Three Post-Doc positions on modelling avian abundance, ecological interactions and population dynamics

The Swiss Ornithological Institute SOI is a non-profit organization focusing on a wide range of research topics on birds within and beyond Switzerland. We are offering three postdoc positions in the areas of statistical modelling of bird abundance and distribution changes, ecological interactions and population dynamics, respectively.

**Pos. 1: Changes in bird abundance and distribution**

The Swiss Breeding Bird Atlas 2013–2016 (Knaus et al 2018) brought forward profound changes in the distribution and population of Swiss birds, especially thanks to the quantitative comparisons with the atlas 1993–1996. The offered position identifies the relationships between land use change, climate change and the observed avifaunal changes, with a special focus on species inhabiting agricultural land and urban area as well as on long-distance. More information on the available data on www.vogelwarte.ch/en/atlas.

**Pos. 2: Ecological interactions**

This project addresses the relationships between mast seeding, rodent populations, predators and wood warblers. The aims are to a) retrospectively analyse the population trends of wood warblers at the European scale in relation to changes in patterns of mast seeding induced by climate change and reproductive performance in response to predators, b) examine patterns of predation on wood warbler nests across Europe and c) investigate spatial and temporal occurrence of wood warbler clusters based on long-term data.

**Pos. 3: Population dynamics**

The aim of this project is to assess demographic drivers of open bird populations and to understand how the environment has contributed to the dynamics. Demographic data sets as well as population counts will be jointly analysed using Bayesian integrated population models. Potential target species are swifts, dipper, whinchat and tawny owl. Knowledge in the BUGS language is required for this position.

Each position requires solid statistical skills combined with good knowledge in ecology, population biology, or related fields; a PhD in one of these or related disciplines; advanced knowledge of R and possibly of additional programming languages; experience in working with large and diverse datasets; a good record of publishing in international scientific journals; willingness to collaborate in a team; very good knowledge of spoken and written English; knowledge of European birds and own fieldwork experience desirable.

We offer challenging full-time positions in a highly motivated international team with the possibility to contribute to ambitious research. The posts are initially offered for two years with a possibility of extensions up to three years.

The job holders will collaborate at the SOI with:
Thomas Sattler (changes in bird abundance, thomas.sattler@vogelwarte.ch),
Gilberto Pasinelli (ecological interactions, gilberto.pasinelli@vogelwarte.ch) and
Michael Schaub (population dynamics, michael.schaub@vogelwarte.ch).

Working place is Sempach (Switzerland), starting dates 1 May 2020 or by agreement.
Your application must include: (i) a statement of your experience, motivation and suitability for this position, and (ii) your CV, including a list of publications and the contact details of two references.

Applications are to be sent
• for position 1 to changes@vogelwarte.ch
• for position 2: to ecology@vogelwarte.ch
• for position 3: to population@vogelwarte.ch

Applications will be considered until 1 March 2020. Interviews are expected to be held in early April.