

Animal ecology and traceability

Organizers:

Luana Bontempo, Francesca Cagnacci, Federica Camin - Research and Innovation Centre, Fondazione Edmund Mach

Paolo Pedrini, Sezione Zoologia dei Vertebrati, MUSE - Museo delle Scienze

Teachers: Wolfgang Fiedler (Max Planck Institute for Ornithology, Germany), Keith A. Hobson (Western University, Canada), Paolo Pedrini (MUSE, Italy), Francesca Cagnacci, Federico Ossi (FEM, Italy), Luana Bontempo (FEM, Italy).

Venue:

Lectures: the Campus at Fondazione Edmund Mach, via Mach 1, San Michele all'Adige, Trento, Italy: between mountains and vineyards (<http://www.fmach.it/eng>).

Practical lessons in the field: Trentino region at 'Bocca di Caset' bird ringing station (http://www.muse.it/it/La-Ricerca/Zoologia-vertebrati/Attivita/Pagine/ghost_biodiversita_Caset.aspx) and in Val di Cembra for radio tracking in the context of the project 2C2T (<https://sites.google.com/site/2c2troeandreddeer/>).

Dates: September 5 - 8 2015.

Format: An intense, four-day course that will combine classic, but highly interactive lectures with three practical lessons, including a visit in the Stable Isotope laboratory at FEM and two field trips, one at Bocca di Caset for bird ringing and one in Val di Cembra for a radio-tracking and camera trapping experience in the context of the project 'Roe and red deer in Trentino and Technology'.

Participation: This course is mainly designed for graduate students (PhD and MSc), but is open also to post docs, lab technicians or managers. There will be room for a maximum of 20 PhD students from the IRSAE network and 10 attendees outside the network.



The course is supported by the International Research School in Applied Ecology (IRSAE. www.irsae.no). **Fees and costs** are therefore:

IRSAE participants - Fees, board and lodging are covered for participants from IRSAE network, who may also apply for a mobility grant to cover travel costs, after admission to the course (see application form at (<http://irsae.no/grants/>)).

No IRSAE participants - 150€ for the four days, transports to field sites included. Food and lodging near the campus can be booked at 80 €/day. Alternative lodging possibilities are available in the area.

Scientific content:

The study of animal ecology aims to investigate the interactions between animals and the environment surrounding them. Understanding these mechanisms would be paramount to assess the current and future state of animals in ecosystems exposed to climatic and landuse changes. Appropriate methodologies are crucial to describe and measure in the most precise and accurate manner the ecological dynamics that influence animal population dynamics and behavioural trends. This course will first provide a general overview on methodological and ecological aspects of animal ecology research with the description of different approaches (from movement ecology to stable isotopes and traditional tagging). Then, the course will focus on two specific topics:

- the application of different techniques to infer the migratory pattern of birds, in particular the description of their migration with 'traditional' (bird ringing) and innovative(stable isotopes) methods;
- the study of ungulate and large carnivore movements in an anthropic mountainous environment.

Summary course schedule (more info on the websites):

Mon, 05 th September	am	Arrivals at FEM, San Michele all'Adige
	pm	Lecture: 'Traditional' and 'innovative' approaches to study bird evology and movement
Tue, 06 th September	am	Lecture: Stable isotope ratios approach for animal ecology
	pm	Lab practical lesson – stable isotope ratios analysis of bird feathers Late afternoon: departure to Bocca di Caset and overnight stay
Wed, 07 th September	full day	Field practical lesson - Bocca di Caset bird ringing station Late afternoon: return to FEM
Thu, 08 th September	am	Lecture: The study of animal movement: innovative approaches and techniques
	pm	Field practical lesson-Radio-telemetry, wireless sensor networks and camera trapping in Val di Cembra Return to FEM: concluding remarks

Evaluation and Credits: ECTS credit evaluation can be requested. Credits will be assigned on the basis of participation and a final exam.

Registration: Email the application form (**email subject:** Animal Ecology and Traceability School 2016), containing a brief description of your PhD project and description of the relevance of the course to your research, along with a CV to Luana Bontempo (luana.bontempo@fmach.it) or Elisabeth Riseth (elisabeth.riseth@hihm.no). **Deadline: August 15, 2016. Notification of acceptance: August 22, 2016**

More and upcoming info/material on:

<http://irsae.no/courses-conferences-and-workshops/upcoming-courses>