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Discovery & Born-Digital Archiving: Open Source Systems for Preservation and Access


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A decorative graphic on the left side of the slide, consisting of a vertical circuit board pattern with various lines and circular nodes in shades of blue and white.

DISCOVERY & BORN-DIGITAL ARCHIVING: OPEN SOURCE SYSTEMS FOR PRESERVATION AND ACCESS

EVERGLADES EXPLORER

EE.FIU.EDU

L. BRYAN COOPER; MARGARITA PEREZ MARTINEZ

DECEMBER 3, 2015

The logo for Everglades Explorer, featuring a stylized 'E' icon followed by the text 'EVERGLADES EXPLORER' in a bold, sans-serif font.

EVERGLADES
EXPLORER

EVERGLADES EXPLORER – EE.FIU.EDU

1 DISCOVERY SYSTEM; 1 SEARCH ENGINE; 1 INTERNET ARCHIVE;

WHY?

Live “sand-box” for play and continuing education; and to **prototype systems addressing needs** of Everglades Partners; e.g.

- * Loss of material at local government agencies (**SFWMD**)
- * Inability to expose collections to the larger world (**National Park**)
- * Local MARC records not “set” with OCLC (**MDPL**)
- * Need to get scientific data out of silos – federal mandate (**ILTER**)
- * Gov agency problems with CMS – search engine limitations
- * Inability to find historical research near scientific government reports

RELEVANT TECHNOLOGY CHANGE

- **OPAC & Technology Challenges – Google Search Ideal**
- **Federated Search Systems (Using APIs) to pull metadata from diverse silos Peaked 2009-2011)**
- **Internet Archive WARC files – ISO Standard in 2009**
- **Discovery Systems Ascendant – 2011**

LIBRARIANS APPROACH TECHNICAL SERVICES, ASKING....

*I found a **report** on website that is something the library needs to collect -- or used to collect and still should.*

*Saw a **bibliographic record** somewhere else, pointing to an electronic resource, and wanted to get that into our catalog or discovery system so FIU end-users could more easily locate.*

OUR PROJECT IS RELATED TO:

NATIONAL DATA TRENDS -- LIBQUAL...MOST RECENT REPORT

- Survey data reveals **insatiable demand** for access to an exponentially growing field of information.

- *“No library can ever have sufficient content that would come close to satisfying this appetite.”*
- *And “...our discovery tools are not quite maximizing the value libraries can deliver. There is a lot of room for improvement in this area.*

Martha Kyrillidou -- LibQUAL

OTHER REASONS? PROFESSIONAL PHILOSOPHY?

RANGANATHAN'S LAWS

- **1st Law** – resources are for use – fostering access as prime directive
- **2nd and 3rd Laws** -- every user his/her document (focus on knowing your users); and every record or document its user (focus on item – and making it easier to connect it with the user wanting it.)

RANGANATHAN'S LAWS

- **4th Law – Save Time of the User**

Join in one place what is in numerous different search systems, using the 3 search systems.

- **And 5th Law – adapt to change** – freeing up and syndicating metadata and data – preparing for enriching evolving discovery systems

SILOS -- FIU LIBRARIES & BEYOND

- When we started our project, there were silos where Everglades researchers would have to perform repetitive searches if performing a complete literature review.
 - Aleph catalog
 - FIU Digital Collections
 - Hathi Trust
 - FCE LTER site housing data sets and articles
 - National Park Service website and hidden museum catalog
 - SOFIA
 - GIS data
 - PALMM Everglades Collections
 - Miami-Dade Public
 - FIU/LTER partners like Odyssey Earth
 - Local Publications (born-digital)

FLA 2015 ANNUAL CONFERENCE POSTER SESSION

- **Linking Old Librarianship to New: Aligning 5-Steps of *The Innovator's DNA* in Creating Thematic Discovery Systems for the Everglades**



A screenshot of the FIU Digital Commons website. The header includes the FIU logo and 'Digital Commons FLORIDA INTERNATIONAL UNIVERSITY'. A navigation menu contains 'Home', 'About', 'Resources', 'FAQ', 'My Account', and 'Account'. A banner image shows a building at night with the text 'Preserving and promoting the scholarship, creative works and history of the FIU community'. Below the banner, a breadcrumb trail reads 'Home > FIU Libraries > FIU Libraries > 24'. The main content area is titled 'WORKS OF THE FIU LIBRARIES' and features a digital work titled 'Linking Old Librarianship to New: Aligning 5-Steps of The Innovator's DNA in Creating Thematic Discovery Systems for the Everglades'. The work is by L. Bryan Cooper and Margarita Perez Martinez, both from Florida International University. It has 32 downloads since June 03, 2015. A 'Download' button is visible. On the right side, there is a search bar with the text 'Enter search terms:' and a 'Search' button. Below the search bar, there are options for 'Advanced Search', 'Notify me via email or RSS', and 'Florida International University'. A 'Browse' section is also visible with 'Collections' and 'Disciplines' links.

<http://digitalcommons.fiu.edu/glworks/24/>

DISCOVERY SYSTEM





DISCOVERY SEARCH

Search MARC and Dublin Core records linking directly to digital resources

Search...

online only exclude microform

Search



ARCHIVED WEB SEARCH

Search archived documents in pdf, html and media formats [\(i\)](#)

Search...

contains exact starts with

Search



CMS SEARCH

Search selected Content Management Systems, sub-domains and folders [\(i\)](#)

Search...

Search

[HTTP://EE.FIU.EDU/](http://ee.fiu.edu/)

EVERGLADES EXPLORER METADATA

Partner Institution	Num. Rec.	Metadata Schema
Everglades National Park	5	MARC
HathiTrust	85	MARC
SUS Libraries Integrated Library System (ILS) - Aleph	402	MARC
Miami Dade Public Library	164	MARC
FIU GIS Center	12	EML
Florida Coastal Everglades Long Term Ecological Research (FCE LTER)	125	EML
South Florida Information Access (SOFIA)	250	FGDC
Publication of Archival Library & Museum Materials (PALMM) digital collections	3,450	Dublin Core
Total	4,493	XC

Narrow your search:

- online only
- exclude microform

- ▼ **Subject:Topic**
- [Everglades National Park](#) (3)
 - [FCE](#) (3)
 - [Florida Coastal Everglades LTER](#) (3)
 - [ecological research](#) (3)
 - [long-term monitoring](#) (3)

[More...](#)

