MSC Project on Phenology of the Seychelles Warbler

Supervision: Prof Hannah Dugdale, Day to day: Claire Tsui



<u>Background:</u> The Seychelles Warbler is a cooperative breeding bird that uses rainfall as a cue for the onset of their breeding. It is very well established that many species have shifted their breeding phenology as result of climate change. However, these studies have been greatly limited to species occupying the northern hemisphere, and phenology of birds in the global south has been severely understudied. To fully understand the effects of climate change on birds globally, it is imperative to consider species from the tropics and global south. Till now, for the past 30 years the study has been running, there has been no quantification of how climate has changed in the Seychelles and how this affects breeding of the warblers. You will study the effect of changes in rainfall and temperature patterns on phenology and fitness in the Seychelles warbler, with the potential to address how phenology changes with bird age.

This project will involve:

Data wrangling and statistical modelling in R

Potential fieldwork opportunity

Opportunity to publish and contribute to novel research on a timely topic

Ideal candidates will have some knowledge of R and an interest in phenology. Field work experience is ideal but not necessary. Supervision will be provided.



Key Reading:

Komdeur and Daan 2005 <u>https://link.springer.com/article/10.1007/s10336-005-0008-6</u> Lei Lü et al 2019 <u>https://onlinelibrary.wiley.com/doi/abs/10.1111/gcb.14831</u> Chambers et al 2013 <u>https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0075514</u>

If you are interested please email <u>l.s.tsui@rug.nl</u> or <u>h.l.dugdale@rug.nl</u>. Do get in touch if you have any questions! Start date is flexible.