

The effect of climate change on breeding bird productivity: a meta-analysis

The global temperature has been significantly rising across the 20th and 21st centuries, and climate warming has been shown to have multiple effects on populations of many organisms, including birds. In response to warmer springs many birds arrive and start breeding earlier. However, we do not know if this affects the number of produced young. In this project I will conduct an analysis of temporal changes (within the last 45 years) in the production of young of birds from all over the world. I will use the statistical technique named "meta-analysis", which allows for quantitative generalization of results of many research projects. The analysis will also identify other than climatic conditions factors that influence the offspring production. I am going to collect the published data by searching through the ornithological literature, as well as to obtain unpublished data from the authors of long-term studies of bird biology. As the offspring production is associated with population trends, the results of this project will have an important conservation value, and may help to identify the species especially endangered due to climate change.