

Experimental Ecology – Experimentelle Ökologie

BACKGROUND AND AIMS

The specialist group was founded 1995 on the 25th annual meeting of the GfÖ held in Dresden with special focus on experimental ecology of plants in order to apply methods and to involve knowledge of physiology and biochemistry in entire plant stands (community and ecosystem level). Starting with 15 members now about 80 scientists are enrolled. The (selected) topics of annual and now biennial meetings are reflecting the development from *ecophysiology* of plants to *functional* (plant) *ecology* and *biogeochemistry* and their linkage, e.g.:

- Functional impact of biodiversity
- Allocation within plants and ecosystems
- Interactions and processes of the rhizosphere
- Ecology of disturbed systems and plant life in extreme an environment
- Plants on boundaries between atmospheric and chemical cycles

Key subjects of the group are:

- √ Productivity and cycling of matter
- √ Interaction and trade offs between belowground and aboveground processes and between plants and associated organisms (e.g. link to phytopathology)
- √ Effect of functional traits and processes on pattern (link to vegetation science and population ecology)
- √ Biodiversity and ecosystem function (link to evolutionary ecology)
- √ Carbon fixation and storage related to Global Change (link to biogeochemistry)
- √ Adaptation and abiotic and biotic stress compensation on different levels of complexity (from plant cell to ecosystem) and ecotoxicology (link to chemical ecology and toxicology)



RECENT ACTIVITIES

- Symposium as part of the GfÖ Annual Conference 2008 „Biogeochemical cycles of terrestrial ecosystems in a changing environment“
- Workshop 2008, TU Dresden (Tharandt) „Plant life in an extreme and a changing environment“
- Methods workshop together with the Specialist group „Desert Ecology“ in Bayreuth in 2009 connected with the next Annual Meeting of GfÖ
- Next biennial workshop in 2010 in Kiel
- Various publications and media reports

FUTURE ACTIVITIES

- Further Symposia as part of GfÖ Annual Conferences
- Further specialist group workshops together with other specialist groups and scientific societies
- Training courses and summer schools
- International cooperation between societies and news groups
- Development of new research initiatives