

13 October 2011

**Call for a PhD student and Diploma/Master's students on the topic of:
Modeling dispersal, connectivity and species' sensitivity to fragmentation across scales**

Topic:

The movement of animals between habitat patches has fundamental effects on the persistence of populations and metapopulations in fragmented landscapes. There is growing interest in how dispersal and connectivity affect the long-term response of species to land-use changes and climate change, yet empirical data and models still provide only limited answers – especially for the protection of multiple species/biodiversity. State-of-the art models, combined with detailed data, are therefore imperative for the effective design of conservation strategies from the local to the regional.

We seek a **PhD student** to apply individual-based simulation models for studying connectivity for various species in Europe, potentially using the “*FunCon*” model, in order to assess how fragmentation affects species and communities across scales and under different conservation strategies. The work is part of the EU-project SCALES: “**Securing the conservation of biodiversity across administrative levels and spatial, temporal, and ecological scales**” (www.scales-project.net).

Concomitantly, we invite interested **Diploma/Master students** to take part in ongoing analyses of the effects of fragmentation on birds in the Atlantic rainforest of South America, using the *FunCon* model in combination with empirical data.

Requirements:

- Students of Biology, Ecology, System Sciences or related topic
- Programming skills (e.g. Delphi, C++, NetLogo) are essential
- Familiarity with the topics of conservation biology, spatial ecology, connectivity, and dispersal
- Experience with simulation models (especially individual-based models) is highly desired
- GIS knowledge and experience is beneficial
- Good communication skills in English

Duration and place of work:

PhD: January 2012 (3 years). Master/Diploma: optimally 4-6 months.

Place of work:

Dept. of Conservation Biology, UFZ-Helmholtz Centre for Environmental Research, Leipzig, Germany. The work will be conducted in close cooperation with, and partly funded by, the University of the Aegean (Prof. Yiannis Matsinos, Dept. of Environment).

To apply, please send a short CV (up to 2 pages) and a short letter explaining your interests and relevant skills, to Dr. Guy Pe'er, guy.peer@ufz.de.

PhD candidates, please submit your application and two recommendation letters.

For further questions please contact Dr. Guy Pe'er by email or at +49-341-2351646.