

MetaArchiving Diatomscapes and FSU "Flying High" Circus Digital Collections: Using Aspects of The DCC Curation Lifecycle Model

Abstract

This poster will use text, images, and screen captures to show aspects of The DCC Curation Lifecycle Model involved in the online digital collection building and preservation of Diatomscapes and FSU "Flying High" Circus archival digital objects. The Diatomscapes digital collection consists of thirty-eight images of biological silica produced from JEOL JSM-840/FEI Nova Nano SEM 400 scanning electron microscopes and the FSU "Flying High" Circus digital collection consists of one-hundred and fifty black & white images and 1 short video created from a TTI overhead, fixed-back scanner. Both projects are case studies in the application of The DCC Curation Lifecycle Model to digital objects.

Working closely with Florida State University Biological Scientist, Dr. A.K.S.K. Prasad, the FSU Libraries Digital Library Center has begun the application of several aspects of The DCC Curation Lifecycle Model to the curation of Diatomscapes, images of biological silica. The preservation and store aspects of The DCC Curation Lifecycle model applied to Diatomscapes utilizes the MetaArchive, distributed digital preservation network and the Florida Center for Library Automation (FCLA) Florida Digital Archive (FDA). The access, use, & reuse aspects of The DCC Curation Lifecycle model applied to Diatomscapes utilizes Picasa and Flickr whereas FSU "Flying High" Circus utilizes FSU Libraries Digital Collections (DigTool). However, Diatomscapes exist as restricted on-line digital collections in Picasa and Flickr pending publication of species name new to science at which time the digital collections will become open and available in FSU Libraries Digital Collections (DigTool).

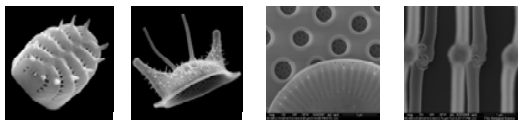
Working closely with Florida State University Special Collections department, the FSU Libraries Digital Library Center has developed the FSU "Flying High" Circus online digital collection in FSU Libraries digital content management system (DigTool) with archival tiff images preserved via MetaArchive.

The goals of both projects are to create the following:
 • Increase awareness, exposure, and application of The DCC Curation Lifecycle Model to digital objects within the biological science research disciplines with future interdisciplinary introduction & application
 • Develop a current, best practices, and extensible digital preservation strategy
 • Increase access, use, and use of digital objects via catalog, social networking tools, and OCLC WorldCat

Previous work:
 ✓ ACRL 14th National Conference - 3/15/09 Poster Session (Block Five) http://2007.ispace.ci.fsu.edu/~psmithii/acrl_03092009_fsu.pdf
 ✓ 4th International Digital Curation Conference - 12/2/08 Poster Session http://www.dcc.ac.uk/events/dcc-2008/programme/posters/e-Curation_of_Diatomscapes.pdf
 ✓ SPARC Digital Repositories Meeting 2008 - 11/17/08 Innovation Fair http://2007.ispace.ci.fsu.edu/~psmithii/2008-11-07_1717.swf
 ✓ FSU Libraries Digital Collections - FSU "Flying High" Circus (DigTool) - Fall 2007 http://digitool.fcla.edu/R/?func=collection-result&collection_id=1382&pd.s_handle=GUEST

Diatomscapes

Diatomscapes are images of biological silica and consists of diatoms ("microscopic, single-celled plants that thrive in freshwater, saltwater, brackish water and even semi-terrestrial environments" (Prasad, 2005)) and Radiolarian ("amoeboid protozoa that produce intricate mineral skeletons" digital images developed by Florida State University's Department of Biological Science faculty member, Dr. A.K.S.K. Prasad. Diatomscapes II is another collection of images of biological silica. The term Diatomscapes was developed by FSU Biological Scientist Dr. A.K.S.K. Prasad.

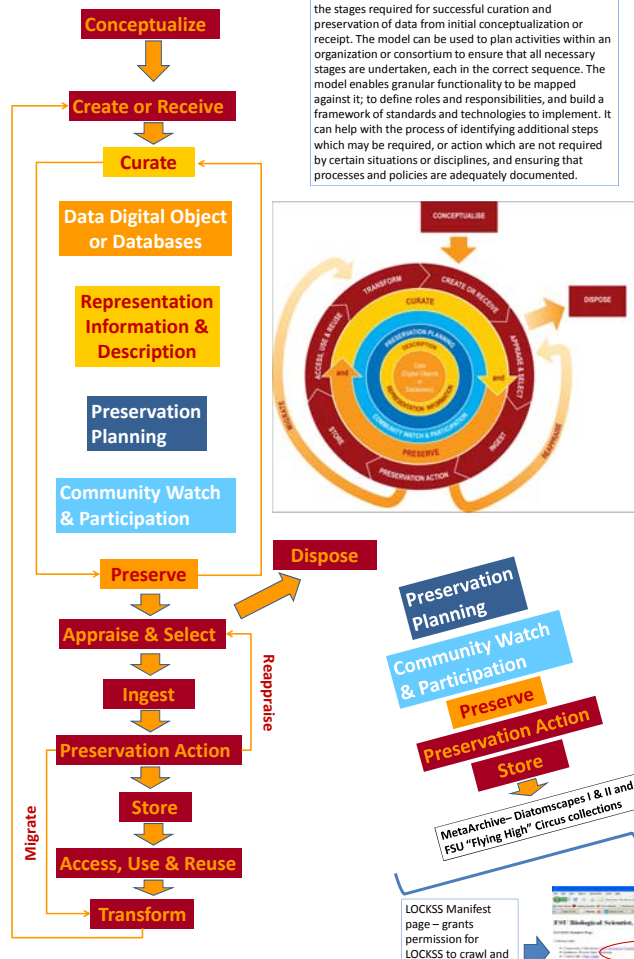


FSU "Flying High" Circus

FSU Flying High Circus Collections includes 152 black & white images and 1 short video highlighting FSU students that performed in the FSU Flying High Circus from the 1950s - 1960s. The collection also includes one digitized copy of the 1952 FSU "Flying High" Circus Program highlighting circus events from the May 1 - 3, 1952 performance from the Florida State University Libraries Special Collections.



