Master Thesis Project

Drone Ecology: Estimate Skylark Reproductive Success Using Drones

Skylarks are rapidly declining, largely due to more intensified management practices. For the conservation of skylarks precise estimates of their population dynamics and reproductive success are important. To do so, their nests must be found, which is with the current methods very labour-intense. Drones might enable to facilitate the search of nests of skylarks and thus also the evaluation and development of conservation measures. Thus, for the first time, drones will be equipped with infrared cameras and used to find skylark nests.

The overall aim of this master thesis is to develop and test the method of finding skylark nests with drones.

You will work in a team of field assistants and a PhD student and have the possibility to learn how to fly drones, how to search skylark nests for the ground level truth, and to conduct your own project. The results are expected to be published in a peer-reviewed scientific journal. The candidate should have a pronounced interest in ecology and in technology, know the basics in statistics (R), and ideally own a driver's license.

Field work starts in April 2020. For application or additional information, please contact PD Dr. Eva Knop (www.knoplab.ch; eva.knop@ieu.uzh.ch).