

Master Thesis

Spatial variance in reproduction of a climate sensitive high-elevation bird species

During this MSc thesis you synthesize published results on environmental influences on the reproduction of the White-winged Snowfinch. You will transform environmental maps into a breeding success map to visualize areas within the Alps that are particularly important for the reproduction of Snowfinches.

Contact: PD Dr. Franziska Korner-Nievergelt (franziska.korner-nievergelt@unibas.ch)

Temporal and spatial variance in phenology and breeding success using acoustics

You will analyse spatial and temporal variance in the timing of the broods and the breeding success using acoustic recordings of Snowfinch nestlings collected over the last years in the Alps. You may assess environmental influences on the breeding success of this climate sensitive high-elevation bird species.

Contact: PD Dr. Franziska Korner-Nievergelt (franziska.korner-nievergelt@unibas.ch)

Understanding the population decline of the Citril finch in Switzerland

In this Msc-thesis, you compare the breeding census data from the 1990ies with those from the 2010ies and ask what environmental factors drive the pronounced negative population trend of the Citril finch.

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Changes in migration timing and stopover use in Egyptian vultures

*The Egyptian vulture (*Neophron percnopterus*) is an endangered migratory species. Most individuals from the Iberian Peninsula cross the Sahara to spend the winter in the Sahel. However, some juveniles from a population in western Spain have adopted an alternative strategy, wintering in southern Spain instead. These contrasting strategies provide an opportunity to investigate how migratory behaviour varies among individuals and changes over time. Using long-term GPS tracking data, you will investigate one of two topics: Option 1: whether migration timing differs between vultures wintering in the Sahel and southern Spain, and how environmental conditions influence these patterns; or Option 2: where key stopover areas are located, whether vultures return to the same sites across years, and which environmental and landscape characteristics distinguish used sites from available areas. Both projects will contribute to a better understanding of how Egyptian vultures respond to environmental change and help identify periods and areas of particular importance for their conservation.*

Contact: Marina Garrido-Priego (marina.garridopriego@unibas.ch)

Macrofauna in the soil

During this MSc-topic, you investigate macrofauna in the soil. You may compare different monitoring techniques such as emergence traps, pitfall traps or underground traps, and you study how grazing or mowing affects the macrofauna in the soil.

Contact: Jasmin Liedtke, PhD (jasmin.liedtke@unibas.ch)