

## Master Thesis (Forst / Ingöko / Biologie / SRM) at Professur für Ökoklimatologie

### Phenological sensitivity to climate change across interacting taxa – a case cuckoos, their brood hosts, prey and primary producers

#### What is it about?

Cuckoos are long-distance migratory birds, well-known as obligatory brood parasites of other bird species. Cuckoos have to tune their spring arrival to the breeding grounds to both arrival of their hosts and emergence of their prey. Increasing temperatures in temperate regions has caused earlier onset of the spring and cuckoos are seemingly advancing their arrival less than their hosts and emerging prey. However, we still do not understand well how cuckoos, their hosts and prey spring phenology is affected by spring phenology of primary producers – plants.



#### Research Question

How affect increasing spring temperatures multilevel spring phenology of cuckoos, their brood hosts, prey and plants?

#### Tasks

- Analysis of readily available long-term data (40 years) on cuckoo, their brood hosts, prey and plant phenology from Tatarstan
- Data processing, analysis and visualization skills are required
- Moderate R or other statistical software skill is required (e.g. mixed linear models)

**Starts immediately / until end-May**

**If you are interested, please contact:**

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