The DCC Curation Lifecycle Model



The DCC Curation Lifecycle Model - The DCC Curation Lifecycle Model provides a graphical high level overview of the stages required for successful curation and preservation of data from initial conceptualization or receipt. The model can be used to plan activities within an organization or consortium to ensure that all necessary stages are undertaken, each in the correct sequence. The model enables granular functionality to be mapped against it; to define roles and responsibilities, and build a framework of standards and technologies to implement. It can help with the process of identifying additional steps which may be required, or action which are not required by certain situations or disciplines, and ensuring that processes and policies are adequately documented.

Data Digital Object or Databases

Access, Use & Reuse

Transform

DigTool Open Repository - FSU "Flying High" Circus Collection

Data Digital Object or Databases

Access, Use & Reuse

Transform

Picasa & flickr Social Software - Diatomscapes I & II

Preservation Planning

Preserve

Curate

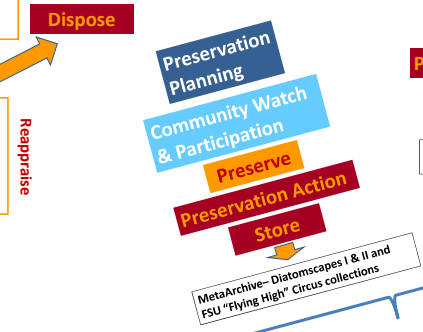
Preservation Action

Store

Florida Digital Archive (Dark) - Diatomscapes I & II

Florida Digital Archive (FDA) - Package Name; Ingest Time; Title; id; name; md5; sha1; size (online collection preservation statistics)

Migrate



LOCKSS Manifest page - grants permission for LOCKSS to crawl and harvest archival units represented as URLs (hyperlinks)

Points to RDF Descriptive Data from conspectus database entry

Collection Description Data Editor - describes digital collection in the MetaArchive Conspectus Database

Collections with green IDs are marked to be preserved (their archival units are part of the title database - Auburn Cap | FSU Cap | GA Teach Cap | Lou Cap | Rice | VT preservation caches)

Faculty acknowledgement
 "I am very pleased that my diatom images are now digitally archived as part of the pilot program for Florida Digital Archive - FDA) digital preservation. I am honored to be partnering with FSU Digital Library and your colleagues (Florida Center for Library Automation - FCLA) on this innovative program. Kindly extend my thanks, on my behalf, to Ms. Motyka and Ms. Caplan for their contributions to the success of this important aspect of our collaboration. I hope it is just the beginning for a long and mutually beneficial partnership between scientists and digital technologists. Thank you again for this exciting news. You made my day!" - Dr. A.K.S.K. Prasad, FSU Biological Scientist



Plato L. Smith II | Digital Library Department Head | Associate University Librarian
 Florida State University | FSU Libraries | Tallahassee, FL | USA
 850-644-3053 - Office | psmithii@fsu.edu

References:
 Boyer, E. L. (1997). Scholarship reconsidered: priorities of the profesorate. Retrieved March 6, 2009 from http://www.pcrest.com/PC/FGB/test/2_5_1.htm.
 DCC. (2008). The DCC curation lifecycle model. Retrieved December 9, 2008 from <http://www.dcc.ac.uk/>.
 FDA. (2003). Florida digital archive. Retrieved December 10, 2008 from <http://www.fsu.edu/digitalarchive/dia/dfs.htm>.
 Griffiths, A. (2008). The publication of research data: researcher attitudes and behavior. 4th International digital curation conference, Edinburgh, Scotland.
 Higgins, S. (2007). Draft DCC curation lifecycle model. The International Journal of Digital Curation, Issue 2 (2), 2007. Retrieved December 9, 2008 from <http://www.ijdc.net/ijdc/article/view/45/52>.
 Hunter, P. (2005, January). A tradition of scholarly documentation for digital objects: the launch of the digital curation center. *Arande*, 42. Retrieved September 18, 2007 from <http://www.arande.ac.uk/issue42/dcc-cu/>.
 Jantz, R. (2008). An institutional framework for creating authentic digital objects. 4th International digital curation conference, Edinburgh, Scotland.
 JISC. (2003). JISC circular 6/03 (revised) digital curation centre. Retrieved December 9, 2008 from http://www.webarchive.org/jan/13734/20060324/www.jisc.ac.uk/index261f.html?Name=funding_digcentre.
 JISC. (2004). JISC e-Research brochure, e-Science data curation. Retrieved December 9, 2008 from www.dcc.ac.uk/docs/dcc-life-cycle.pdf.
 Kinigh, K. (2006a). The promise and challenge of archeological data integration. *American Antiquity*, 71(3), pp. 567-578.
 Morphbank. (2008). About morphbank. Retrieved December 10, 2008 from <http://www.morphbank.net/About/Introduction/>.
 RIN (2008) To Share or not to share: Publication and quality assurance of research data outputs. Research Information Network, June 2008. Retrieved December 10, 2008, from <http://www.rin.ac.uk/files/Data%20publication%20Report%20main%20-%20final.pdf>.
 TDWG. (2007). Biodiversity information standards (TDWG). Retrieved December 10, 2008 from <http://www.tdwg.org/about-tdwg/>.