

Researching Transylvanian wetlands and hay meadows

The high, wide mountain basin of Csík and the steep valleys of Gyimes in the Eastern Carpathians of Transylvania form a unique and beautiful landscape, with a varied geology, rich biodiversity and a medieval vista of patchwork fields, meadows and pastures maintained by traditional agriculture.

László Demeter MIBiol, of Sapientia Hungarian University of Transylvania, and Barbara Knowles MIBiol, senior science policy adviser to IoB, are running a project to gather and communicate scientific evidence for the protection of wetland species and habitats in this area, train university students in practical wetland ecology and communicate the results to local people, children and decision makers.

This project has a number of related objectives:

- a systematic survey to identify and record wetland species and habitats of conservation value
- make proposals for their protection at European, national, county or local level
- create management plans
- improve access to information for scientists and the public
- create education materials
- train local students and researchers.

In the first phase of the project, we have identified a number of previously unrecorded wetland habitats, using high resolution aerial photographs of the region, and recruited 20 students for the fieldwork. We have spoken to the mayors of a number of villages about the value of the special wetlands in their jurisdiction, and identified the land ownership for many of the ponds. Fieldwork began in March 2009, to record and map the fauna and flora of the 200 seasonal ponds in the Csík basin.

We surveyed zooplankton (including nationally rare crustaceans like fairy shrimp species and calanoid copepods), amphibians (common frog, moor frog, smooth newt and great crested newt) and vegetation (we identified more than 100 species including several nationally rare ones). We made regular field outings in spring and a five day field trip in July with students of environmental engineering, training them to identify key species and involving them in laboratory measurements and mapping.

Working with the Pagan Snow Cap region association, we have received a grant from the Global Environment Fund to study “Mountain hay meadows – hotspots of biodiversity

and traditional culture”. Our project aims to facilitate the sustainable use of hay meadows and thus to maintain high biodiversity, important ecosystem services and healthy local communities.

Using both projects to talk to local people about the natural treasures in their area, we aim to help them to appreciate the value of these treasures and how they can benefit from protecting them; for example in education, ecotourism and through agri-environment schemes.

Two IoB members have generously donated pond ecology and monitoring equipment for the wetlands project. If you have second hand equipment to spare, or would like to fund or participate in some of the research and education activities of our projects, contact us.

The region is a great holiday destination for biologists, and for anyone interested in learning about and helping to preserve this very special part of Europe. We can arrange itineraries, local guides and accommodation. Your visit will support the local economy directly.

For more information, see www.treasuresoftransylvania.org or contact Barbara Knowles: barbara.knowles@yahoo.co.uk