# Digitization Overview and Best Practices

Mark Leggott, University of PEI/discoverygarden inc Don Walsh, Memorial University Access 2013 Conference, St. John's Newfoundland

# Why Digitize? ML/DW

#### Access

- To provide specific community or public with access to rare/distant/fragile material
- Enhance access via search+, disabled users

#### Preservation

 To conserve analogue assets and preserve for the long term

#### Who? DW

#### In house

- Building staff expertise is a key opportunity is using internal resources
- Students also make great digitization staff
- Metadata



## Who? DW

#### Outsource

 Consider for expensive digitization, system customization and hosting

#### MEMORIAL UNIVERSITY Libraries

#### Digital Archives Initiative Evening Telegram, 1900-1918

1900, January - June 💙

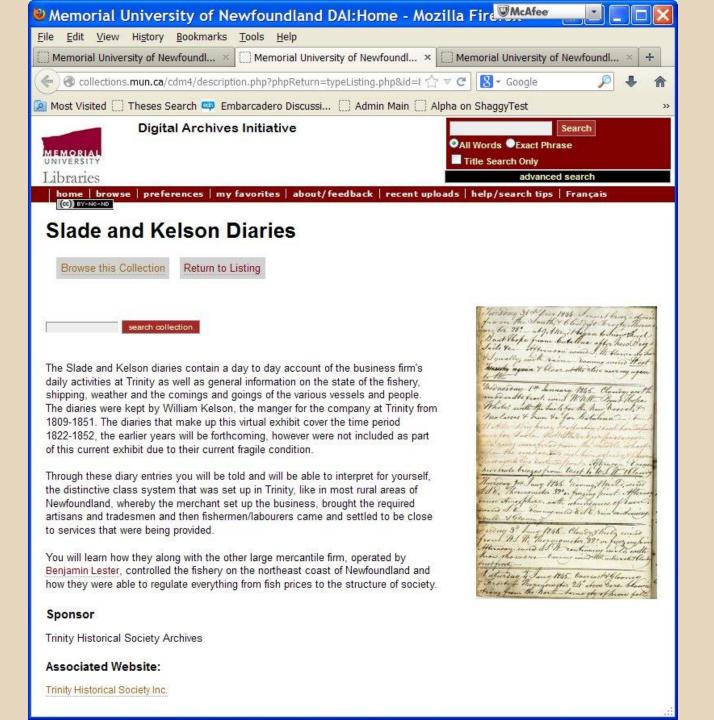
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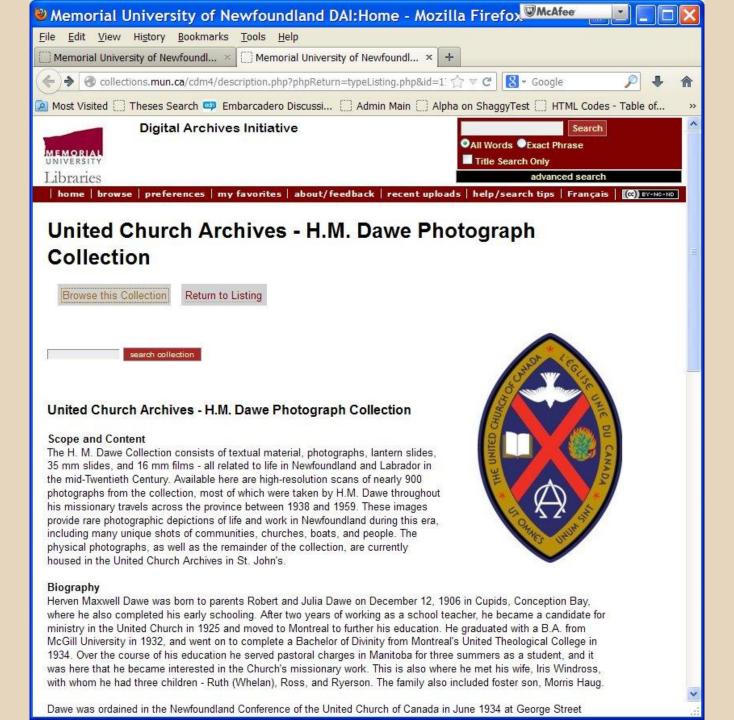


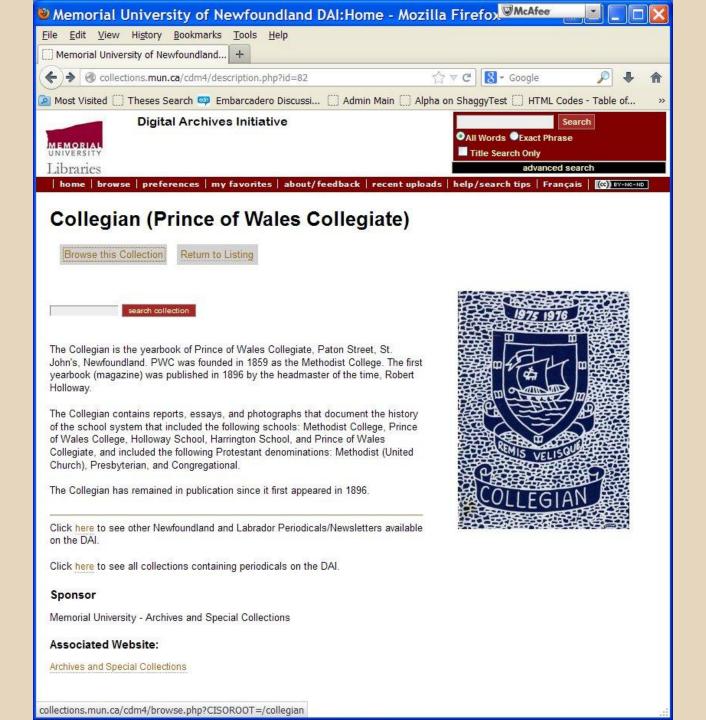


## What? ML/DW

- Special/Unique Collections form the core
- Any kind of collection is potential, including artifacts with multiple views & data
- Emphasis on local helps build community
- Find collections attractive to donors, e.g. local histories, Celtic music, UPEI history
- Similar to our approach for analogue info







#### How? DW

- 1. Evaluate and select material
  - a. Depts come to us
- 2. Clear permission to use material
  - a. Up to content owners
- Determine technical specifications
  - a. Metadata (consultation)
  - b. File formats
- 4. Develop workflows
  - a. Standardize where possible
- 5. Determine resources needed
  - a. Can owner digitize?
  - b. To our specs?
  - c. Will let owner hire students and Library oversee work

- 6. Decide if you will outsource
  - a. Newspaper example
- 8. Identify and acquire necessary resources
  - a. Type of scanner needed?
  - b. Need to get equipment?
- 9. Hire and train staff
  - a. Students can train others
  - b. Staff supervisor
- 10. Execute the project
  - a. Create the content and metadata, e.g. using bib control services
  - b. Add content and metadata, often as a batch process
- 11. Test, Polish and Launch

# Workflows

Adding a simple compound object (Book)

Items received for processing

Items passed to students for processing

Check scan quality during process

Completed scans go to staging area to be renamed

Renamed scans copied copies resized for PDF creation

PDF files are OCR-ed

PDF files converted to PDF/A

Files added to the DAI

Items received for processing

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Check scan quality during process

Completed scans go to staging area to be renamed

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PDF files converted to PDF/A

Files added to the DAI

#### Items received for processing

Items can come from different departments around campus.

Items can come from off campus.

We even receive items from outside the province.

Items received for processing

Items passed to students for processing

Check scan quality during process

Completed scans go to staging area to be renamed

Renamed scans copied copies resized for PDF creation

PDF files are OCR-ed

PDF files converted to PDF/A

Files added to the DAI

#### Items passed to students for processing



Students are trained to handle digitization in all mediums. Books, Large Scale Maps, Videos, Film, Audio, Slides, etc.

Students then train new recruits to do the work.

Items received for processing

Items passed to students for processing

Check scan quality during process

Completed scans go to staging area to be renamed

Renamed scans copied copies resized for PDF creation

PDF files are OCR-ed

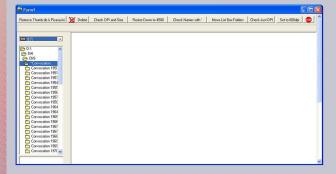
PDF files converted to PDF/A

Files added to the DAI

#### Check scan quality during process

The quality of the scans are checked by myself and the students themselves.

I have certain criteria that must be meet Pixel width and height and DPI / PPI (600)



Items received for processing

Items passed to students for processing

Check scan quality during process

Completed scans go to staging area to be renamed

Renamed scans copied copies resized for PDF creation

PDF files are OCR-ed

PDF files converted to PDF/A

Files added to the DAI

Completed scans go to staging area to be renamed

File names should be readable and make sense to the user.