- ▼ **Creator:Author**
- [James Fourqurean](#) (2)
 - [C.T. American Art](#) (1)
 - [Carole McIvor](#) (1)
 - [Douglas, Marjory Stoneman](#) (1)
 - [Hall, Margaret, 1947-](#) (1)

[More...](#)

- ▼ **Date**
- [1900-1999](#) (1)
 - [2000-2015](#) (6)

- ▼ **Library/Collection**
- [State Universities of Florida](#) (2)
 - [Florida International University](#) (1)

▶ **Other contributors**

▶ **Format**

▶ **Subject:Genre**





Search records



Select: [All](#) [None](#)

Relevancy 8 results

1. [The Everglades : river of grass /](#)
 format:  Films, videos — 1 streaming video file (approximately 5 min.) :
 location: <http://www.odysseyearth.com...>
 abstract: This short film by nature documentarian Richard C. Kern and his son Richard S. Kern briefly describes the Everglades and how water flow makes it a gigantic, slow-moving *river*.
2. [A Seminole Indian family at home in the Everglades of Florida — Beautiful Florida Series — The Everglades : river of grass /](#)
 by C.T. American Art
 format:  Films, videos — 1 streaming video file (circa 5 min.) :
 location: <http://www.odysseyearth.com...>
 date: ©2012.
 published: [Miami, FL] : Asheville, North Carolina: Asheville Post Card Co., Odyssey Earth,
3. [Decorative envelope and advertisement for book, 1947. \[electronic resource\]](#)
 by Douglas, Marjory Stoneman — *Reclaiming the Everglades*.
 location: <http://purl.fcla.edu...>,
<http://purl.fcla.edu...>,
<http://digitool.fcla.edu:80...>
 date: 1947.





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[HTTP://EE.FIU.EDU/](http://ee.fiu.edu/)



CMS SEARCH

ACROSS SELECT AGENCY AND PARTNER SITES USING GOOGLE API

- Everglades Digital Library
- Everglades Foundation
- Everglades NPS's channel
- Eyes on the Rise
- Florida Coastal Everglades (FCE) LTERNET
- Florida Keys National Marine Sanctuary
- Library of Congress Reclaiming the Everglades
- National Park Service
- Odyssey Earth
- SFWMD America's Everglades project site

- South Florida Information Access (SOFIA)
- South Florida Water Management District (SFWMD)
- Southeast Environmental Research Center (SERC) Water Quality Monitoring Network
- The Everglades Foundation Channel

The screenshot displays the 'Everglades Explorer' search interface. At the top, it says 'Powered by FIU Libraries and its partners' with 'Home' and 'Contact' links. A search bar contains the text 'shark river' and a 'Search' button. Below the search bar are tabs for 'Web', 'Image', 'Book', 'News', and 'Video'. The results are organized into three columns:

- Column 1:** Shows search results from external sites like 'Shark River in the Gulf of Mexico' and 'SOFA - Ecosystems'.
- Column 2:** Displays book covers and titles such as 'The Everglades' and 'Everglades'.
- Column 3:** Lists news and video items, including 'Lawsuit Filed to Protect Everglades', 'Fishing Best Bets', 'Just a sliver of BP', 'Obama Everglades', and 'Predators of Shark River'.

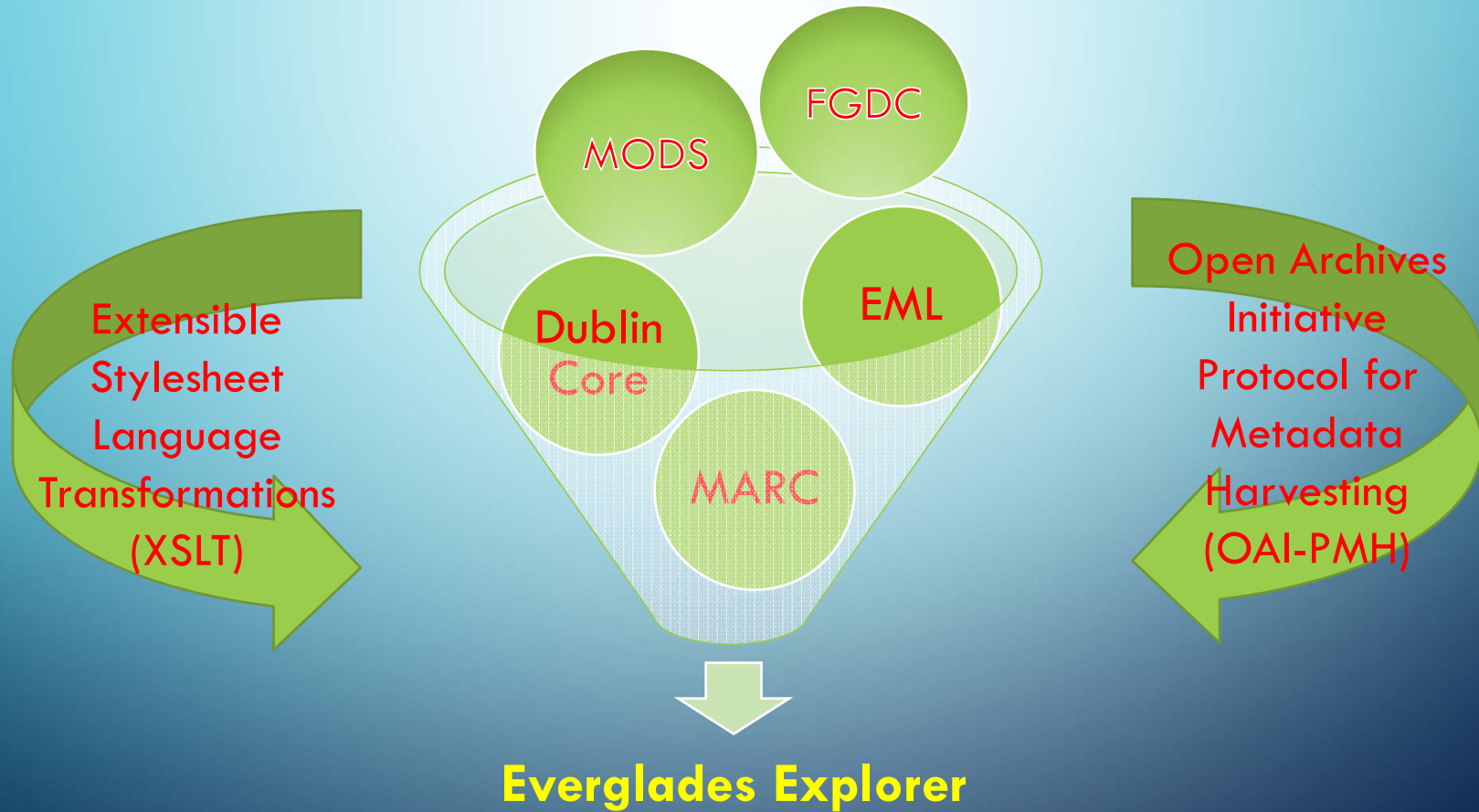
At the bottom of the interface, the URL 'ee.fiu.edu' is visible.



