

Experimental approaches and field studies to investigate ecosystem integrity under multiple stress

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May 9, 11:05 - 12:45, Hall 300

This session aims at discussing recent insights in the individual and combined impact of various stressors - which comprise amongst others anthropogenic chemical pollution, predation (including predator or alarm cues), temperature variation, invasive species etc. - on different levels of ecological complexity. Thereby, the impact on the physiology of individual organisms and the potential propagation of these effects to higher levels of ecological organization will be one focus topic. Moreover, contributions addressing the consequences of stressor-induced alterations in the community composition of prey and predator organisms on horizontal (within a trophic level) and vertical (across trophic levels) interactions within food webs under stress are invited. Studies using controlled experimental approaches (e.g., factorial designs) that further the mechanistic understanding of stressors' interactions or correlational field studies are welcome. By doing so, the role of multiple stressors for the integrity of ecosystems' structural and functional characteristics are discussed, fostering a more holistic and realistic assessment of risks associated with the use of organic and inorganic chemical stressors.