0001 2013-05-03 (1) 0001.jpg 0001 2013-05-03 (1) 0003.jpg 0001 2013-05-03 (1) 0005.jpg 0001 2013-05-03 (1) 0007.jpg 0001 2013-05-03 (1) 0009.jpg 0001 2013-05-03 (1) 0011.jpg 0001 2013-05-03 (1) 0013.jpg 0001 2013-05-03 (1) 0015.jpg 0001 2013-05-03 (1) 0017.jpg 0001 2013-05-03 (1) 0019.jpg 0001 2013-05-03 (1) 0021.jpg 0001 2013-05-03 (1) 0023.jpg 0001 2013-05-03 (1) 0025.jpg 0001 2013-05-03 (1) 0027.jpg 0001 2013-05-03 (1) 0029.jpg 0001 2013-05-03 (1) 0031.jpg 0001 2013-05-03 (1) 0033.jpg 0001 2013-05-03 (1) 0035.jpg 0001 2013-05-03 (1) 0037.jpg 0001 2013-05-03 (1) 0039.jpg 0001 2013-05-03 (1) 0041.jpg 0001 2013-05-03 (1) 0043.jpg 0001 2013-05-03 (1) 0045.jpg 0001 2013-05-03 (1) 0047.jpg 0001 2013-05-03 (1) 0049.jpg

0001\_Cover.jpg 0002\_Inside Cover .jpg 0003\_Blank Page.jpg 0004\_Blank Page.jpg 0005\_Title Page.jpg 0006\_Abstract .jpg 0007\_Acknowledgements.jpg 0008\_Table of Contents .jpg 0009 Page v.jpg 0010\_Page vi.jpg 0011\_List of Tables .jpg 0012\_List of Figures .jpg 0013\_Page ix.jpg 0014\_Abreviations.jpg 0015\_Page xi.jpg 0016\_Page 1.jpg 0017\_Page 2.jpg 0018\_Page 3.jpg 0019\_Page 4.jpg 0020\_Page 5.jpg 0021\_Page 6.jpg 0022\_Page 7.jpg 0023\_Page 8.jpg 0024\_Page 9.jpg

0025\_Page 10.jpg

Items received for processing

Items passed to students for processing

Check scan quality during process

Completed scans go to staging area to be renamed

Renamed scans copied copies resized for PDF creation

PDF files are OCR-ed

PDF files converted to PDF/A

Files added to the DAI

Renamed scans copied... copies resized for PDF creation

After trial and error we have decided on 1600 pixels wide (keeping aspect ratio) and 600 dpi as a file size to create PDFs.

Of course this may vary depending on the images / material being scanned.

Items received for processing

Items passed to students for processing

Check scan quality during process

Completed scans go to staging area to be renamed

Renamed scans copied copies resized for PDF creation

PDF files are OCR-ed

PDF files converted to PDF/A

Files added to the DAI

#### PDF files are OCR-ed

The reason for the 1600 wide pixel width is to ensure the best quality for OCR-ing.

OCR-ing enables the user to search the PDF for words and phrases.

Items received for processing

Items passed to students for processing

Check scan quality during process

Completed scans go to staging area to be renamed

Renamed scans copied copies resized for PDF creation

PDF files are OCR-ed

PDF files converted to PDF/A

Files added to the DAI

#### PDF files converted to PDF/A

PDF document opened on a computer that did not have the font used in the PDF installed.

PDF/a embeds fonts so this can't happen.



Items received for processing

Items passed to students for processing

Check scan quality during process

Completed scans go to staging area to be renamed

Renamed scans copied copies resized for PDF creation

PDF files are OCR-ed

PDF files converted to PDF/A

Files added to the DAI

#### Files added to DAI

At this point we are ready to ingest the files into our digital repository.

With the CONTENTdm system files are OCR-ed on the fly during upload.