WHAT HAVE WE LEARNED ?



METADATA CHALLENGE



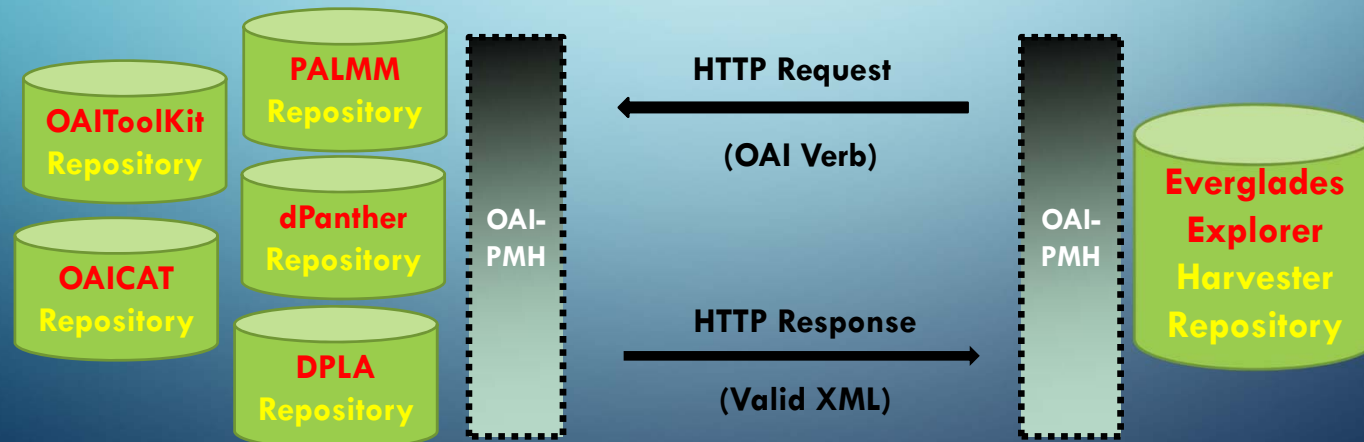
ee.fiu.edu

METADATA TRANSFORMATION

Extensible Stylesheet Language Transformations (XSLT)



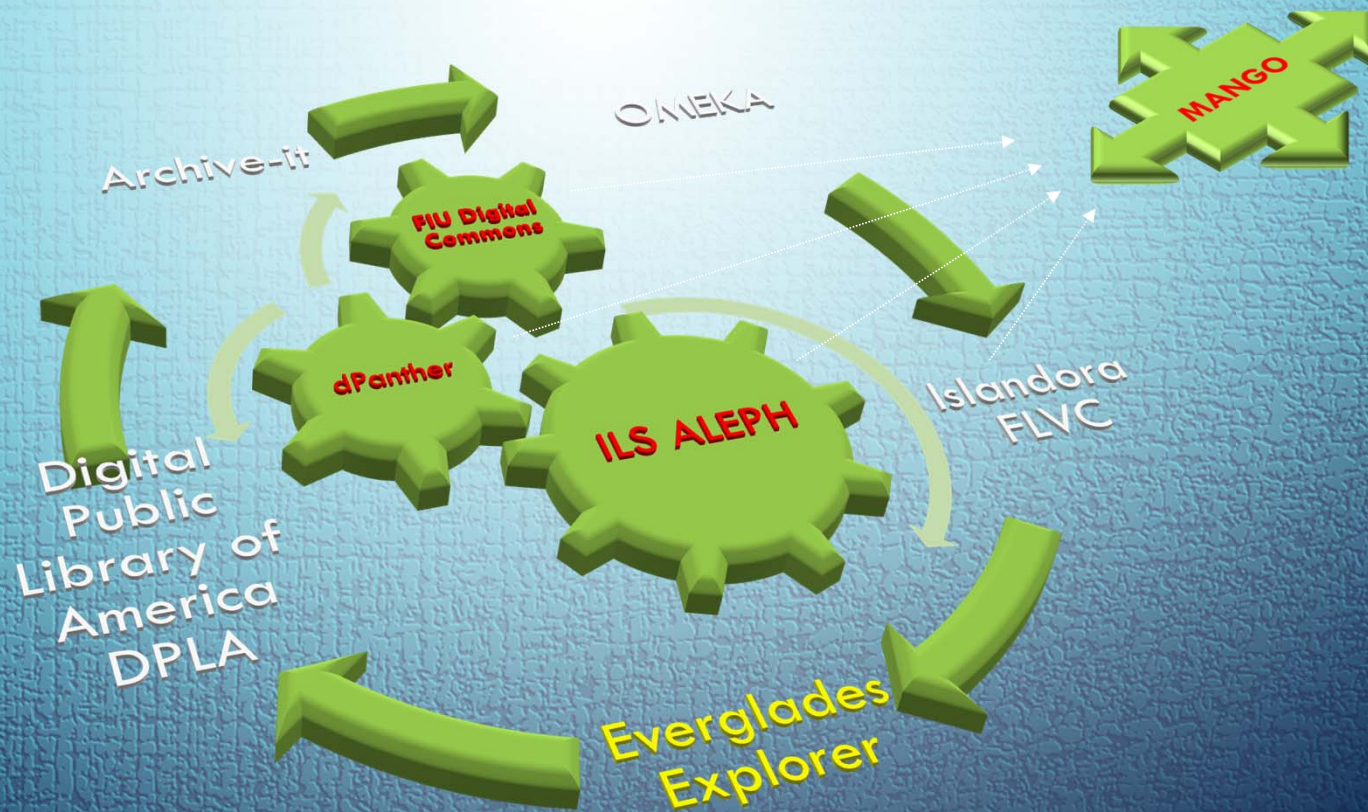
Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH)



Low-barrier mechanism for repository interoperability

HARVESTING OVERVIEW

Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH)



HARVESTING IMPACTS

February 2015, Library and Information Technology Association (LITA) panelists say Top Technology Trends include enhancing **discoverability** (Enis, 2015)

Making content accessible **where the search originates** (e.g. Google, Google Scholar, WorldCat, DPLA, Europeana) creates value for digital libraries and users (Enis, 2015)

Repositories contributing to aggregators can experience **increased site visits from 55-109 per cent** (DPLA, n.d)

METADATA AGGREGATOR COOL PROJECT...



ee.fiu.edu

DIGITAL PUBLIC LIBRARY OF AMERICA (DPLA)

[HTTP://DP.LA/](http://dp.la/)

A **portal** that delivers students, teachers, scholars, and the public to incredible resources, wherever they may be in America.

