

Session 9: Life History

Date: Thursday 2 November, 2017
Time: 09:45 – 10:05
Room: Seminar Room

The evolutionary ecology of passerines in the Anthropocene

Presenting author: **Marta Szulkin**

Authors: **Marta Szulkin¹**

Affiliations: ¹Wild Urban Evolution & Ecology Lab, Centre of New Technologies,
University of Warsaw, Warsaw, Poland

Urban areas currently occupy approximately 3% of the Earth's surface, and more than half of the human population worldwide lives in cities. Yet our understanding of natural variation, response to selection and adaptation of wildlife living in urban environments is limited. Indeed, virtually all long-term studies of vertebrates investigated in the wild and used as cornerstone in evolutionary ecology research were started in natural environments characterised by limited human interference. There is thus a considerable gap in our understanding of the dynamics of organismal trait variation, selection and response to selection in an urban setting. As urban space is an environment with conspicuously altered ecological dynamics relative to original natural habitat, more insight into the evolutionary ecology of free-living animals in urban environments is needed. Moreover, urbanisation is also a statistically powerful and fascinating framework to study evolutionary and ecological processes since the process lends itself to multiple replicate experimental setups. I will here present 2 years of life-history and fitness data collected in a gradient of urbanisation to highlight (i) the need for a greater consensus in quantifying urbanisation and its effect on fitness and (ii) the importance of studying gradients of environmental change rather than urban-rural dichotomies to detect non-linear responses to urbanisation.