# **Facilities DW**

Equipment you may need and possible costs

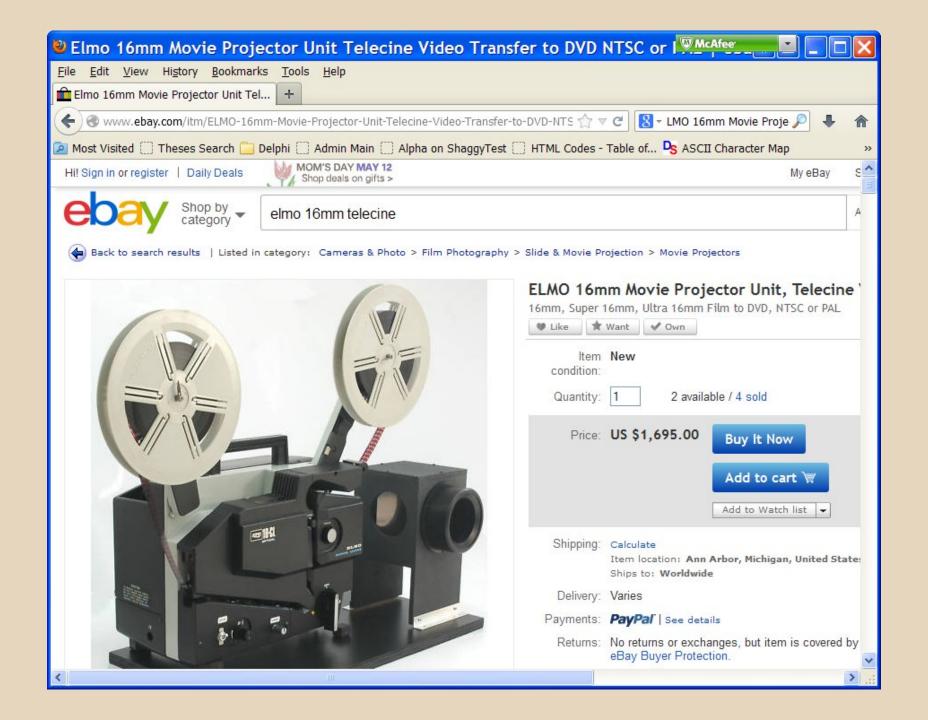
# Student staff - train new students



# 16mm, 8mm, Super 8





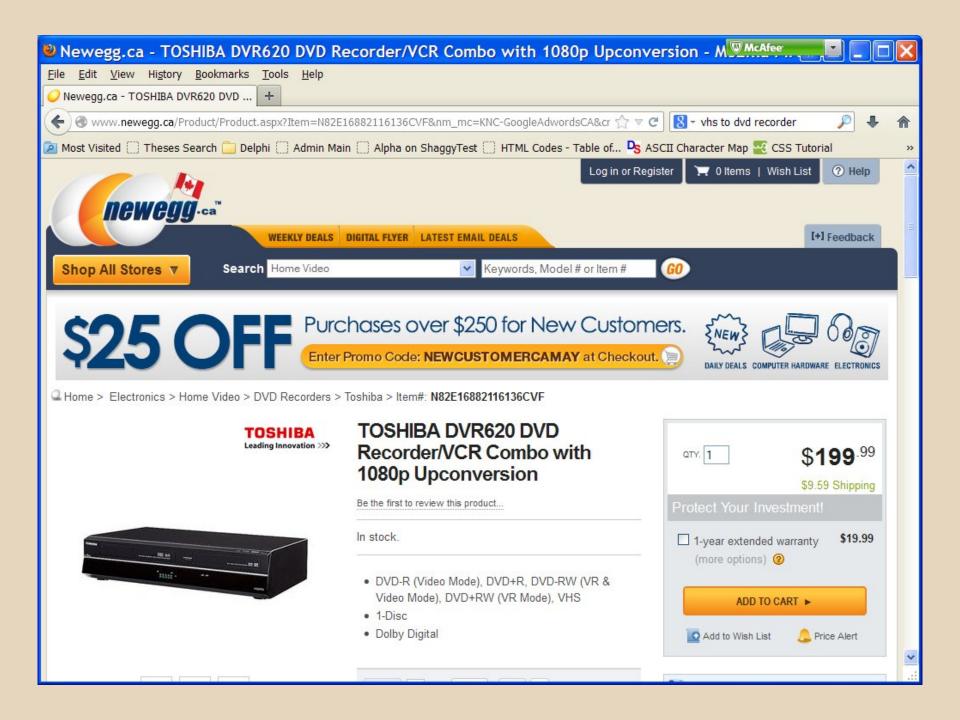


# 3/4 in, Broadcast Beta, VHS



# Video work station





#### **Audio work station**



\$299.00 Future Shop has them as low as \$99.95 **TEAC AD-RW900 \$600** 

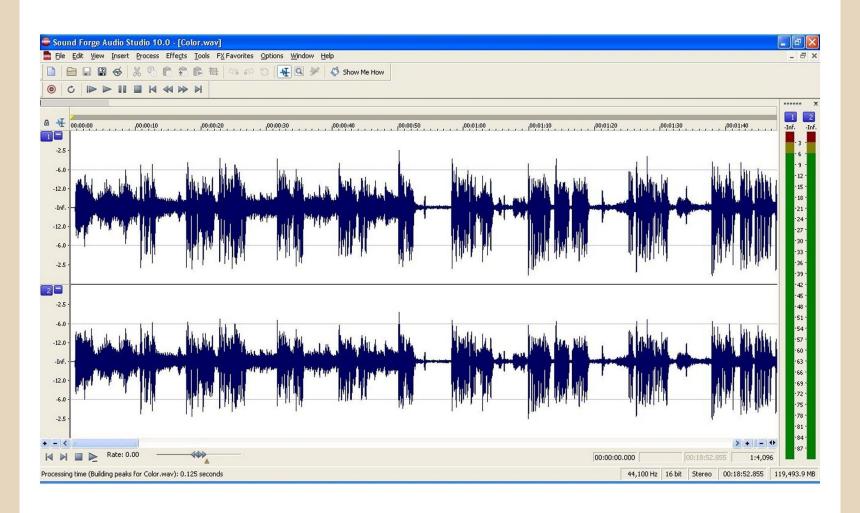
All you reall need is a Cassette Deck

## **Analog Audio to Digital**



USB phono plus \$100

# **Audio Processing Software**



**Sound forge Audio Studio \$64.95** 

#### Our Main Workhorse



**Epson GT-20 000 \$1500** 

#### **Document Feeder**



Kodak i1420 \$4,000.00

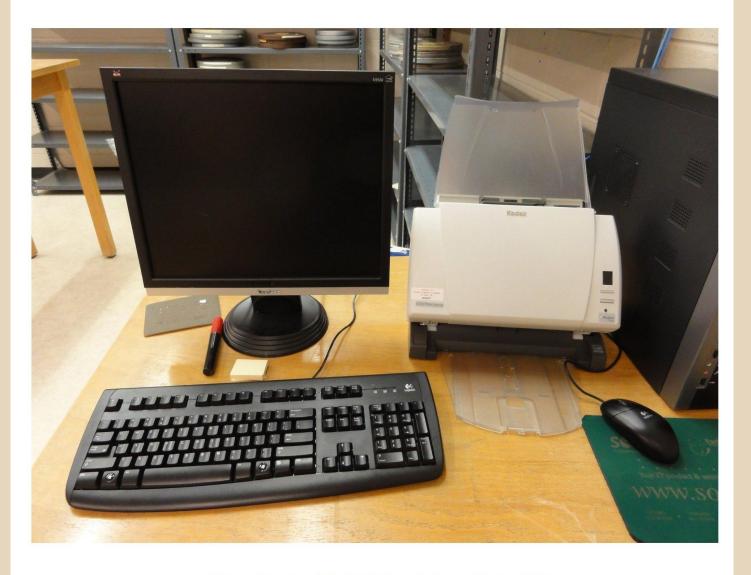
Recommended Daily Volume: Up to 7,500 pages per day

## Spine Remover



Believe it or not \$3,000.00

#### **Photo Scanner**



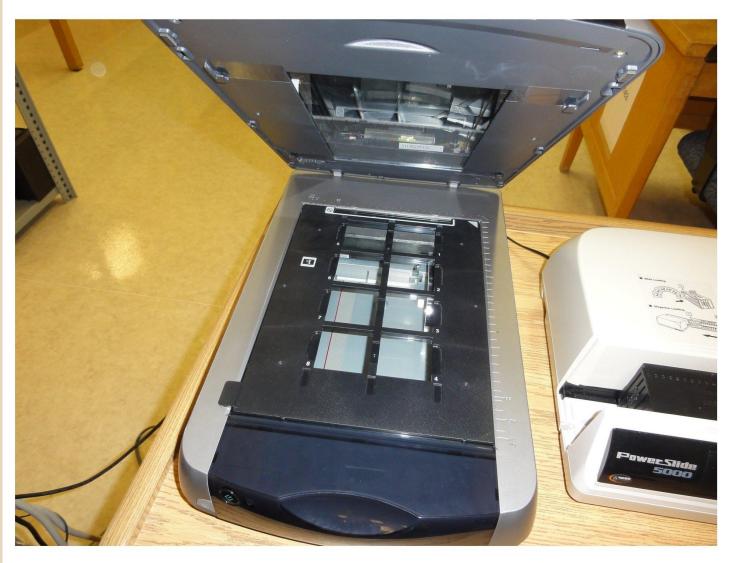
Kodak i1220 \$1,198.87

## Slide Scanner



PowerSlide 5000 \$1,000.00 **Holds 50 slides** 

## Flatbed with Transparency

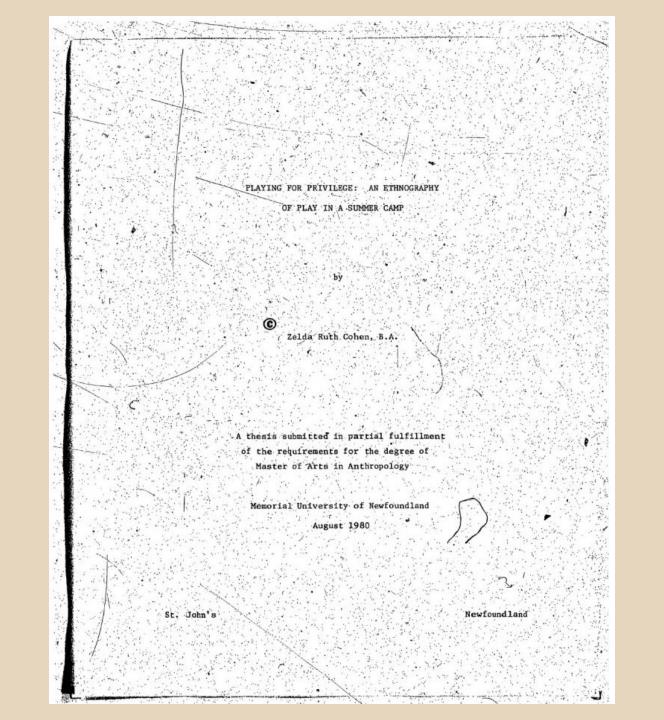


**Epson Perfection 4870 \$100** 

## ScanPro 1000 Microfilm-Microfiche Scanner



The new 3000 now available. I believe the 1000 was about \$7,000.00



## **ColorTrac Smartlf Gx+T56**



Close to \$30,000.00
We shared the cost with our
Maritime History Archive

## **Audio from univestity community**



# To preserve we need to be able to digitize



## Video 8



Found on eBay \$275.00 I've seen them with screen for \$325.00



## **Microcassette**



Can usually be found on eBay for around \$100.00

## Anyone remember these?



## Staff Skills ML

- Project Manager
- Subject Matter
   Expert/Selector
- Conservator
- Metadata
- Scanning tech

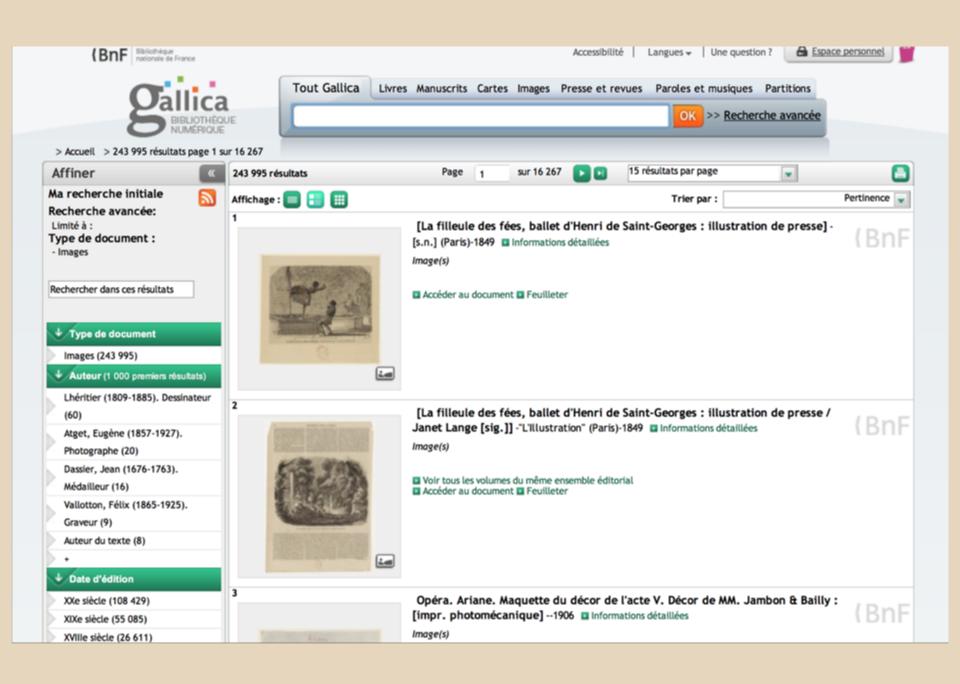
- Quality control/Test
- Data entry tech
- Programmer/tech
- Systems admin
- Interface designer
- Documentation