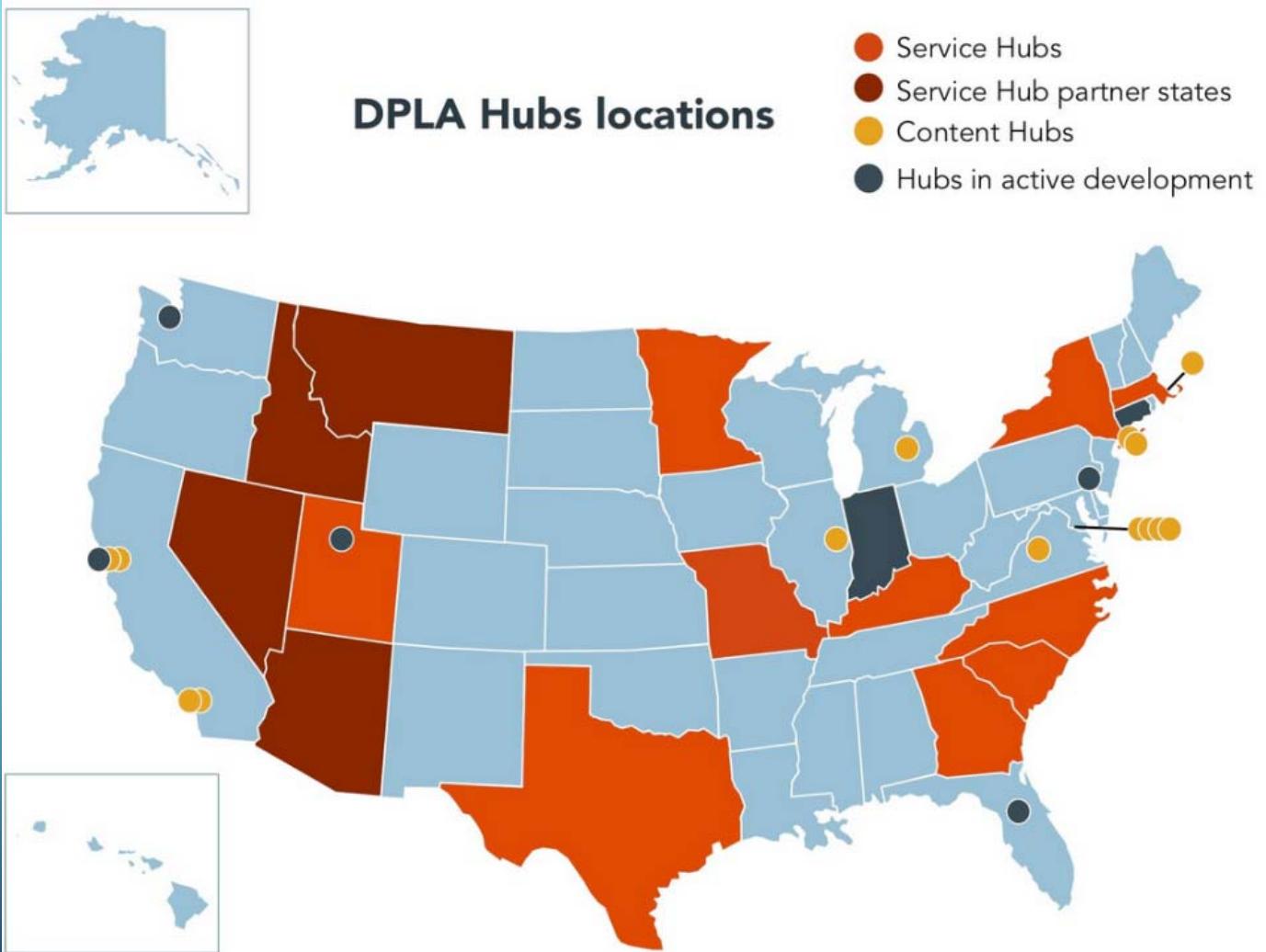
A **platform** that enables new and transformative uses of our digitized cultural heritage.

An advocate for a strong **public option** in the twenty-first century. DPLA seeks to multiply openly accessible materials to strengthen the public option that libraries represent in their communities.

The screenshot shows the DPLA website with a navigation bar at the top containing links for About, Hubs, For Developers, Education, Get Involved, Help, News, Contact, Donate, Login, and Sign Up. The main content area features a large historical map of the Americas with the text "AMERICA SIVE NOVI ORBIS NOVVA DESCRIPTIO". Below the map is a search bar with the text "A Wealth of Knowledge" and "explore 11,474,555 items from libraries, archives, and museums". To the right, there are sections for "Exhibitions" with a "View all" link, "Explore by Place" with a map of Clemson and a "Map" link, "Explore by Date" with a "Timeline" link, and a "Timeline" section with a year range from 1946 to 1952, where 1949 is highlighted.

