IMLS Interim Progress Report 2

Interim Progress Report
IMLS Museum/Library Collaboration Grant
University of Michigan
Flora and Fauna of the Great Lakes Region
May 2001-October 2001

The most significant event in this reporting period was the addition of Terri Geitgey to the project team. Terri joined us in early June, as the IMLS Project Librarian. She is devoted full time to the project and has primary responsibility for collection implementation and evaluation. Other significant accomplishments are reported in topical sections below.

Digitization

The primary digitization activity of this period was the fish field notes. The process included detailed selection by the curatorial staff of the fish division, agreement on a basic metadata structure for the creation of surrogate records for the field notes (see below), extensive testing to develop scanning guidelines including resolution, scanner settings, and file naming conventions, as well as the scanning itself. In addition, an oversize map related to mammals in Michigan was photographed and scanned.

The largest piece of digitization remaining is the specimen capture. This work was delayed as selection and ordering of equipment took longer than expected, since we needed to ensure interoperability with present lenses available in the museums and to accommodate future plans for equipment utilization beyond this project. All of the equipment is now on site and testing is about to begin. Since these specimen images will link directly to collection records, no additional descriptive metadata will need to be created.
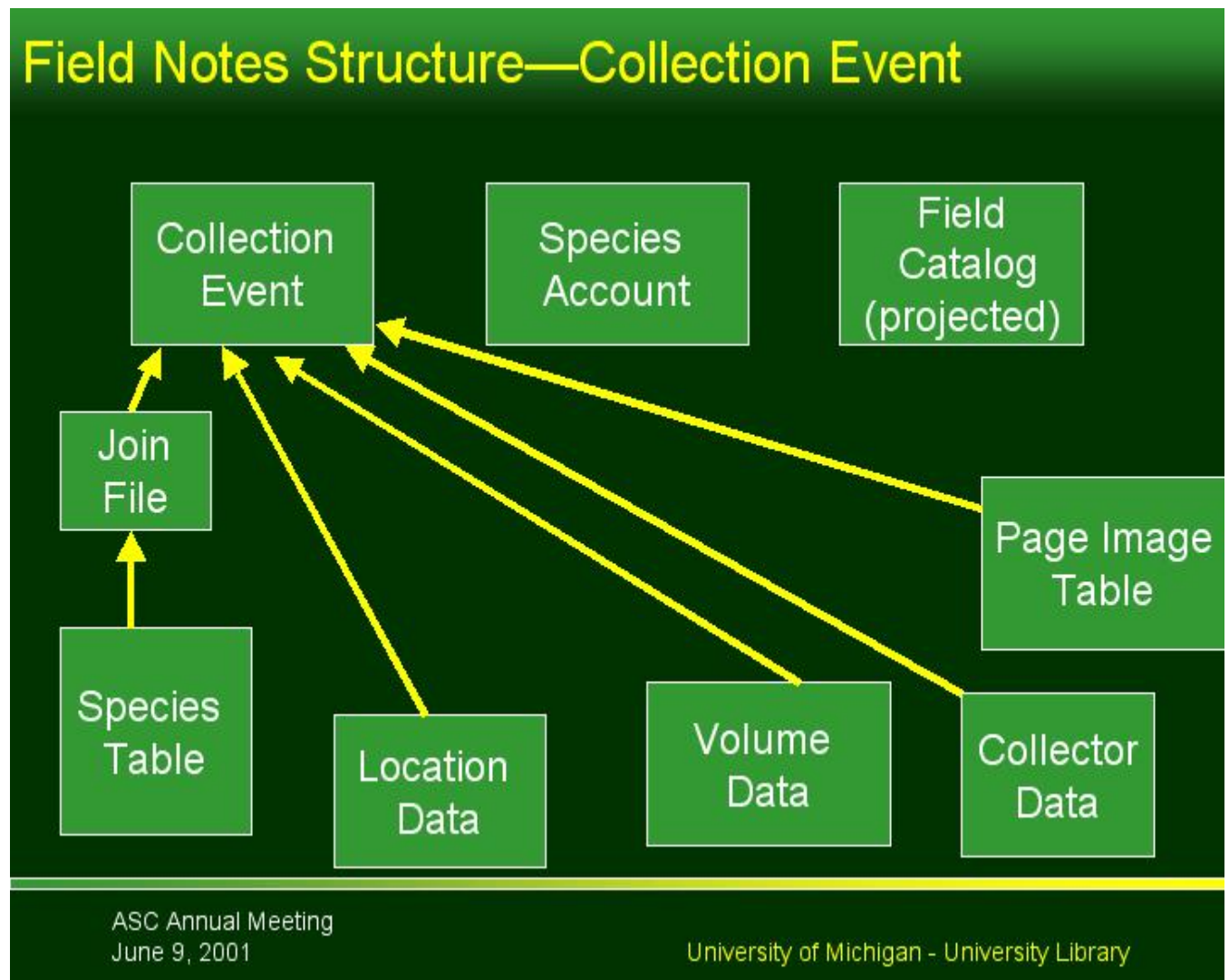
Metadata Analysis and Creation

One of the earliest activities that Terri tackled was the development of a detailed metadata map of the existing museum collection management databases, mapping them to each other and to the Darwin Core. We reviewed this map with the collection managers to resolve outstanding questions. The map formed the basis for subsequent discussion of search access points and fields to include in record displays.