## \$\$ ML

- Project budgets will vary widely
- UPEI has used soft funds to add resources to core team for most projects
- Quick rule of thumb:
- Staff estimate x 1.3 = Project Budget
- Add/subtract for outsourcing/in-kind

## Interfaces ML

- Digital Library interfaces typically include
  - Browse (title, name, date, format, geo)
  - Search (keyword, fielded, boolean)
  - Faceting, Timelines, Mapping
  - My List Creation, Export/Print



#### PRINCE EDWARD ISLAND LEGISLATIVE DOCUMENTS ONLINE

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search

#### Navigation

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- Biographies
- Audio Recordings
- Images



Colonial Building from Hughes Corner, ca. 1860s Source: Public Archives and Records Office - Acc2702/s23/6

Welcome



Inicio

Arte

Música

Conferencias

Ciencias Sociales

Biblioteca

INICIO > MÚSICA > CLAMOR >

# CLAMOR COLECCIÓN DIGITAL DE M Ú S I C A ESPAÑOLA



#### Clamor

Clamor es un portal de conocimiento que aspira a ir incorporando toda la actividad concertística de música española desarrollada en la Fundación Juan March desde su inicio en 1975. Clamor enriquece el audio de las grabaciones en vivo,...

más ...

Búsqueda Sencilla

Búsqueda Avanzada

Buscar

buscar

#### Acceso a la colección

Conciertos

Compositores

Obras

Intérpretes

Programas de mano

**Partituras** 

#### Obras



Audio completo en streaming de unas 800 obras, entre ellas más de 300 estrenos, grabadas en vivo en los conciertos de la Fundación. Una parte sustancial de estas obras no se interpreta con regularidad o no se encuentra disponible en registros

Search	search	

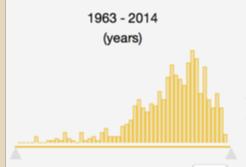
Relevance -

Title

Date

#### Limit Results

#### **Date**



Filter

Specify date range: Show

Type

Journal Article (584)

Conference Proceedings (36)

Your Sea

Your Search: fish 🔕

Limited to: no limits selected

10 | 25 | 50 | 100

1 - 25 of 673

2

...

next >

#### Gender and generation

Tarisesei, J., Novaczek, I., & WorldFish Cent., P. (Malaysia). (2006). *Gender and generation: crucial aspects of local fisheries management on Lelepa Island, Vanuatu*. 7. Asian Fisheries Forum, Penang (Malaysia), 1-2 Dec 2004. Vanuatu Culture Centre, Port Vila Vanuatu.

Advanced Search

Lelepa is a small island off the northwestern coast of Efate in central Vanuatu. The history of the inshore fisheries of Lelepa Island is the story of changing technologies, changing gender roles and, most profoundly, changing needs and priorities of fisherpeople. Over time, marine species have deve...

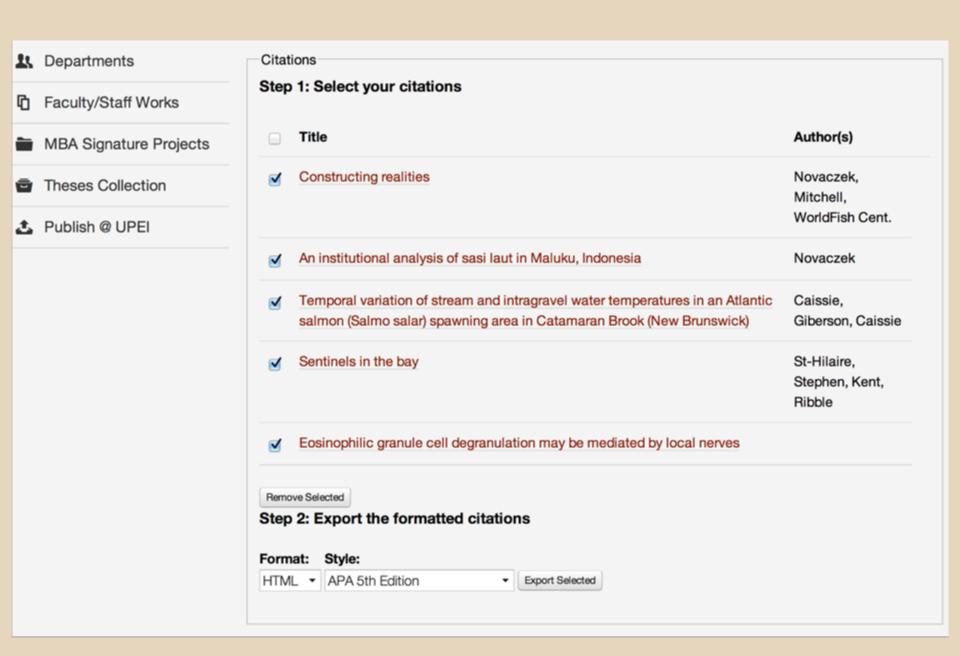


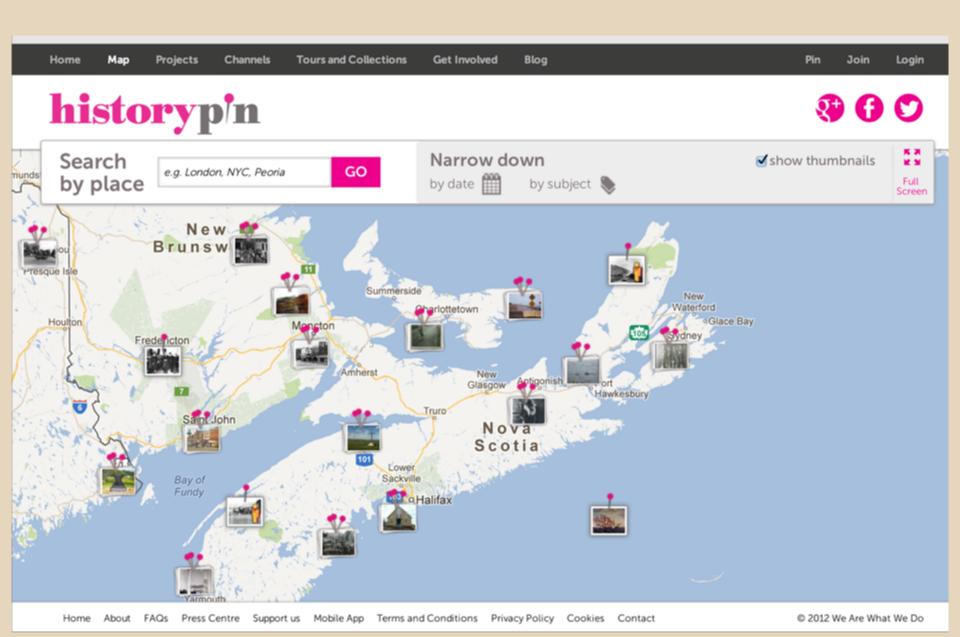
Check @UPEI

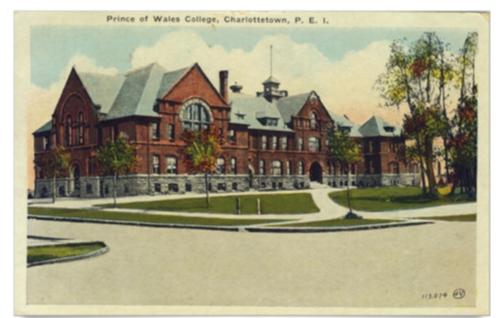
#### Constructing realities

Novaczek, I., Mitchell, J., & WorldFish Cent., P. (Malaysia). (2006). *Constructing realities: documenting women's fisheries in the Pacific Islands*. 7. Asian Fisheries Forum, Penang (Malaysia), 1-2 Dec 2004. Institute of Island Studies, University of Prince Edward Island, 550 University Avenue, Charlottetown, PE Canada CIA 4P3, [mailto:inovaczek@upei.ca].

Research on Pacific Islands has revealed the pivotal involvement of women in all aspects of fisheries, from harvesting through processing to marketing. Women are not "just gleaning"; they are making essential contributions to local food security and in many cases, also enabling the commercial







Postcard courtesy of the Prince Edward Island Museum and Heritage Foundation

Prince of Wales College, ca. 1900-1932

1860 - 1969

#### Prince of Wales College Opens

Completed in 1900, the Prince of Wales College building was designed by architect C. B. Chappell.