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EXPLORER
FLORIDA



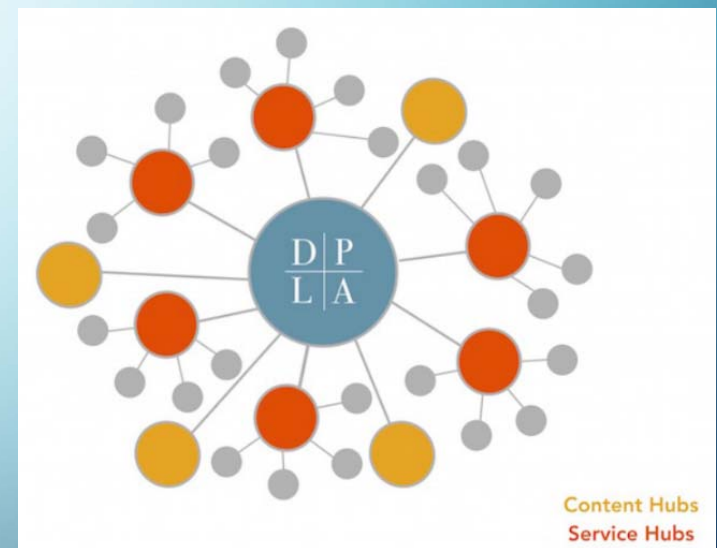
<https://digitalpubliclibraryofamerica.atlassian.net/wiki/download/attachments/524354/DPLA-states-map-20141007.jpg?version=1&modificationDate=1415646248263&api=v2/>

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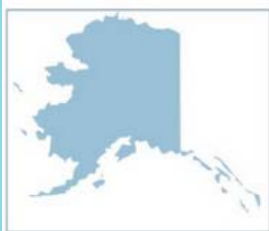
HARVESTING ROLES

Service Providers or Service Hubs then make OAI-PMH service request to harvest that metadata (State or regional projects)

Data Providers or Content Hubs are repositories that expose structure metadata via OAI-PMH (large institutions)



Retrieved from <http://dp.la/info/hubs/>

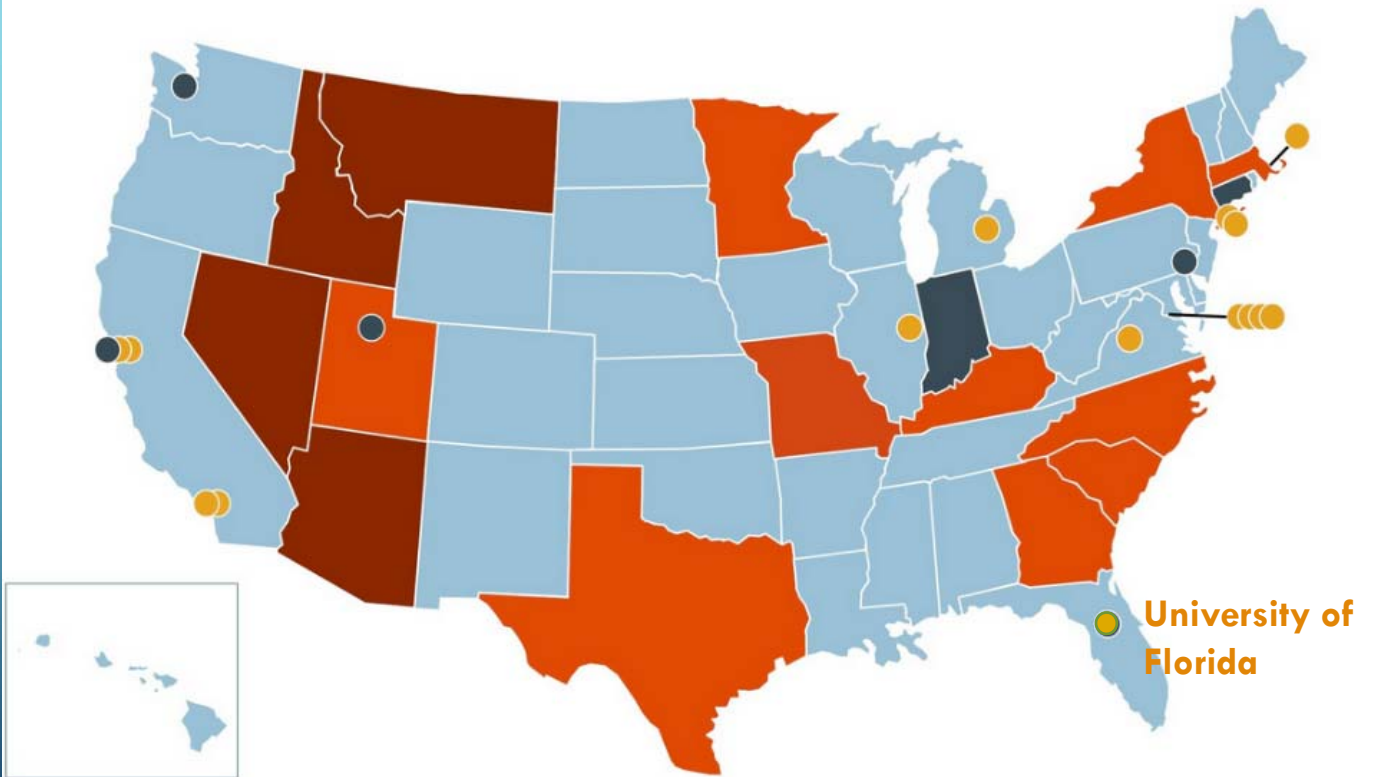


DPLA Hubs locations

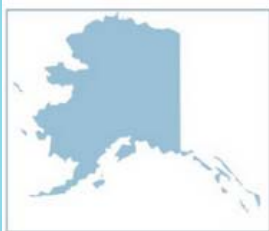
- Service Hubs
- Service Hub partner states
- Content Hubs
- Hubs in active development

State or regional projects)

Large institutions



<https://digitalpubliclibraryofamerica.atlassian.net/wiki/download/attachments/524354/DPLA-states-map-20141007.jpg?version=1&modificationDate=1415646248263&api=v2/>

