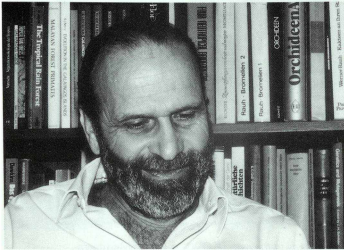


Terrestrial Ecology

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Research

The main field of activity of the department is ecological investigations in dry grassland ecosystems as well as in forest ecosystems of eastern Austria. In the Pannonian-influenced areas of Lower Austria and Burgenland, faunal relations are being studied. This includes space-time analyses of vertebrates (G. Spitzer), environmental influences on insect populations (K. Säger), ecosystem analyses (W. Waitzbauer) and soil ecological research (Ch. Kampichler). In cooperation with various Austrian institutions (Institute of Plant Physiology, University of Vienna, the Federal Agency and Research Centre of Agriculture, the University for Agriculture and the Federal School of Horticulture), Ch. Kampichler developed a promising mesocosm technique for assessing the impact of soil biological processes under field conditions.

A second focus is insect communication mainly, in Southeast Asian rainforests and deciduous forests (K. Säger) and in deserts of the Middle East, e.g. the Sahara and Jordanian deserts (W. Waitzbauer).

Teaching

The teaching activities of the department reflect the above-mentioned research programmes. Lectures are conducted on basic ecology, entomology, tropical ecology, ecophysiology and methods in ecology. Practical courses on animal taxonomy and determination (Zoologische Grundübungen II) and on soil biology are also held. Members of the department lead ecological excursions in Austria, in the Mediterranean area and overseas. Excursions to Croatia (Cres Island), Tunisia and Jordan, supervised by W. Waitzbauer, are conducted in cooperation with the Institute of Plant Physiology of the University of Vienna.

International Cooperations

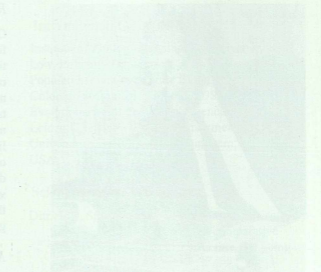
Ch. Kampichler is currently cooperating with the NERC Centre of Population Biology at the Imperial College at Silkwood Park, UK. He works on the effects of enhanced temperature and carbon dioxide on soil biological processes.

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... of the soil pore surface and its effect on available habitat space of microarthropods. The roughness of the soil pore surface is a key factor in determining the available habitat space for microarthropods. This is because the roughness of the soil pore surface affects the surface area of the soil pore, which in turn affects the amount of soil pore surface available for microarthropods. The roughness of the soil pore surface is also affected by the size of the soil pore, the shape of the soil pore, and the distribution of the soil pore. The roughness of the soil pore surface is a complex function of these factors, and it is important to understand the relationship between these factors and the roughness of the soil pore surface in order to better understand the available habitat space for microarthropods.



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