



Symposium on

Community Ecology and Conservation Biology



Bern, Switzerland
August 14 - 18, 1994

Abstracts

Symposium on Community Ecology and Conservation Biology

organized by

Systematisch-Geobotanisches Institut
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Ecological monitoring of vegetational cover: principles and methods of organization

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Dramatic Changes in flora and vegetation under man's influence necessitate taking control of this process. Ecological monitoring of vegetational cover (or briefly, botanical monitoring) is a subsystem of biosphere monitoring. It is the permanent service of watching over state and level of anthropogenic changes of vegetation, especially in regions and places of its intensive economic use. The aim of such monitoring is to warn against all cases when and where anthropogenic pressure upon plant communities exceed permissible levels and there is a danger of sharp drop in their productivity, of deterioration of environment, or of extinction of rare and valuable plant species. Botanical monitoring is based on revealing the degree of differences between actual state of vegetation and potential (or similar to it) vegetation represented by a system of protected areas. It includes remote sensing, visual observation from board of artificial earth's satellites, airplanes and helicopters, cosmic and airphotographs, watching plant communities and populations of rare plants on permanent and temporary sample areas, composing geobotanical maps (including prognostic ones). Botanical monitoring may be realized at biosphere, national, regional and local levels. The basis of botanical monitoring is constituted by potential vegetation in the framework of protected areas (biosphere reserves, zapovedniks, national parks, sanctuaries and permanent sample plots), as well as by the system of control plots representing plant communities in different stages of their degradation. For permanent sample plots the special regime of protection and moderate use must be elaborated that will secure steady state of their floristic composition and structure.