

# Student Internship

8. Oktober 2018

# at Leibniz Institute of Ecological Urban and Regional Development (IOER) in Dresden

# Topic:

Assessment of green infrastructure and their ecosystem services in the tri-border region Germany - Czech Republic -Poland

#### **Background:**

Terms like "summer heat", "flooding" or "species extinction" are dominating our daily news. They are showing the impacts for peoples' health and well-being, biodiversity and sustainable usability of our natural capital. To develop intelligent and sustainable solutions to cope with these impacts is the largest challenge of the 21th century.

With the Green Infrastructure Strategy and the Concept of Ecosystem Services the European Union has developed first strategic approaches which need to be concretized and implemented on regional and local level. For this purpose, suitable assessment methods must be developed and tested, which should be possible, at least in part, by adapting German methods of landscape planning proven for many years.

### Approach for the internship:

As part of the internship, in the summer semester 2019, the green infrastructure approach is to be applied and its ecosystem services are to be exemplarily recorded. In the tri-border region, concrete areas / elements of the green infrastructure that represent a wide range of different biotope types should be visited. At first their biotope classification needs to be reviewed and the degree of naturalness (hemeroby) should be assessed. The next step is to record the ecosystem services of these biotopes. This is followed by an evaluation of the data collected with regard to the functionality of these ecosystems in the triborder region.

The internship is part of the international project "MaGICLandscapes" (Managing Green Infrastructure in Central European Landscapes). The project is funded by the EU.

(further Information: www.interreg-central.eu/MaGICLandscapes)

Possibly, comparative work in other case study areas of the project "MaGICLandscapes" can be carried out during the internship.

The results of the internship will be used in the research project "Ma-GICLandscapes" in order to develop a generalized methodology for assessing the functionality of green infrastructure and to visualize the distribution of specific green infrastructure ecosystem services in maps. On this basis, gaps in the

## Kontakt:

Dr. Henriette John h.john@ioer.de Tel. +49 351 4679-219

Dr. Marco Neubert m.neubert@ioer.de Tel. +49 351 4679-274

Leibniz-Institut für ökologische Raumentwicklung e. V. Weberplatz 1 01217 Dresden









green infrastructure can be identified and the need of action can be derived with regard to the creation or improvement of green infrastructure.

After the internship, it is possible to do a thesis.

Working languages are German and/or English. Knowledge of Czech and/or Polish language is an advantage.

The Leibniz Institute of Ecological Urban and Regional Development (IOER) in Dresden is an establishment of the Leibniz Association for research in the spatial sciences focusing on ecological aspects of sustainable development. It was founded on 1 January 1992, is jointly funded by the federal and Saxony governments and is a research establishment with a staff of over 100.

The Institute addresses the scientific basis for the sustainable development of cities and regions in the national and international context. Research concentrates on five main research areas.

The internship is integrated into the following two research areas:

The 'Landscape Change and Management' research area analyses the changes in cities and regions. Open spaces and their ecosystem services are given special consideration, as are the strategies, tools, and forms of governance required in order to influence them.

The 'Environmental Risks in Urban and Regional Development' research area deals with the analysis and assessment of environmental risks caused by natural hazards and climate change as well as with the respective measures, strategies and tools required for taking the risks into account.

[www.ioer.de]

www.ioer.de