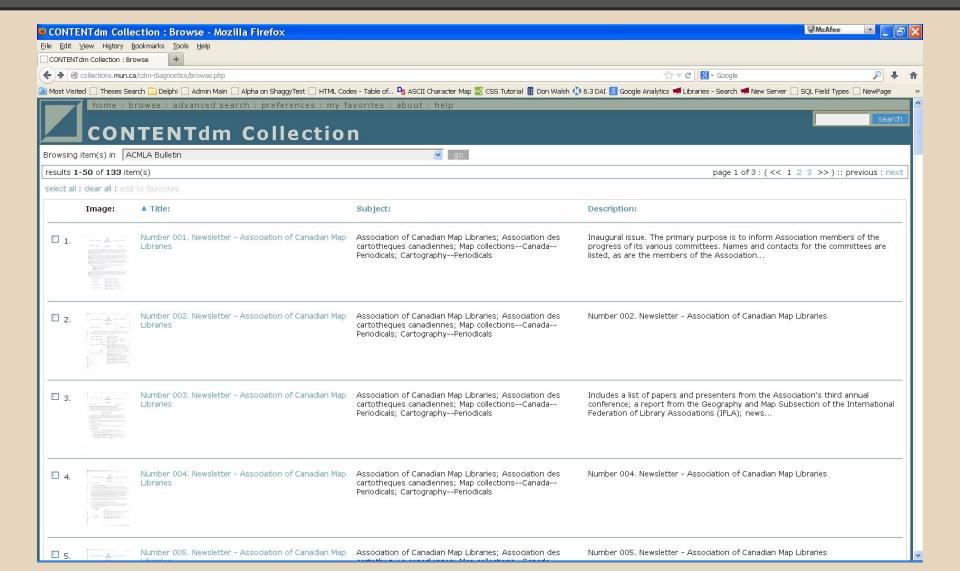


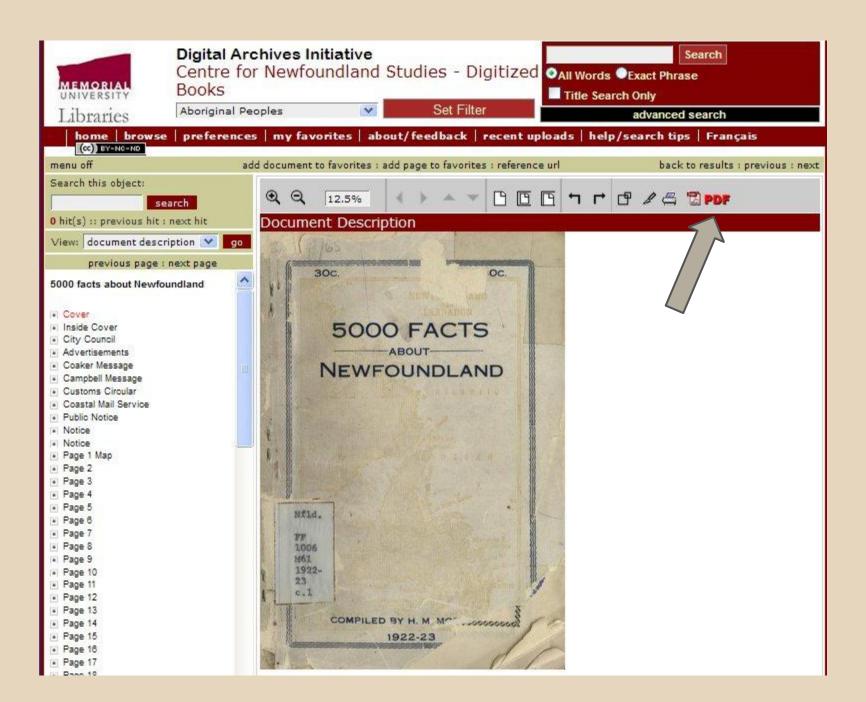
## MUN Interface Examples DW

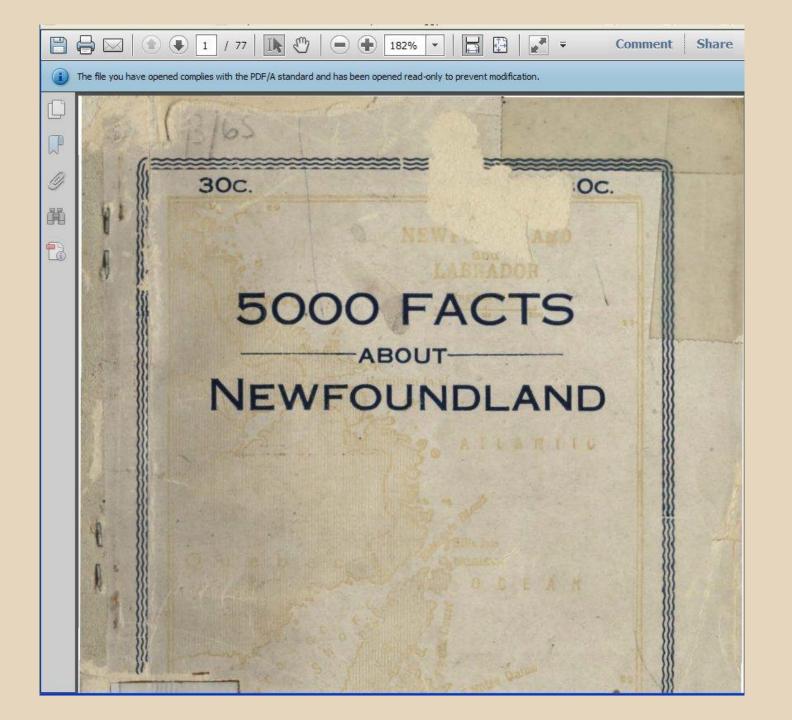


Our Newest Collections! Memorial University of Newfoundland Convocation Memorial University DELTS Video Collection, 1995 - present NL Books(2) - General Western Star Evening Telegram, 1900-1918 Evening Telegram, 1879-1899 Mouseion - Classical Views - Echos du Monde Classique Memorial University Folklore and Language Archive Song Title Index Centre d'études franco-terreneuviennes Collection NL Books(2) - General Pevton Family Collection Land Surveys United Church Archives Chinese Community in Newfoundland United Church Archives - H.M. Dawe Photograph Collection Job Kean Collection Archives - Digitized Collections Return to page top

## **CONTENT dm Out of the Box**







## MEMORIAL Libraries

#### Digital Archives Initiative

Memorial University DELTS Video Collection, pre-1994

Arts

Set Filter

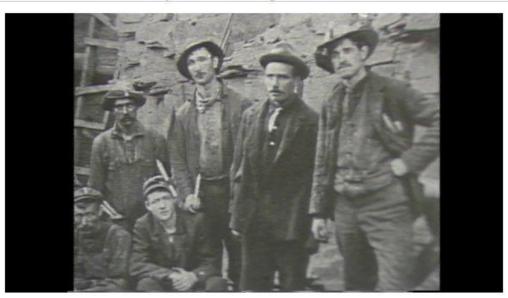


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add to favorites : reference url

back to results : previous : next

#### A thousand years will come again. Bell Island. Part 02





Save this File (170.37MB) Right-click the icon and click "Save As"

Title A thousand years will come again. Bell Island. Part 02 Summary A film about the history of mining on Bell Island.

Mining--Newfoundland and Labrador--Bell Island--History Subject

Memorial University of Newfoundland. Division of Educational Technology Creator

Contributors Pitt, Robert D. W., 1953-

Date 1985

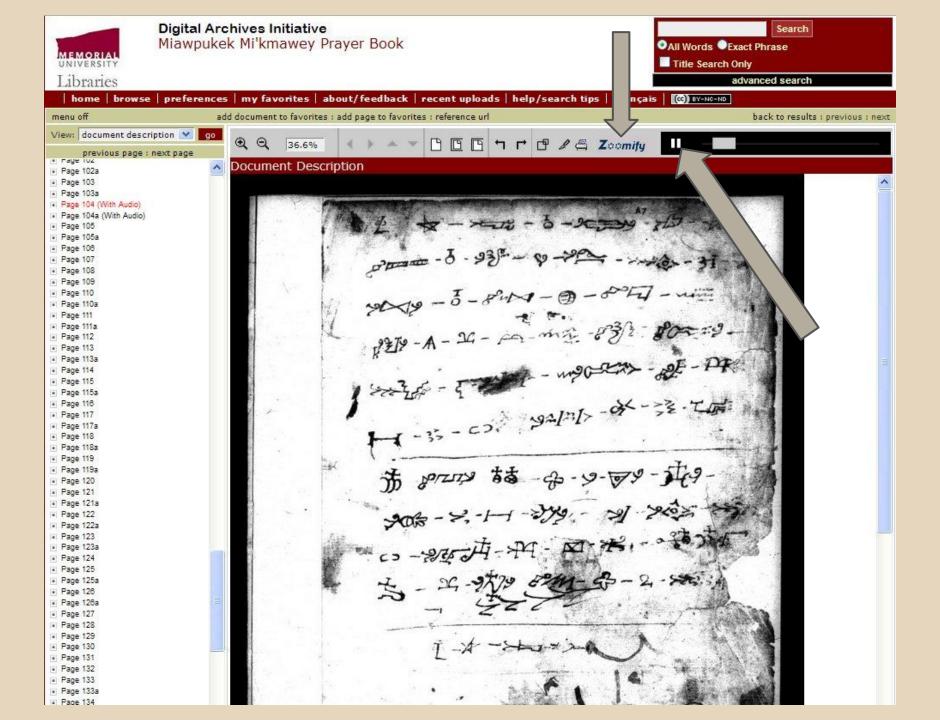
Publisher Memorial University of Newfoundland. Division of Educational Technology

