SEEWIESEN Max Planck Institute for Ornithology

LECTURE SERIES

FALL/WINTER 2017/18

MAX-PLANCK-GESELLSCHAFT

THURSDAY | January 18, 2018 | 13 P.M. | HOUSE 4 LECTURE ROOM

SUSANNE SCHINDLER

University of Bristol | Host: Küpper Research Group

Contests with outsiders can lead to conflicts within social groups

In many social species, from hymenoptera to primates, group members contribute to repel outsiders. Which group members get involved into the repulsion and at what level of involvement is not yet fully understood; sometimes sub-ordinates (helpers) sacrifice themselves in the action and at other times, group members refuse to assist their breeders.

Repellent actions are costly, both for the individual and the dependent young, and there might be a point when winning a contest requires that much involvement that the fitness return from winning is lower than the fitness return from losing the contest without getting involved in the first place. This point can differ among group members and thus, the interests in how much and how long effort is spent in a contest can clash within the group.

We calculate the inclusive fitness of each group member and identify when the interests of group members over getting involved into a contest with an outsider diverge and thus, when within-group conflict is likely to occur.

WHO IS SUSANNE SCHINDLER

since 2017	Postdoctoral Research Associate at University of Bristol, UK
2015 - 2016	Postdoctoral Research Associate at University of Zurich, Switzerland
2010 - 2015	Postdoctoral Research Associate at University of Oxford and Imperial College, London, UK
2005 - 2011	Doctorate at Max Planck Institute for Mathematics in the Sciences and University of Leipzig, Germany

SELECTED PUBLICATIONS

- Schindler, S, Festa-Bianchet, M, Hogg, JT & Pelletier, F, 2017, 'Hunting, age structure, and horn size distribution in bighorn sheep'. Journal of Wildlife Management.
- Kokko, H, Schindler, S & Sprouffske, K, 2017, 'Searching for a Cancer-Proof Organism: It's the Journey That Teaches You About the Destination'. in: Ecology and Evolution of Cancer.
- Schindler, S, Gaillard, J-M, Gruning, A, Neuhaus, P, Traill, L, Tuljapurkar, S & Coulson, T, 2015, 'Sex-specific demography and generalization of the Trivers–Willard theory'. Nature.
- Traill, L, Schindler, S & Coulson, T, 2014, 'Demography, not inheritance, drives phenotypic change in hunted bighorn sheep'. Proceedings of the National Academy of Sciences.
- Schindler, S, Neuhaus, P, Gaillard, J-M & Coulson, T 2013, 'The Influence of Nonrandom Mating on Population Growth' The American Naturalist.

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