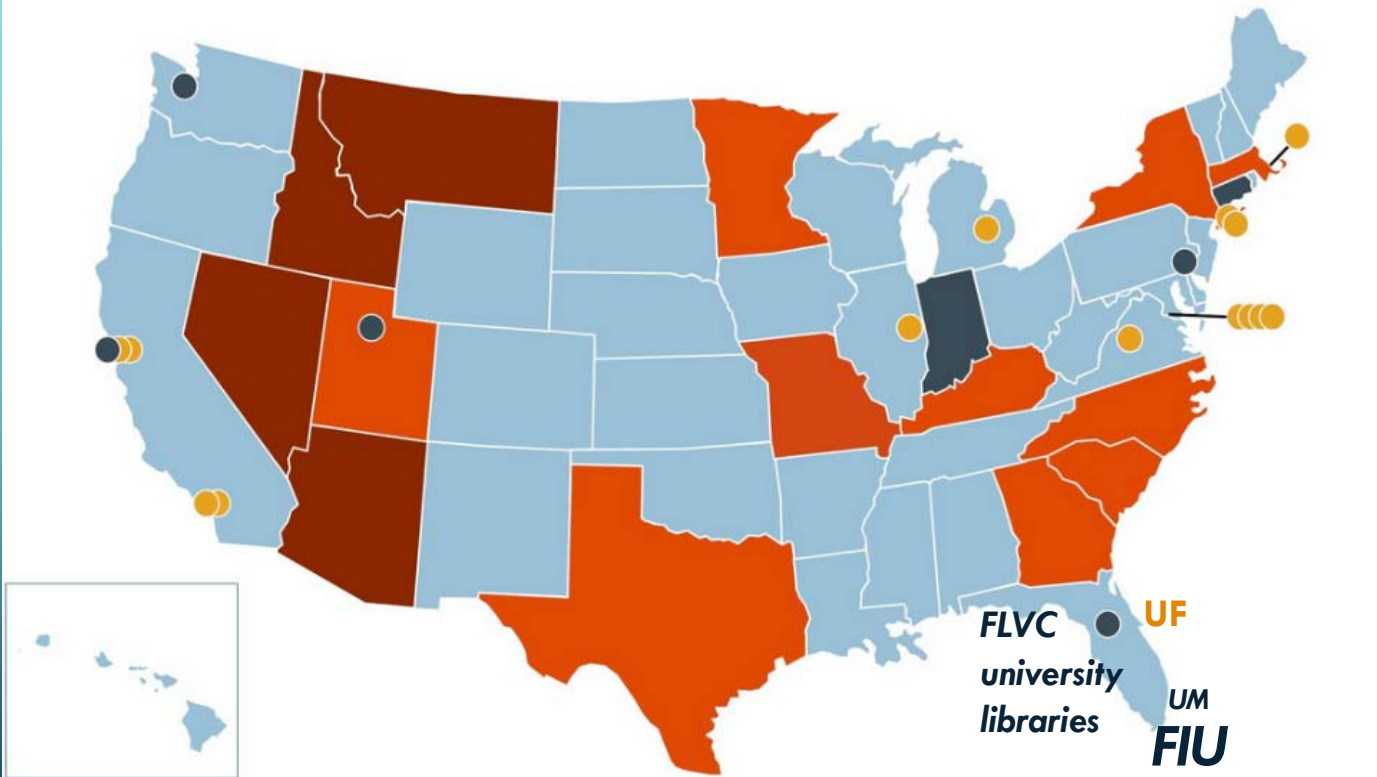


DPLA Hubs locations

- Service Hubs
- Service Hub partner states
- Content Hubs
- Hubs in active development

State or regional projects

Large institutions



<https://digitalpubliclibraryofamerica.atlassian.net/wiki/download/attachments/524354/DPLA-states-map-20141007.jpg?version=1&modificationDate=1415646248263&api=v2/>

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Search

[HTTP://EE.FIU.EDU/](http://ee.fiu.edu/)

ARCHIVE-IT



**FLORIDA
EXPLORER**

**OPEN –SOURCE SOFTWARE & HOSTING PROVIDED
BY INTERNET ARCHIVE (BREWSTER KAHLE)**



INTERNET ARCHIVE



- **Founded by Brewster Kahle in 1996**
- **San Fran based digital library with mission: Universal Access to All Knowledge.”**
- **Ambitious & Very Progressive – an activist organization**
- **Wayback Machine – 150 billion web captures**
- **Archive-It web-crawling & hosting service**

ARCHIVE-IT / MILESTONES

- **2002** – open source web crawler Heratrix released
- **2006** – Archive-It launched in 2006
- **2009** ISO standard achieved
- **2013** -- 13 initial partners grows to 238 – Best Practices for Web Archiving published

ARCHIVE-IT.ORG

FEE BASED HOSTING SYSTEM FOR OPEN SOURCE CRAWLS (HERATRIX)

- **ARCHIVE-IT.ORG TODAY** – 425 Thematic Collections from over 400 Institutions:
 - *Colleges & Universities; Law Libraries; Museuems & Art Libraries; National Institutions; NGOs, Local Government, State Archives & Public Libraries.*
 - **LOC Program, K-12 Web Archiving Program**

WHY ARCHIVE THE INTERNET?

- Ephemeral coverage of events – Occupy Movement (Occupy Wall Street)
- Earthquake in Japan (Virginia Tech)
- Warfare; Bad Guys – Passenger jet shot down over the Ukraine
- Politics --SFWMD – Ephemeral government documents

FIU – ARCHIVET-IT EVERGLADES EXPLORER A WEB ARCHIVAL SEARCH



- Small grant received to build collection / test system (\$3,000)
- 125 GB (1/8 TB; plus 3,000,000 URLs (documents).

A screenshot of the Everglades Explorer website. The top navigation bar includes the Archive-IT logo, 'HOME', 'EXPLORE', 'LEARN MORE', and 'CONTACT US' links. A 'Login' button is in the top right corner. Below the navigation, there is a banner for 'Florida International University Libraries' with the Archive-IT logo and a description of the service. The description states: 'Archive-It Partner Since: Mar, 2015. Organization URL: http://ee.fiu.edu. Description: Everglades Explorer is a library, archive and research service with customized search engines. Everglades Explorer's mission is to provide easier location of quality and specific information, and improve quick access to data, publications and maps buried or scattered across the shallow and deep web. The portal also provides records, links and archives connecting directly to video, sound recordings, pamphlets, books, photos, art, curriculum material, government reports, theses and dissertations, scientific data sets, and more. Everglades Explorer makes use of: 1) An open source discovery system (eXtensible Catalog) collecting and housing "thick" metadata in MARCXML and Dublin Core linking directly to diverse academic digital resources; 2) The "Internet Archive," collecting and linking searchers to Everglades related documents, reports and other resources in .pdf and media formats, mostly harvested from government and non-government organizations(NGO). 3) A targeted Google API searching across "thin" Everglades metadata and real-time Content Management System (CMS) websites of partners, and other select organizations and government agencies. Can't find something? Have a suggestion for something to add? Please contact us at perema@fiu.edu.'


TESTING ACQUISITION OF 3 DIFFERENT FORMATS

- Currently archiving 15 GB of Data; 242 active “seeds”
- 11,574 documents crawled, including:
 - HTML
 - Jpeg or other image files for maps
 - Video
 - PDFs

SO FAR, OUR LARGEST SINGLE HARVEST NETTED 6,492 PDF DOCUMENTS


- Test harvests included select partner documents
 - FCE LTER
 - National Park
 - SOFIA
 - SFWMD
 - Etc.

