

Accepted Manuscript

Title: The Other Insect Societies: Overview and New Directions

Author: James T. Costa

PII: S2214-5745(18)30065-8
DOI: <https://doi.org/doi:10.1016/j.cois.2018.04.008>
Reference: COIS 459



To appear in:

Received date: 8-4-2018
Revised date: 19-4-2018
Accepted date: 20-4-2018

Please cite this article as: James T. Costa The Other Insect Societies: Overview and New Directions (2018), <https://doi.org/10.1016/j.cois.2018.04.008>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

The Other Insect Societies: Overview and New Directions

James T. Costa^a

^a Highlands Biological Station, 265 N. Sixth Street, Highlands, NC 28741, USA and Department of Biology, Western Carolina University, Cullowhee, NC 28723, USA; costa@email.wcu.edu.

Special issue: "Social life in insects: can we get new insights from the "other" social insects?"

Article type: review

Declarations of interest: none

Abstract

The diversity of societies and forms of social interaction across the Arthropoda is commensurate with the great taxonomic diversity within this phylum. Social evolution research has, however, largely focused on a small subset of social forms; namely, those deemed to be "eusocial" — groups exhibiting overlapping generations, cooperative brood care, and reproductive division of labor. Here I provide a brief overview of the "other," non-eusocial, societies of insects and allies, defining the main social traits of interest and summarizing recent work. Four active and emerging fields of inquiry in the other insect societies are discussed.

Keywords

Social insects, social evolution, parental care, cooperation, larval societies, biparental care, maternal care, paternal care, resource defense sociality.

Highlights

- The heterogeneous "other" social insects represent at least four social-evolutionary pathways.
- The terminology widely used to describe these societies is inaccurate and inconsistently applied.
- New directions in the study of social evolution are discussed: itero- vs. semelparity, social immunity, social nutrition, and cross-taxonomic approaches.

Download English Version:

<https://daneshyari.com/en/article/8878436>

Download Persian Version:

<https://daneshyari.com/article/8878436>

[Daneshyari.com](https://daneshyari.com)