Associated Name Memorial University of Newfoundland, Distance Education, Learning and Teaching Support (DELTS)

Duration 30:09

Location Canada--Newfoundland and Labrador--Bell Island

Catalogue Number 526-28



## Digital Archives Initiative

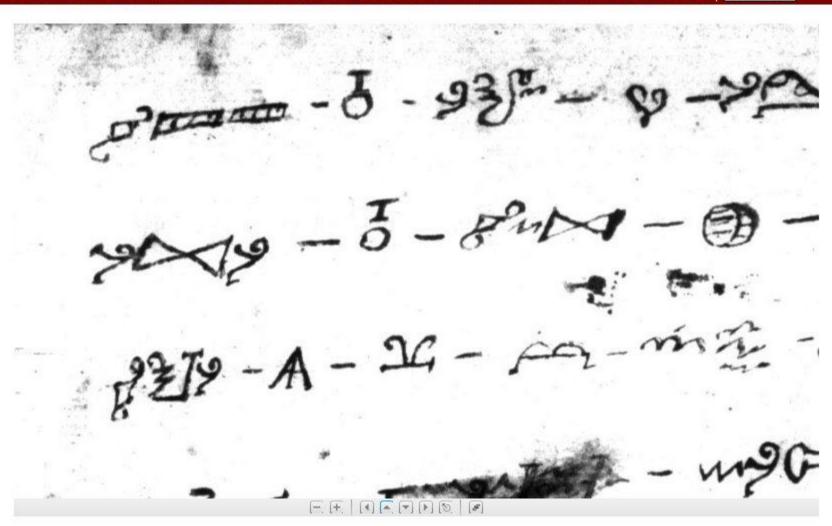
MEMORIAL

Libraries

OAll Words ●Exact Phrase
■ Title Search Only

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## MEMORIA Libraries

#### **Digital Archives Initiative**

Centre for Newfoundland Studies - Digitized

Maps Atlantic Canada

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Title A chart of the coast of America from Newfound Land to Cape Cod

Subject Atlantic Coast (Canada) -- Maps -- Early works to 1800 Atlantic Coast (N.L.) -- Maps -- Early works to 1800

Atlantic Coast (New England) -- Maps -- Early works to 1800

Scale [ca. 1:15 769 600] (W 73°--W 50°/N 53°--N 40°). Hand coloured. Decorative title Description

cartouche. Compass rose with rhumb lines. Bar scale in English and French leagues.

Creator Seller, John, fl. 1658-1698

## MEMORIA Libraries

#### **Digital Archives Initiative**

Centre for Newfoundland Studies - Digitized Maps

Atlantic Canada

Set Filter



advanced search

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Title A chart of the coast of America from Newfound Land to Cape Cod

Subject Atlantic Coast (Canada) -- Maps -- Early works to 1800

Atlantic Coast (N.L.) -- Maps -- Early works to 1800

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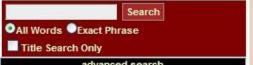
Scale [ca. 1:15 769 600] (W 73°--W 50°/N 53°--N 40°), Hand coloured, Decorative title Description cartouche. Compass rose with rhumb lines. Bar scale in English and French leagues.

Creator Seller, John, fl. 1658-1698

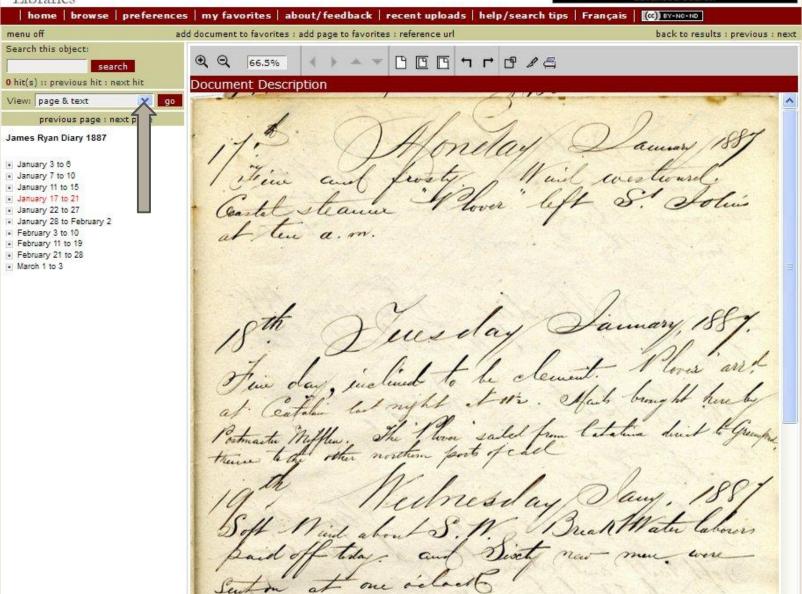


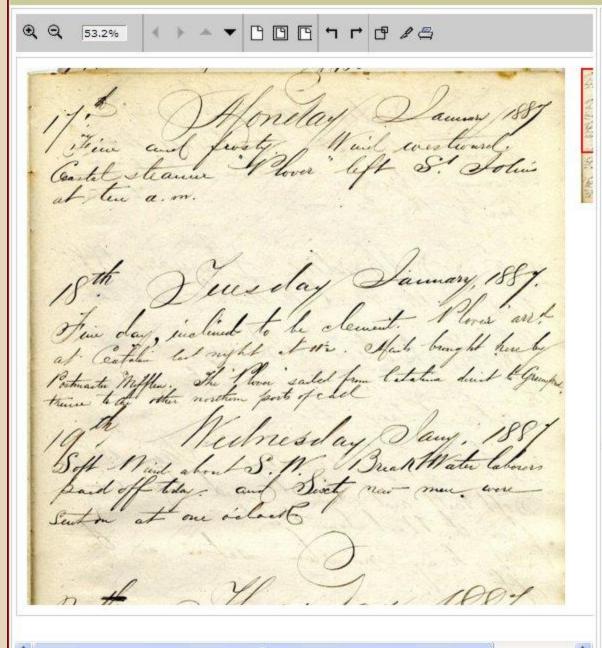
#### Digital Archives Initiative

Maritime History Archive - James Ryan Ltd. Diaries, Bonavista



advanced search





January 17, Monday

Fine and frosty. Wind westward. Coastal steamer "Plover" left St. John's at ten a.m. [NR]

January 18, Tuesday

Fine day, inclined to be clement, "Plover" arrd, at Catalina last night at 11 1/2. Mails brought here by Postmaster Mifflin. The "Plover" sailed from Catalina direct to Greenspond, thence to the other northern ports of call. [NR]

January 19, Wednesday

Soft Wind about S.W. Breakwater laborers paid off today and Sixty new men were sent on at one o'clock. [NR]

January 20, Thursday

Thomas Cole, B.I.C, promised Proprietor in presence of writer to rent him the store at B.I.C for summer 1887 on usual terms. [JD]

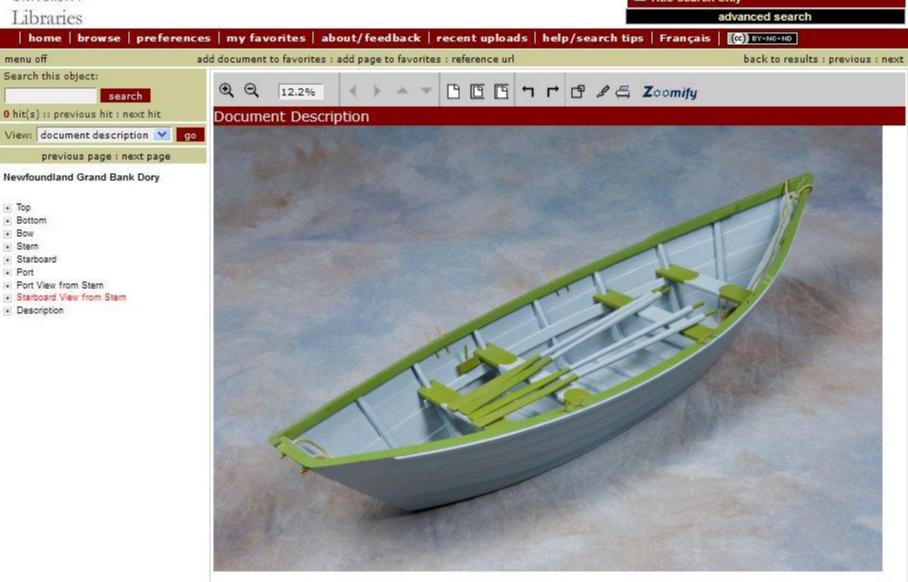
January 21, Friday

Wind South, veering later to the West. "Plover" reached Catalina, bound South, at 12 1/2 a.m. Proprietor, en route to England, started about eight this morning for Catalina to join the "Plover" for St. John's. [NR]



