

“Population Cycles and Outbreaks: Still of interest or historical debate?”

A workshop connected to the 11th Winter School of Ecology

University of Jyväskylä, Konnevesi Research Station 20.-23.2.2018

Conveners: **Hannu Ylönen** (Jyväskylä), **Harry Andreassen** (Evenstad, Norway) and **Janne Sundell** (Helsinki)

Workshop assistants: **Marko Haapakoski** and **Thorbjörn Sievert**

Adjacent to the Winterschool course 2018 ***“Population ecology and population cycles”***, Dr. Janne Sundell as main organizer of the course, we aim to organize a workshop on ***“Population cycles and outbreaks”***. Analytical tools and modelling have greatly improved during last decades when studying long-term data sets. As well more short-term experimental studies on mechanisms and processes of population change during different population phases have been carried out. However, it is hard to find anymore fierce intellectual debates in meetings and congresses, or even publications on causes of different types of population fluctuations in vertebrates, especially mammals. We, graduate students from 1980's and early 1990's could enjoy these events later named „vole wars“, with excellent discussions and arguing.

Our research station can host around 50-60 participants including the students of the winterschool. See more of the winterschool and Konnevesi Research Station under https://www.jyu.fi/science/muut_yksikot/winterschool

The workshop is open for all interested ecologists and the estimated number of participants is 50 - 60.

Workshop registration fee is from Tuesday – Friday lunch is 250€ and from Wednesday - Friday 200€, graduate students 80€.

Program

Tuesday 20.2.2018 Travel day

- Arrival and accommodation of early arriving participants
- 18.00 Supper,
- Sauna, and free discussions

Wednesday 21.2.2018:

- Late arrivals and free program
- 11.30 **Lunch**
- **Session 1: Chair: Hannu Ylönen**
- 13:00 – 13.15 Opening of the workshop. Hannu Ylönen/Harry Andreassen/Janne Sundell
- ***Outbreaks, cycles, damage and health effects***

- 13.15 – 14.00 **Prof. Grant Singleton** (International Rice Research Institute, Philippines): Rodent outbreaks in Southeast Asia and Australia: great progress but challenges await
- **14.00 – 14.45 Prof. Herwig Leirs** (Antwerpen University, Belgium): Gerbils, fleas and plague epizootic cycles in Central Asia.
- 14.45 – 15.15 Coffee
- *Chair: Janne Sundell*
- 15.15-15.45 **Dr. Jens Jacob**, (Julius Kühn-Institut, Münster, Germany): Using the ecology of rodent cycles to predict crop damage and health risk.
- 15.45 – 16.15 **Prof. Juan Jose Luque Larena**, (University of Valladolid, Spain). Recent periodic boom-and-bust vole dynamics in Mediterranean Europe: origins, ecology and impacts
- 16.15 – 16.35 TBA
- 16.35 – 16.55 TBA
- 16.55 – 17.15 Discussion, Outbreaks, cycles, damage and health effects
- 17.30 Dinner
- 19.00 Sauna and social evening

Thursday 22.2.2018:

- 8.00 – 9.00 Breakfast
- *Chair: Grant Singleton*
- *Changing or disappearing cycles. Why?*
- 9:30 – 10.00 **Prof. Heikki Henttonen** (Luke, Helsinki): Lapland cycles: the best example of disappearance and return of small rodent cycles
- 10.00 – 10.30 **Dr. Frauke Ecke** (SLU, Umeå, Sweden): Pathogens in small rodents – just interesting if zoonotic or potential drivers of population dynamics?
- 10.30 – 10.40 **Break**
- 10.40 – 11.10 **Kaja Johnsen** (Hedmark University College, Evenstad, Norway): Do winter conditions affect vole population dynamics?
- 11.10 – 11.40 **Dr. Otso Huitu** (Luke, Tampere): Field vole population cycles – are pathogens drivers or passengers?"
- **Lunch**
- *Chair: Harry Andreassen*
- *Predation as regulating factor in population cycles*
- 13.00 – 13.30 **Assoc. prof. Nicolas Lecomte**, (University of Moncton, Canada): Population cycles and dynamics: a predator point of view
- 13.30 – 14.00 **Prof. Erkki Korpimäki** (Turku, Finland): Do vertebrate predators regulate prey populations?

- 14.00 – 14.30 **Dr. Janne Sundell** (Helsinki University, Lammi): Why the least weasel is thought to be so important for the North-European vole cycles?
- **Coffee**
- *New views*
Chair: Nicolas Lecomte
- 15.00 – 15.30 **Dr. Esa Koskela** (Jyväskylä, Finland): Individual life histories and population cycles
- 15.30 – 16.00 **Prof. Stefan Halle** (Jena, Germany): Common vole cycles fading out in Germany, or not?
- 16.30 – 16.50 TBA
- 16.50 – 17.10 TBA
- Poster viewing, snacks and drinks
- **18.30 Workshop banquet**
- Social evening

Friday 23.2.2018:

- 8.00 – 9.00 **Breakfast**
- 9.30 **Prof. Harry Andreassen**, (Hedmark University College, Evenstad, Norway): Vole populations cycles: Are we only verifying our own old ideas?
- 10.00 ***Commentaries to round table discussion***
- Prof. Heikki Henttonen (The Mr. Cycle): What is new if there is new?
- Prof. Herwig Leirs (Mr. Plague & Outbreak): How to control outbreaks?
- Dr. Esa Koskela (Mr. New ideas): Cycles and what to study inside the vole?
- **Round table ending discussion led by the conveners: Cycles and outbreaks: Vähän vanhaa, vähän uutta, vähän sinistä, vähän lainattua? (Seek your Finnish dictionary!)**

11.45 – 13.00 **Lunch**

- Departure to airport to flights 2.05pm or to 5.50pm from Jyväskylä airport, departure to train or busses or stay one night more at the research station (Saturday flights 5.55am and 14.20pm).