Aggregation and sexual attraction in *Carabus* - a field experiment

Claudia Drees‡, Wiebke Schuett§, Elisabeth Yarwood§, Thorsten Assmann‡

‡ Institute of Zoology, Hamburg, Germany
§ University of Sussex, Falmer, Brighton, United Kingdom
| Leuphana Universität, Lüneburg, Germany

Corresponding author: Claudia Drees (claudia.drees@uni-hamburg.de)

Received: 11 Jun 2019 | Published: 12 Jun 2019

Citation: Drees C, Schuett W, Yarwood E, Assmann T (2019) Aggregation and sexual attraction in *Carabus* – a field experiment. ARPHA Conference Abstracts 2: e37128. https://doi.org/10.3897/aca.2.e37128

Abstract

Individuals need to find both suitable environmental conditions and mating partners which might be especially difficult for solitary species. Here, we experimentally studied the role of olfactory cues in attracting conspecifics in several forest-dwelling *Carabus* species. We considered two possible ways of attraction, general aggregation and sexual attraction. In a field experiment we used single male and female beetles as baits in dry pitfall traps and compared the catches of these traps to those in empty ones. Depending on the species, we found suggestive evidence for aggregation behaviour and/or sexual attraction. Our study highlights that olfactory cues play an important role in *Carabus* but the underlying mechanisms remain to be studied.

Presenting author

Claudia Drees

Presented at

19thECM poster

© Drees C et al. This is an open access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.