

B. Ammann (University of Bern) gave an overview of methods and approaches in paleoecology. Subsequent presentations covered topics such as tree migration, impacts of climate and humans on vegetation changes, and reconstruction of historical fire regimes. The second session focused on the historical time scale. M. Bürgi (WSL, Birmensdorf) showed how environmental history and historical ecology extend paleoecological approaches up to the present time. Other presentations focused on past disturbance patterns in forest ecosystems, with an analysis of fire history and ecology. In the afternoon, J. Dearing (HITE

Leader, University of Liverpool, UK) presented the Lac d'Annecy project in France, a study of the impact of changes in historical land use and climatic shifts on sediment deposition. Other presentations on linking past with present ecosystem dynamics included approaches using aerial photographs, tree rings and genetic markers. The last session focused on assessing future ecosystem dynamics using modeling. H. Bugmann (Swiss Federal Institute of Technology Zurich) discussed how approaches for evaluating past ecosystem dynamics could be used to project future trajectories of terrestrial systems. Case studies covered

predicting future fire regimes and using models of insect outbreaks to derive sustainable management strategies.

The workshop revealed a wealth of approaches and data sources and illustrated the importance of an integrated approach. The need for multi-site studies, meta-analyses and comparative approaches was also recognized.

For more information see: www.wsl.ch/HITECH.

MATTHIAS BÜRGI
WSL, Birmensdorf, Switzerland
matthias.buergi@wsl.ch



Past Ecosystem Processes and Human-Environment Interactions

PAGES FOCUS 5 CONFERENCE, BUELLTON, CALIFORNIA 13-18 FEBRUARY 2005

PAGES Focus 5 is composed of three distinct but complementary sub-programs that focus on the human dimensions of environmental change: Human Impacts on Terrestrial Ecosystems (HITE), Land Use and Climate Impacts on Fluvial Systems (LUCIFS) and Human Impacts on Lake Ecosystems (LIMPACS). Program leaders and around 30 scientists representing 14 countries met for 4 days in February to discuss research findings and the future development of the program.

J. Anderson, R. Dikau and H. Bugmann led days dedicated to oral and poster summaries within the sub-programs, and John Dearing led a further day of presentations and discussion about modeling and integration. Talks and posters ranged from modern and historical flooding in the Mississippi catchment, to the causes of eutrophication in Lough Neagh and the sustainability of mangrove forest. M.-J. Gaillard ran a workshop on POLLENDAL, the calibration of pollen diagrams in terms of land cover. C. Crumley chaired a session on how to enhance links between the social and natural sciences.

Over twelve hours of lively debate identified a number of areas where Focus 5 could be developed, particularly concerning integration and regionalization of research outputs. A new integrative scheme for organizing Focus 5 science was proposed. It

emphasizes the synthesis of data and findings from multiple case studies for specific areas of the world. These syntheses will provide the long temporal perspective on the functioning and sustainability of specific regions. A simple matrix of zonal/azonal areas and the degree of previous human impact will provide the basic organizational structure (Fig. 1).

In practice, it is likely that regional groups will nominate their work for inclusion, and Focus 5 will encourage syntheses where they are required and new research where none exists. A number of flagship studies combining archives (e.g., sedimentary, documentary, instrumental) will be promoted as demonstration

projects. The new scheme will be launched at the PAGES OSM. This meeting was a rare opportunity for Focus 5 scientists to meet as a single group and achieved a great deal, especially in terms of integration. It served to emphasize the diversity of environmental issues and topics that Focus 5 lends itself to, and the clear need to learn from the past in order to understand the present.

Thanks to Isabelle Larocque for organizing the meeting and to all the participants for their full contributions.

JOHN DEARING
University of Liverpool, UK
j.dearing@liverpool.ac.uk

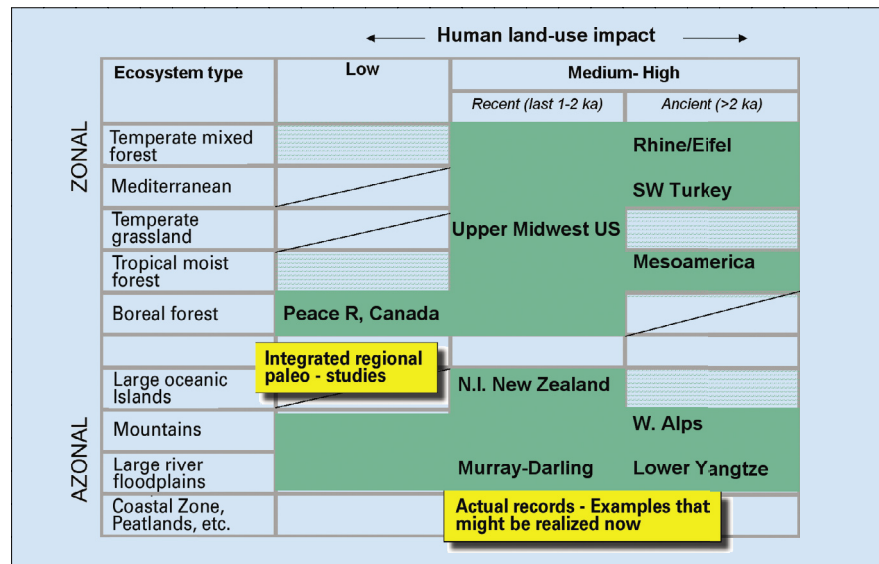


Fig. 1: Proposed matrix for regionalization of global case studies with geographical examples.