## RES-224-25-0042, Prof E Tipping, Lancaster University 01 Sep 04 – 31 Aug 05

## Developing an Interdisciplinary Approach to Address Environmental and Social Issues Resulting from Changes in Land Use

The aim of this project was to develop ways for social and natural scientists to work together in order to address environmental and social issues resulting from changes in land use in the English Lake District. To achieve this aim four young scientists from the Lancaster Environment Centre engaged in a part-time year long process of learning how to work together and exploring ways of effectively working alongside stakeholders to address issues in the Lake District. The Lake District proved an excellent study area. As Foot and Mouth in 2001 revealed, whilst the landscape is very much a cultural (farmed) landscape, much of the population is dependent on income from the tourism sector. In order to try to understand potential futures in the Lake District it is clear that a holistic understanding of the links between the resident and visiting populations and rural land uses is essential.

The project mainly consisted of meetings where those involved discussed issues ranging from ways of studying and understanding the world, ways of doing research in groups of scientists with very different skills, to the current issues affecting the Lake District. In all, six main meetings took place, three of which were confined to scientists, and three involving both scientists and representatives of stakeholders. The first meeting engaged stakeholders in a discussion of the issues currently affecting the Lake District, and was instrumental in providing a focus for ideas on ways in which social and natural sciences could be applied jointly to provide useful advice and direction on such issues. As the project progressed and the young scientists' ideas on how and what to propose for future work clarified, the focus of meetings moved towards discussing draft proposals for future research among scientists and stakeholders, to ensure that the proposals were both achievable scientifically and were of value to stakeholders. The project enabled:

- The development of a group of young scientists with an increased individual and group capacity for undertaking interdisciplinary work through their enhanced understanding of the factors contributing to effective interdisciplinary science.
   A large number of small meetings took place between the scientists aimed explicitly at understanding their different approaches and assumptions.
- The wider development of an awareness of interdisciplinary potential and its importance within the Lancaster Environment Centre at Lancaster University.
- Establishment of links between the academic community and a range of stakeholders in the Lake District National Park resulting in increased awareness amongst stakeholders of the relevance of interdisciplinary science to an understanding of the rural environment. The research involved a range of stakeholders such as the National Trust, United Utilities and Cumbria Tourist Board to representatives from Commoner Associations.
- Increased awareness of the environmental and societal issues impacting on rural land use in the Lake District National Park and how these relate to particular stakeholders.
- Production of a proposal for work in the Lake District National Park which will
  incorporate public values into an exploration of potential future land use. If
  funding is gained for this proposal it will allow the young scientists to develop
  research techniques for the integration of natural and social science including
  public value towards developing potential scenarios of future land use.