Workshop: Next Generation Data Management in Movement Ecology

May 8–12 2017

Venue: Fort Lauderdale REC, Davie, Florida
Contact: Mathieu Basille (`basille@ufl.edu`)

Instructors: Simona Picardi, David Bucklin & Mathieu Basille (UF WEC)
Guest lecturers: Anne Berger (Leibniz Institute for Zoo and Wildlife Research, Germany), Hamish Campbell (Charles Darwin University, Australia), Francesca Cagnacci (Fondazione Edmund Mach, Italy) & Ferdinando Urbano (Independent researcher, Italy)

Attendance: Reserved for **Natural Resource managers** (for a fee) and **UF students** (with tuition waiver). Limited seats are available on a first come – first served basis. Natural Resource managers, please register on Eventbrite.com. UF students, please contact Mathieu Basille directly to register.

Recent technological progress has allowed ecologists to obtain a huge amount and diversity of animal movement data sets of increasing spatial and temporal resolution and size, together with complex associated information related to the environmental context, such as habitat types based on remote sensing, population density, and weather. Based on several years of experience on multiple species, this intensive five-day workshop is designed to teach participants how to handle, manage, store and retrieve movement data in a spatial database, and how to eventually feed them to analysis tools. In the first part of the course, participants will be exposed to basics of spatial databases for wildlife tracking data, using PostgreSQL/PostGIS, the reference free and open-source database system. The second part will focus on the integration of environmental data in the process. The third part will tackle the specifics of movement data, and how to connect the database to the R statistical environment for analysis. Step by step, using reproducible, hands-on exercises that will be released on-line, we will provide a complete and seamless procedure from raw data to final analysis that will enable participants to fully manage and integrate complex animal movement data sets. Although the workshop is intended for a wide audience, basic knowledge of SQL, spatial databases and R are highly recommended to get the best experience.

Participants will have to bring their own laptop computers, with necessary software installed (instructions will be provided).

Reference: Urbano, F. & Cagnacci, F. (ed.) (2014) *Spatial Database for GPS Wildlife Tracking Data: A Practical Guide to Creating a Data Management System with PostgreSQL/PostGIS and R.* Springer, 257 pp. DOI: 10.1007/978-3-319-03743-1

More info on: `http://ase-research.org/training/PostGIS_2017/`