BESIDES [EE.FIU.EDU](https://ee.fiu.edu) – ARCHIVAL SEARCH BOX, CAN USE.... [HTTPS://ARCHIVE-IT.ORG/](https://archive-it.org/) KW EVERGLADES



HOME | EXPLORE | LEARN MORE | CONTACT US


The leading web archiving service for collecting and accessing cultural heritage on the web
Built at the Internet Archive



Welcome to Archive-It!
Attend a live informational webinar and demo to learn more about the service


Contact Us to sign up for an upcoming session:
Dec 10 2015, 11:00 AM PST
Dec 22 2015, 11:30 AM PST

Explore Collections [Show All Collections](#)




Smithsonian Institution Websites
By Smithsonian Institution

Over 200 websites archived related to Smithsonian museums, galleries, and programs.



Amateur Mormon Historian
By Brigham Young University

Features the lifestyle and culture of Mormons through self published blogs.



Everglades Explorer -- EAPRA (Assorted PDF & Report Archive)
By Florida International University Libraries

An archive of digital government and non-government organization (NGO) documents and reports, representing the Greater Everglades watershed and adjacent...

EVERGLADES EXPLORER

Florida Coastal Everglades Long Term Ecological Research

- About us
- Research
- Data
- Publications
- Student Organization
- Education & Outreach
- Intranet
- What We Do
- News
- Jobs
- Meetings
- Personnel
- Photos
- Visitor Info
- About the Everglades
- Contact Us

News and Announcements

Follow @fcelter



Newsletters



FCE Newsletter
Spring 2015
(PDF, 0.8 MB)



FCE Newsletter
Winter 2015
(PDF, 1.7 MB)



FCE Newsletter
Fall 2014
(PDF, 3.6 MB)



FCE Newsletter
Summer 2014
(PDF, 1 MB)

Narrow Your Results

Group Sort By: **Count** | **(A-Z)**

ERIC-- Education (11)

Subject Sort By: **Count** | **(A-Z)**

- Everglades National Park (24)
- Big Cypress National Preserve (10)
- Estero Bay (10)
- Hydrology (8)
- Climate Change (6)
- Endangered Species (5)
- Environmental Education (5)
- Lee County (5)
- Wildfires (5)
- Conservation Land (4)
- Estero Bay Agency for Bay Management (4)
- Everglades Headwaters (4)
- Everglades Restoration (4)
- Natural Resources (4)
- Science Education (4)
- Taylor Slough (4)
- Vegetation Report (4)
- Water Management (4)
- Bibliography (3)
- Dry Tortugas National Park (3)
- Ecology (3)
- Elementary Education (3)
- Sea Level Rise (3)
- Arnold Committee (2)
- Biscayne National Monument (2)

More ▾

Less ▲

Sites for this collection are listed below. Narrow your results at left, or enter a search query below to find a site, specific URL or to search the text of archived webpages.

Search

Clear

Sites

Search Page Text

Page 1 of 2 (188 Total Results)

Next Page ▶

Sort By: **Title (A-Z)** | **Title (Z-A)** | **URL (A-Z)** | **URL (Z-A)**

Title: South Florida Everglades Restoration

URL: <http://cmsdata.iucn.org/downloads/florida.pdf>

Description: Brief summary of the history of negotiations and agreements between federal and state government and stakeholders of the everglades.

Captured **once** on **Apr 28, 2015**

Subject: [Environmental law](#), [Everglades National Park](#), [Everglades Restoration](#)

Creator: [Ashcraft, Catherine](#)

Publisher: [Massachusetts Institute of Technology](#)

Language: [English](#)

Coverage: [1988-2005](#)

Format: [PDF](#)

Date: [2005](#)

Contributor: [Fuller, B.W.](#)

Title: Crusade for the Glades

URL: http://fcelter.fiu.edu/about_us/everglades/general_information/Crusade_for_Glades.pdf

Description: Magazine article about the role of academic scientists and students in Everglades restoration

Captured **once** on **Apr 28, 2015**

ee.ttu.edu

EVERGLADES
EXPLORER

8 ORGANIZATIONS HAVE COLLECTIONS RELATED TO CLIMATE CHANGE



Climate change and environmental policy

By Stanford University, Social Sciences Resource Group

Stanford University's Social Science Resource Group's collection on Intergovernmental and Non-governmental Organizations that focus on

ee.fiu.edu

SELECT LEARNING CURVES....

- Running test-crawls – reviewing reports.
- Click-through and visually inspect archived seeds/documents
- Finding links that resulted in no material acquired
- Page, “News or RSS Feed” and larger URL crawls (folder level; sub-domain; domain).

ESTABLISHING BEST PRACTICES CURATION; TECHNICAL / SYSTEMS BACK-END

- Appraisal & Selection
- Scoping – portions of sites; whole sites
- Data Capture parameters (crawl frequency; types of files (PDF only?)
 - **27% of Archive-It partners harvest only PDFs**
- Quality Assurance; Clean-up/Removal (No Single Best-Practice).
- Storage & Syndication (Metadata; Data)

WHAT ELSE WAS LEARNED....

- Easy to catalog using DC
- DC most efficient for collection/seed level harvests – docs can rely on OCR indexing)
- Test crawls important; render and analyze reports
- Effective video harvest, but at institutional flat page level (Not good w/YouTube)
- One-time vs periodic harvests might be best
- Harvester rights & abilities – “Archive-This” plugin for Mozilla
- Can assign contributor rights or (metadata development).

EXTERNAL METADATA LOAD (SINGLE OR BULK)

- For set of older documents (**ERIC**, from 60s and 70s)
- Located **OCLC** records in Worldcat or other OCLC index / single or bulk export to Refworks
- Use Refworks to cross-walk to **ODS – Open Document Spreadsheet**
- Import into **Excel** / Check; edit fields
- Import into **Archive-It**

OTHER UNIVERSITIES – COLUMBIA U.

- **Captures university web domains** – focus of University Archives
- **Align Archive-It to existing areas**
 - Collection Development
 - Institutional Academic Specialties /Focus
- **Thematic topics** – global human rights; historic preservation in NYC; NYC religious institutions.

