

**Highlights from Mini-NIS meeting****16 Feb 2001**

Dates: 30-31 January 2001

Location: LTER Network Office

From: K.Baker, J.Brunnt, D.Henshaw

Highlights posted at: [http://www.fsl.orst.edu/lter/im/nis\\_mtg\\_2001.htm](http://www.fsl.orst.edu/lter/im/nis_mtg_2001.htm)**Present at the meeting:**

Karen Baker (PAL/SiteDB module leader)

James Brunt (NET/ASBIB&amp;Personnel module leader)

Don Henshaw (AND/Climdb module leader)

David Blankman (NET)

Richard Dahringer (NET)

Troy Maddux (NET)

Bill Michener (NET)

Patricia Sprott (NET)

This meeting was originally proposed as a post-Snowbird meeting by Baker and Henshaw, but was instead supported by the Network Office as part of the on-going IM mission.

**NIS:**

Karen, Don, and James will report to IMEXEC the need for a revised NIS plan and NIS working group re-activation. The NIS working group has been without a chair since 1997. This meeting functioned as a NIS working group meeting by having the leaders of two of the central NIS modules present. Although not the original focus of the meeting, the work with ClimDB and SiteDB quickly involved the broader issues of definition and integration of modules into a Network Information System.

**SiteDB:**

*Background:* The SiteDB module, designed and functioning since Aug 2000, was implemented originally at Palmer site using SQLServer with a web interface scripted in Perl. The module performs four functions: input, view, modify and compare site data. Code was delivered to Network Office in August 2000 and documentation in September. The code has been migrated to SQLServer and subsequently to an Oracle implementation at the Network Office. Troy Maddux had populated the site table with information from site web pages and from the existing network collection of static site descriptions. David Blankman and James had created a preliminary database design integrating site administrative information, site physical description information, and personnel from SiteDB with network personnel and publication tables.

At this NIS meeting, a demo featured the current Network Office implementation of the input and view functions of SiteDB. After demos and discussions, a new and more normalized module design emerged permitting multiple metadata types for research sites and locations and allowing hierarchical referencing of sites and sub-sites. This extensible design will facilitate inclusion of site-level metadata for ClimDB as well as for any data module required of NIS. The design modifications also ensure ease of accommodation of research sites other than LTER sites such as OBFS and Forest Service. This integrated model forms the core of the research support or administrative side of the NIS.

David will make the necessary changes to the data model and will provide an updated Erwin Studio design (ERD) for posting by 9 Feb. (This is now available at <http://sql.lternet.edu/lternis/>). David will also implement the tables in the database and will post definitions for table fields. At that point Troy and James will begin the task of web interface integration and population. Deadline for this work is March 1.

**ClimDB:**

The ClimDB data model and interface have been designed to be extensible. Don Henshaw implemented ClimDB at the AND site and extended the concepts to include a new module, HydroDB. Initial tests and demonstration indicate that the ClimDB data model and interface are extensible for selected other data types without requiring programmatic

changes.

Don will initiate remote harvest tests in order to include all sites previously part of the database, as well as encourage participation from all other sites. Draft documentation of ClimDB programs and processes will be completed in February. Climdb is undergoing some minor programming changes to make it more robust. Primary emphasis will be the refinement of the administrative front-end, in particular, the improvement of the harvester to include a user-feedback mechanism. Consideration will also be given to improving the query interface and graphical displays. Richard and James will complete these program changes by 15 March with complete harvest of all site data expected at this time. With the extensions mentioned above in SiteDB, ClimDB forms the core of the research side of the NIS.

Complete notes of our ClimDB discussion are available: [http://www.fsl.orst.edu/lter/im/climdb\\_notes\\_01.htm](http://www.fsl.orst.edu/lter/im/climdb_notes_01.htm)

### **HydroDB:**

HydroDB is a project being led by Don Henshaw in coordination with the USFS Forest Health Monitoring (FHM) program to share intersite hydrology data similarly to LTER climate data using the ClimDB model. Don was able to incorporate hydrology data directly into ClimDB without additional programming. This bodes well for using this prototype to produce other value-added cross-site databases. This is exciting news.

### **All-Site Bibliography:**

The group developed a plan for revision and enhancement of functionality for the all-site bibliography. The ASBIB database was last updated in 1998 and has not been updated since because of the difficulty in working with the ever-evolving site-specific scripts that are required to integrate the data. The group present agreed that an enabling solution would be to consider implementation of the LTER Network bibliographic record standard within the powerful new Endnote 4.0 software package available for a variety of computer platforms. After consulting with the Executive Director, James Brunt will investigate purchase of this software for those sites that would like to try it as an alternative for providing their site bibliography data to the NIS. James would also put together the necessary input and output filters to facilitate updates. Sites would have the option of producing a standardized bibliographic format file independently, or using the Endnote software to do it. The FREE software would provide a carrot for getting the data renewed on a more regular basis and would allow the Network Office to use the ISI Reference Web Poster as an end-user interface which provides a great deal of the desired searching and sub-setting functionality.

### **All-Site Personnel:**

The personnel table will interface with SiteDB and all NIS modules, and personnel role types have been redefined.