

Invitation to the Seminar series in Evolutionary Biology

Wednesday, 11.09.2024

Dr. C. Lindstedt-Kareksela

(University of Helsinki, Finland)

Title: The paradox of the organism: internal conflicts, selfish elements, and the evolution of individuality

Abstract:

Group members can benefit from the dilution of predation risk, predator confusion and/or cooperative joint effort in antipredator defence such as deterring the predator with defensive secretions. Many of these cooperative defence strategies are based on public goods, i.e. individually costly acts that benefits all the group members. However, public goods are susceptible to exploitation. In my research group, we use semisocial, haplodiploid and chemically defended pine sawflies (*Neodiprion sertifer* and *Diprion pini*) as a model system to study cost:benefit ratio of group living and cooperation in chemical defence. In my talk, I will present experimental studies that provide information of 1) how predation selects group living and contribution to collective chemical defence, 2) how costs of cooperative defence vary under different ecological conditions and 3) how individuals modulate their contribution to group defence under different social and ecological conditions. These experimental results are then compared to patterns observed in natural populations.

Host: Prof. Hanna Kokko

The colloquium (usually) takes place on Tuesdays at 12:15 pm until approx. 1:15 pm in the BZ 1 lecture hall (HS 00.187). Talks are given in English. Everyone interested is welcome!