#### Digital Archives Initiative Otto Kelland Boat Models





### MEMORIAL UNIVERSITY

#### **Digital Archives Initiative**

Memorial University - Electronic Theses and Dissertations 1 OAII Words ●Exact Phrase

Anthropology

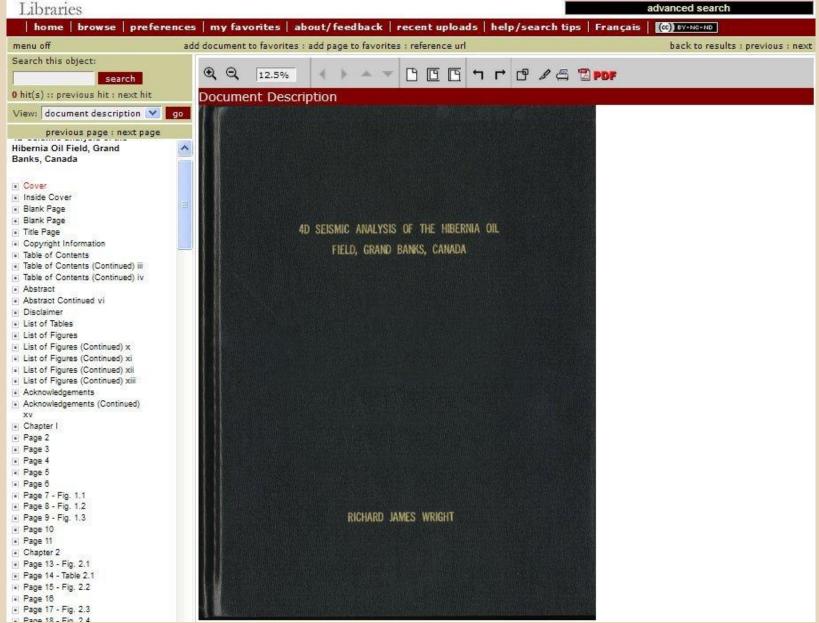
Filter All Theses

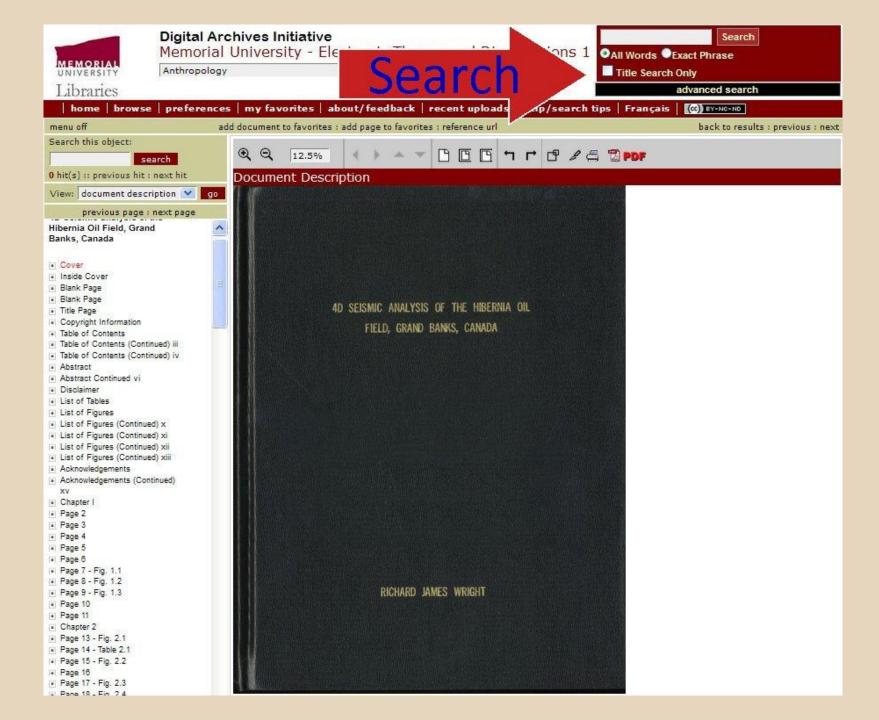
Search

OAll Words OExact Phrase

Title Search Only

advanced search







Welcome to Memorial University's Digital Archives Initiative (DAI), your gateway to the learning and research-based cultural resources held by Memorial University and partnering organizations. From books and maps to photographs, periodicals, video and audio, the DAI hosts a variety of collections which together reinforce the importance, past and present, of Newfoundland and Labrador's history and culture.

#### Browse our collections. . . Audio Books Finding Aid Maps Periodicals Photos Videos Theses By Sponsor List All New! Our Newest Collections! Memorial University of Newfoundland Convocation Memorial University DELTS Video Collection, 1995 - present NL Books(2) - General Western Star Evening Telegram, 1900-1918 Evening Telegram, 1879-1899 Mouseion - Classical Views - Echos du Monde Classique Memorial University Folklore and Language Archive Song Title Index

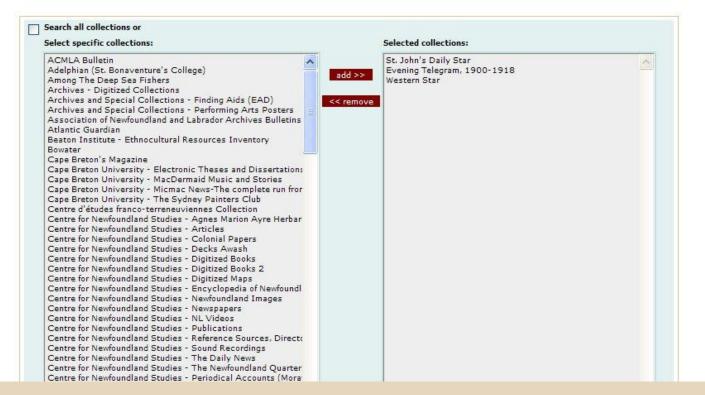
NL Books(2) - General

Centre d'études franco-terreneuviennes Collection

## Digital Archives Initiative MEMORIAL UNIVERSITY Libraries



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	The exact phrase		
	Any of the words		
	None of the words		



#### Digital Archives Initiative



Refine your search	results 1-	-50 of 232 ite					
Type Newspaper (232) Text (232)  Subject Canadian Newspapers Newfoundland and Labrador st. John's 20th Century (193) Canadian Newspapers Newfoundland and Labrador Corner Brook 20th Century (26) Canadian Newspapers Newfoundland and Labrador Corner Brook (13)  Date  1916-11-15 (5) 1919-08-06 (3) 1920-03-24 (3) 1920-05-26 (3) 1920-05-26 (3) 1920-06-09 (3) 1917-01-10 (3) 1917-06-13 (3) 1917-06-13 (3) 1917-04-30 (3)	select all : clear all : add to favorites						
		Image:	Title:	Creator:	Subject:		
	□ 1.		St. John's daily star, 1921-05-05		Canadian newspapers Newfoundland and Labrado John's20th century		
	□ 2.		St. John's daily star, 1920-04-10		Canadian newspapers Newfoundland and Labrado John's20th century		
	□ 3.		Evening Telegram (St. John N.L.), 1917-07-02	n's,	Canadian newspapers Newfoundland and Labrado John's20th century		



#### Memorial University

Digital Archives Initiative

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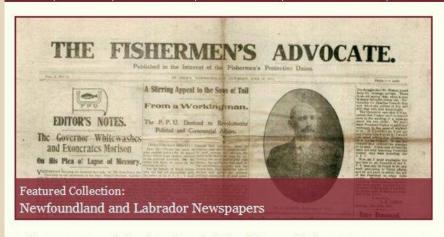
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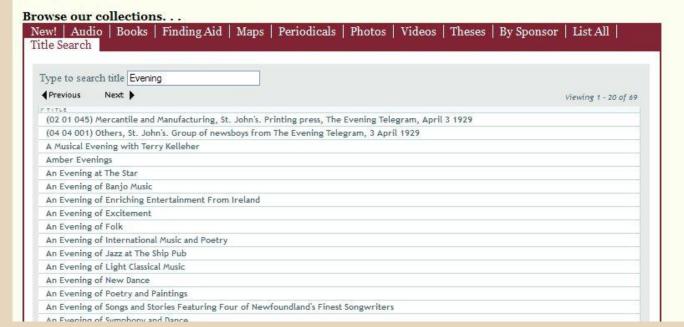




#### Suggested Collections:

- 1. Encyclopedia of Newfoundland
- 2. Newfoundland Quarterly
- 3. Newfoundland Almanac
- 4. Memorial University Theses
- 5. Reference Works
- 6. DELTS Videos

Welcome to Memorial University's Digital Archives Initiative (DAI), your gateway to the learning and research-based cultural resources held by Memorial University and partnering organizations. From books and maps to photographs, periodicals, video and audio, the DAI hosts a variety of collections which together reinforce the importance, past and present, of Newfoundland and Labrador's history and culture.



