



Digitizing species' distributions from analogue books

Funded project work for freelancers or as a master thesis

Background

The geographical distribution of species is the most crucial piece of information for any kind of biodiversity research. However, these information hitherto are often unavailable because they are hidden in thousands of analogue books. This project aims at creating an open-source software toolbox for automatically digitizing species distribution data from analogue books.

Objectives

- Optimize and develop processing routines for data mobilization, and use them for
- extracting distributional information from 13 books (The butterflies of Asia)

Requirements

- Coding skills in Python and R
- Motivation for working with large image data sets and for doing data science

Work programme

- Optimize and implement object detection, pixel classification, georeferencing, and I/O modules
- Create a release of the software toolbox, which is already available in an initial version: https://environmentalinformatics-marburg.github.io/distribution_digitizer_webpage/



Starting date is as soon as possible.

Please contact Dirk Zeuss (dirk.zeuss@uni-marburg.de) for details.