UNIVERSITY OF ALBERTA

- **Prairie Politics and Economics**
- **Government Documents**
- **Grey Literature – Business & Health Sciences**
- **Circumpolar Studies**
- **Education Curriculum Materials**



FOCUSED ON
DISCOVERY
AND FRONT-
END
DEVELOPMENT

SEARCH ALL UOFA ARCHIVE-IT COLLECTIONS

Nominate a Website for inclusion in the University of Alberta Libraries Web Archive

BROWSE ARCHIVE-IT COLLECTIONS

<p>All University of Alberta Libraries Archive-It Collections</p>	<p>Alberta Education Curriculum Collection</p>	<p>Alberta Floods June 2013</p>
<p>Alberta Oil Sands</p>	<p>Canadian Business Grey Literature Collection</p>	<p>Circumpolar Collection</p>
<p>Energy/Environment Collection</p>	<p>Government Information Collection</p>	<p>Health Sciences Grey Literature Collection</p>
<p>Heritage Community Foundation Online Encyclopedia</p>	<p>Idle No More</p> <p>(Photo: Justin Chin)</p>	<p>La francophonie de l'ouest canadien / Western Canadian Francophonie</p>
<p>Prairie Provinces Politics & Economics</p>	<p>University of Alberta Websites</p>	

The collection policy for web archiving describes the scope of these collections: [Web Archiving Policy](#).

Helpful Links

- Digital Initiatives Home
- Digital Preservation
- More Digital Services
- Documentation
 - Metadata Standards and Practices
 - Technical Specifications
- People
 - Geoffrey Harder
Digital Initiatives Coordinator
 - Peter Binkley
Digital Initiatives Technology Librarian
 - Weiwei Shi
Digital Initiatives Application Librarian
 - Leah Vanderjagt
Digital Repository Services Librarian
 - Sharon Farnel
Metadata Coordinator
 - Chuck Humphrey
Data Library and Directory, RDC
 - Feggy Sue Ewanyshyn
Digitization Librarian
 - Robert Cole
Bibliographer and Digital Content Coordinator, Peel's Prairie Provinces
 - John Huck
Metadata and Cataloguing Librarian
 - Umar Qasim
Digital Preservation Officer
 - Lamy Laliberte
GIS Librarian
 - Anna Bombak
Digital Content Specialist
 - Chris Riedlberger
Programmer Analyst
 - Piyapong Charoenwattana
Programmer Analyst
 - Tricia Jenkins
Programmer Analyst

- Merging web archive with Digital Library Systems.

MONTANA STATE LIBRARY

ARIZONA STATE LIBRARY

GOVDOCS

- **Focus on State Documents – often only found online**
- **Websites of State Agencies**
- **Counter-balance to decline in submission of print publications**

STAFF ALLOCATIONS -- CAN MANAGE W/MINIMAL STAFF -- YET SCALABLE

- Columbia U. – 1 staff + some web programming and students for metadata curation.
- Creighton U. – 1 Full-time archivist administers
- University of Alberta – 1 admin; 40 people actively contributing
- Montana State Library – 3 (State Pub Librarian; Metadata Cataloger; Systems/Analyst.
- NC State Archives – 4 (2 archives; 2 state library)
- -- *The Web Archiving Life Cycle Model*” – *The Archive-It Team*

TYPE OF STAFF AT AN INSTITUTION WORKING W/ARCHIVE-IT – SURVEY

- Archives – 64%
- Library Staff – 42%
- Digital Projects Staff – 30%
- IT Staff – 8%
- Other – Student Workers; Web Development, etc. – 8%

- *Source: Sweeter 2011*

PARTNER SURVEY REVEALS DESIRES FOR FUTURE

- **56%** want to eventually archive in their own digital library
- **31%** want to allow Archive-It to handle.
- **Others...**
 - Incorporate **WARC files into digital repositories**
 - Provide **multiple access points** – put metadata & copies of data in multiple gateways (**Syndicate/Discovery**)

-- *The Web Archiving Life Cycle Model*'' – The Archive-It Team

METADATA

- **90%** of partners generate collection level metadata.
- **60%** generate “seed” level metadata
- **15%** generate document level metadata (full-text is fully indexed after 7 days of crawl).
- Currently, only **a small minority** are cataloging what they harvest in their existing catalog.

-- *The Web Archiving Life Cycle Model*” – The Archive-It Team

COPYRIGHT

- **Robots.txt file**
- **DMCA – takedown provision**
- **Archive-It will honor requests to remove content**
- **Most adhere to a library's federal right to capture under preservation and Fair Use concepts/law.**
- **If capturing publications funded by tax dollars, additional protection**
- **Columbia U. 5 out of 783 sites they harvest objected -- . 6 %**

IF ANYONE IS INTERESTED IN USING ARCHIVE-IT IN YOUR RESPECTIVE AREAS....

- I'm available to answer questions, or make department specific presentations.
- **In process of working with Archive-It on pricing structure for FIU; should you have interest -- \$15,000 will allow harvesting up to 18 million URLs and 1.5TB.**
- **If *Archives, Govdocs, Subject Liaisons, or other units are interested,* I would be happy to serve as a resource on the technical function of Archive-It & what we have learned to date.**

WE ARE LOOKING FOR **VOLUNTEERS** EVERGLADES MATERIAL CURATION / PRESERVATION

- **Google Search:** Help us curate and add sub-domains and directory level URLs to Google Search
- **Archive-It:** Websites, or individual documents/pdfs that should be harvested and archived with metadata.
- **Discovery:** Sets of metadata that should be pulled from a silo – large or small – for aggregation in a thematic gateway.

QUESTIONS ?

The screenshot displays the ERGLADES EXPLORER search interface. At the top left is the logo, and at the top right, it says "Powered by FIU Libraries and its partners" with links for "Home" and "Contact". The main content area is divided into three search panels:

- DISCOVERY SEARCH:** Search MARC and Dublin Core records linking directly to digital resources. Includes a search input field, checkboxes for "online only" and "exclude microform", and a "Search" button.
- ARCHIVED WEB SEARCH:** Search archived documents in pdf, html and media formats. Includes a search input field, radio buttons for "contains", "exact", and "starts with", and a "Search" button.
- CMS SEARCH:** Search selected Content Management Systems, sub-domains and folders. Includes a search input field and a "Search" button.

[HTTP://EE.FIU.EDU/](http://ee.fiu.edu/)

ee.fiu.edu

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Thank you!