

## Master Thesis Project

### Impacts of airborne nitrogen on plant diversity in Austria

As a part of ongoing research and monitoring of nitrogen emissions and effects at the Umweltbundesamt, an MSc thesis project is available. The aim is to use existing monitoring data from forest, grassland, and wetland sites together with air concentration and deposition data to assess the impact of long-term effects of nitrogen on plant communities and diversity in Austria. The monitoring network from which the data will be acquired is described here: [https://www.umweltbundesamt.at/studien-reports/publikationsdetail?pub\\_id=2516&cHash=61b4890a2677382c63b364d79fc1889b](https://www.umweltbundesamt.at/studien-reports/publikationsdetail?pub_id=2516&cHash=61b4890a2677382c63b364d79fc1889b)

The focus of the MSc thesis project is on data analysis and the main questions of the project are:

- What was the magnitude of impacts of nitrogen on plant community composition?
- Did airborne nitrogen affect plant diversity?
- Where in Austria were the main impacts?
- In which habitats did the main impacts occur?

#### **Tasks to be done:**

- Data compilation from many different sources (deposition, concentration, plant data, plant trait data, etc.)
- Statistical analysis (preferably in R)
- Writing a manuscript-like thesis

The thesis project is suitable for MSc students in ecology, botany, zoology, conservation biology, or environmental sciences. It will be co-supervised by Stefan Dullinger and colleagues from the Umweltbundesamt (Thomas Dirnböck). The candidate would also have the possibility to work as a trainee at the Umweltbundesamt when working on his/her thesis.

**Interested?** Please contact Prof. Stefan Dullinger (stefan.dullinger@univie.ac.at).

