

Infrastructuring for the Long-Term: Ecological* Information Management

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Abstract

This paper foregrounds the long-term perspective and the role of information management in creating infrastructure to support collaborative ecological research. The case study of the Long-Term Ecological Research Network is an ongoing, longitudinal scientific research collaboration. The three interdependent elements for which information management provides support (science, data and technology) are explored. Tensions are identified and related to the balancing requirements generated by work performed simultaneously within multiple timeframes, short-term and long-term. Learning community and collaboration-in-design are two mechanisms used within the LTER, where the mediating role of information management is developing across a spectrum of activities from research liaison and site change agent to system designer and information scientist. The notion of infrastructure as an ongoing design process highlights participation, co-construction, and the complex relationships between the long-term, data, information management, information systems, and infrastructure.

*Note: the term 'ecological' is used with two meanings, referring: 1) to ecological processes and the science of ecology and 2) to an analytic approach to data and collaborations denoting situated knowledges and concrete everyday work practices.