate with mild winters and high precipitation, which seems to facilitate the use of open habitats for species normally occurring in forests.

Keywords: Carabidae, Atlantic climate, coastal Central Norway

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