 Another major content component of this project are field notes from the Fish and Mammals Divisions of the Zoology Museum. In addition to scanning these, we have been creating surrogate records to provide access to the images and to link with other digitized content. Judy

Ahronheim, the project metadata advisor provided the following overview of the field notes data structure. More detail is available on the project website.

The Field Notes Database comprises three master files, with data being fed to them from seven related supporting files. Data will be exported to DLPS Image Services as reports composed of flat files constructed from records in the three master files. Each page of field notes is identified as being part of either a collection event, a species account, or a field catalog (currently only the collection event is being used for the fish data, as the data received has all been in that data form; data received for the mammals field notes are more varied and will make use of the other forms). Below is a representation of the data structure being used for the collection event part of the field notes database. Supporting tables provide standard data to speed data entry in the collection event master file. A similar model will be used for the Species Account and Field Catalog files. The ratio is one collection event or species account or catalog entry per record. Each record is then associated via a table with one or more page image file names.

Field Notes Structure—Collection Event

ASC Annual Meeting
June 9, 2001

University of Michigan - University Library

System Implementation

We have developed a phased implementation plan that supports a model of iterative development and evaluation. That plan is currently in its first phase, where relevant data records from the three collection management databases (Fish, Fungus, and Mammals) have been exported from their native systems, massaged, and imported into the existing DLPS Image Services infrastructure. Clean-up and enhancement of these databases included standardizing the collection date fields to ISO 8601 format, adding common names when available, and including statements concerning copyright and use permissions. SGML transformation then took place, and the normalized SGML files were indexed and configured for each collection. Once the data transformation was complete, preliminary interface design and testing could begin.

Evaluation Planning

Our evaluation planning has taken two tracks: ongoing evaluation and iterative improvement of the system, using primarily focus groups and external evaluation resources, and a focused evaluation of system content, use, and impact that we plan to develop and deploy in one or more undergraduate classes next fall. The first evaluation effort is being framed now to coincide with the earliest system rollout scheduled for December 2001. We also plan to do an internal evaluation measuring our project against the benchmarks set out in the recent IMLS publication, A Framework of Guidance for Building Good Digital Collections.

Project timeline for year 2

A revised timeline for the remainder of the project was developed as a part of our one-year review and planning process. Realistic high-level milestones were developed for each of month of the grant period.

Month	Milestones	Concurrent activitiesLibrary	Concurrent activitiesMuseums
October 2001	Complete data export from 3 museum collection management databases	Continue with field note scanning and cataloging (ongoing)	Coordinate digital photography of specimens
		Specimen photography	

		(ongoing)	
		Databases for other images (ongoing)	
November 2001	Strawman implementation for searching 3 databases and for cross-collection searching		Coordinate digital photography of specimens
			Meeting to review strawman implementation of 1st release
December 2001	Refinement of initial implementation		Complete additional image selection
January 2002	Constitute focus group for evaluation of initial implementation	Mammal field note imaging	Participate in focus group?
February 2002	Fungus monographs online in text class	Watercolor database cleanup	
March 2002	Watercolors online	Specimen image database cleanup	

	Event????		
April 2002	Specimen images online	Field note database cleanup	
May 2002	Field notes online	Loose ends	
June 2002	Maps and other image material online (continue into July)	Loose ends	
July 2002	Cross-class searching implemented by DLPS programmers	Design evaluation	
August 2002	All content online and linked for cross-collection/cross-class searching	Design evaluation	
September 2002	Evaluation	Lead project evaluation	Participate in evaluation
October 2002	Evaluation	Lead project evaluation	Participate in evaluation
November	Evaluation	Lead project evaluation	Participate in evaluation

2002			
December 2002	Final report		
January 2003	Final report		

Other Activities

In June 2000, Judy Ahronheim and Christie Stephenson presented an overview of the project and its goals at the Association of Systematics Collections, now the Natural Science Collections Alliance. The slides for the presentation are available on the web at http://www.lib.umich.edu/files/collections/flora/asc2.ppt. This conference was an exciting opportunity for us to meet with colleagues from other institutions engaged in similar work, including representatives of several IMLS-funded projects.

Plans are proceeding to sponsor a campus-wide event in the spring to bring together representatives from this project, the other natural science collections, the School of Education and the School of Information to discuss synergies between various natural science projects based at the University of Michigan and opportunities for future expansion and collaboration. A specific outcome from this meeting will be to develop a plan for moving our current work into compatibility with the NSDL initiatives. We are planning to work with other campus projects to facilitate the creation of project or collection-level NSDL/OAI-compliant metadata.