

## **Managing Heterogeneity: Ethnographic Fieldwork within the LTER**

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“Where is that data file?” “How come no one told me about a meeting?” These are just two examples of the everyday questions we face as information flows across our desk. A 2002 study will focus on the management of heterogeneous data, collaborators and organizations as we explore how long-term ecological research attends to the handling and the preservation of both scientific and organizational information. LTER researchers as stakeholders and members of a collaborative network have unique experience with and insight into existing and emerging practices that are pertinent to the design of future research environments. As integrative science inquiries broaden and cross domains, the practice of science often involves participation in a range of collaborations through individual, project, discipline and digital networks.

With the support of a one year NSF/BDEI grant at UCSD (Designing an Infrastructure for Heterogeneity of Ecosystem Data, Collaborators and Organizations – G.Bowker and K.Baker), postdoctoral researcher Helena Karasti will gather an understanding of the existing heterogeneous “data ecologies” and “data practices” of LTER. In her recent thesis Karasti studied work practices and systems development in the field of clinical radiology, and explored ways of bridging the gap between the worlds of technology use and design. In the LTER context, her work will include promotion of community discussion and exploration of those aspects of organizational information where preservation of context alongside site data enhances scientific legacy. Fieldwork will begin with interviews and participant observation with members of Palmer LTER and the LTER network. Though the starting point is with individual people and their work, the research interest is not in practitioners’ personalities or individual styles but rather in their mundane, everyday information practices, e.g. how work is carried out, how information is generated and stored, how collaboration is achieved, and how technical and organizational infrastructure is used. The success of larger-scale collaborative efforts depends upon the production of high quality science through working practices facilitated by a supportive infrastructure. The fields of computer supported cooperative work (CSCW) and social informatics provide tools for developing a useful understanding of how we do long-term and networked science. The “Managing Heterogeneity” project will focus on the ways in which both scientific and organizational data is produced, used, shared, stored and reused across a range of media (such as paper, documents, journals, email, computer networking, organizational memory) within the LTER.

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\*References on the importance of work practice and user participation with design:

Baker and Bowker, 2001: [http://intranet.lternet.edu/archives/documents/Newsletters/NetworkNews/fall01/fall01\\_pg09.html](http://intranet.lternet.edu/archives/documents/Newsletters/NetworkNews/fall01/fall01_pg09.html)

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