## Metadata ML

- Data about data
- No functionality without metadata
- Provides basis of most interface functions
- Valuable for searching, data mining content
- Standards-based schemas best approach as it encourages interoperability

#### **Dublin Core**

- <u>Dublin Core</u> and Qualified Dublin Core
- Basic metadata format even when other more detailed schemas available
- Provides common set of elements and also facilitates federation and integration
- Can be created via a mapping from others

# Descriptive Metadata ML

- Describes the digital asset/item
  - o MODS, EAD, PBCore
  - MADS, EAC-CPF, FOAF
  - o LIDO, CIDOC-CRM
  - o <u>Darwin Core</u>, <u>EML</u>, <u>MzXML</u>

## Technical Metadata ML

- Describes the data file and characteristics
  - textMD
  - o MIX
  - AudioMD / videoMD
- Tools like <u>ExifTool</u>, <u>Jhove</u>, <u>FITS</u> extract
- Used for preservation and transformation

## Administrative Metadata ML

- Describes data that help manage repository
  - When items were created
  - Access controls, copyright/license data
  - Provenance
- May be record or part of a record (e.g. METSRights)

## Preservation Metadata ML

- Goal is to provide a standards-based record of the asset and any actions taken
  - the information a repository uses to support the digital preservation process
- PREMIS is the de-facto standard
- Most complex of the standard metadata

# Best Practice Approach ML

- Goal is to leverage community knowledge and not reinvent the wheel, or create "compromised digital collections"
- Library of Congress is a key resource
  - LoC Digitizing Guidelines
  - FADGI Digitization Guidelines

## Preservation Master ML

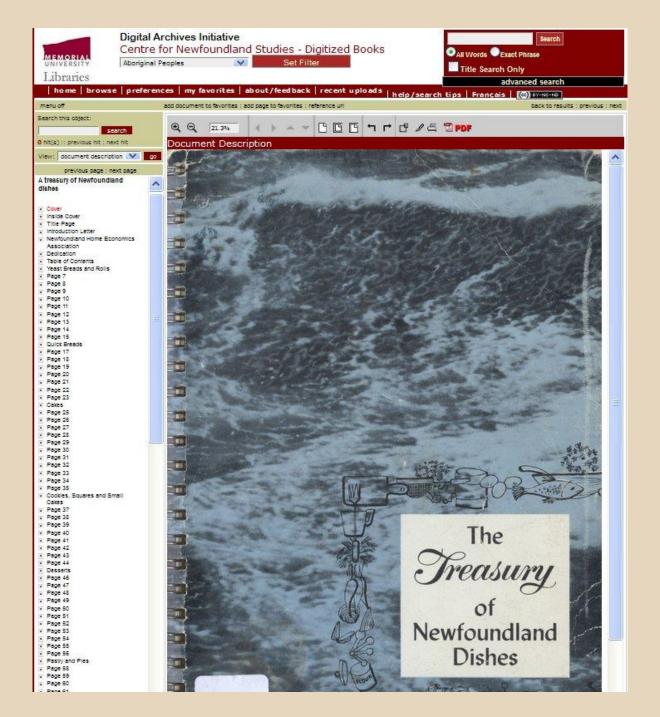
- Concept of Preservation Master file (PM)
   with derived, or service copies is key
- With PM & descMD (+ other MD) should be able to recreate digital collections into the future
- PM may be stored offline, or used to dynamically generate service copy
- Descriptions that follow are for PM file

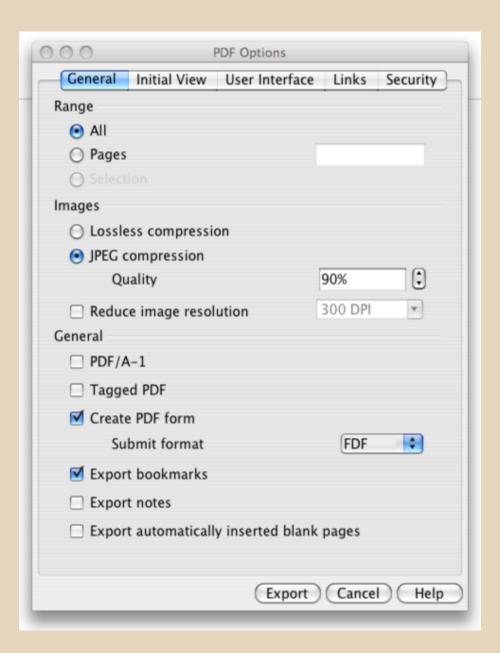
# File Sustainability ML

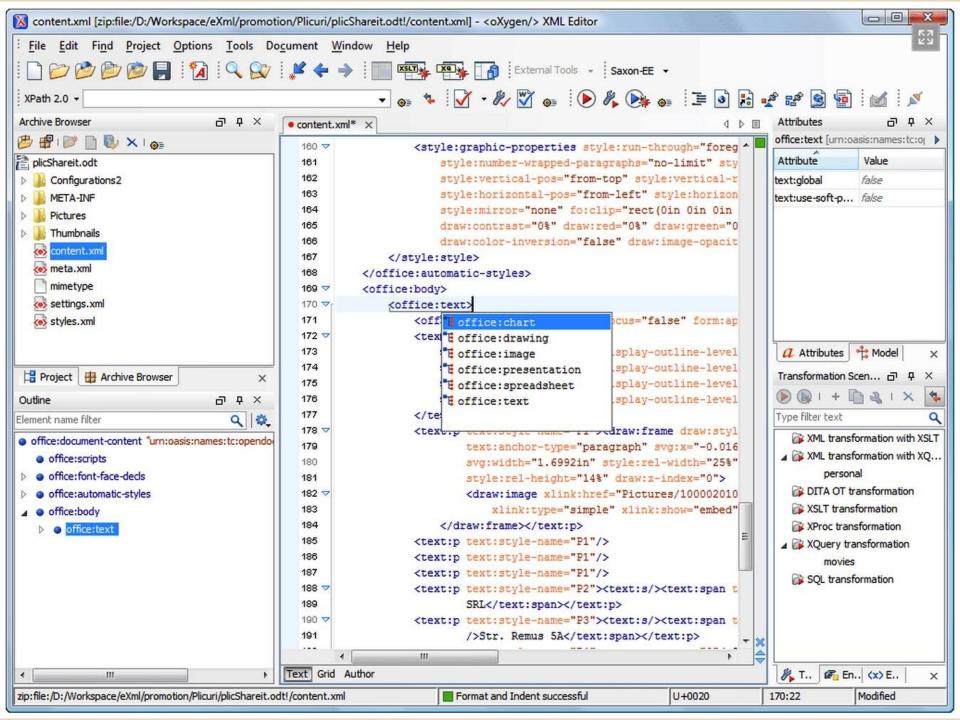
- Openness & Transparency
- Adoption as a preservation standard
- Stability & Compatibility
- Dependencies & Interoperability
- Standardization

## Textual Documents DW

- Various depending on source
- Plain Text or Formatted options
- TXT, XML, PDF/A
- Other formats (e.g. pdf, doc/docx) should be converted to above when added







# **Images DW**

- Quality defined by PPI/DPI & tonal resolution
- Recommended:
  - JPEG/JPEG2000, PNG, TIFF, GeoTIFF
  - bitonal/24 bit colour, 600 PPI/DPI
- Higher resolution better for OCR (600)

# http://www.irfanview.com/



IrfanView - Ima	age properties	; <u>E</u>	
File name:	Cover.jpg		
Directory:	C:\Temp\		
Full path:	C:\Temp\Cover.jpg		
Compression:	JPEG		
Resolution:	600 x 600 DPI	Ch <u>a</u> nge	
Original size:	8135 x 4784 Pixels (38.92 MPixels) (1.70)		
Current size:	8135 x 4784 Pixels (38.92 MPixels) (1.70)		
Print size (from DPI):	34.4 x 20.3 cm; 13.6 x 8.0 inches		
Original colors:	16,7 Millions (24 BitsPerPixel)		
Current colors:	16,7 Millions (24 BitsPerPixel)		
Number of unique colors:	130606	✓ Auto count	
Disk size:	14.23 MB (14,920,744 Bytes)		
Current memory size:	111.36 MB (116,767,912 Bytes)		
Current directory index:	1 / 14		
File date/time:	5/6/2013 / 09:14:20		
Loaded in:	1375 milliseconds		
EXIF info*	<u>o</u> K	<u>C</u> omment	



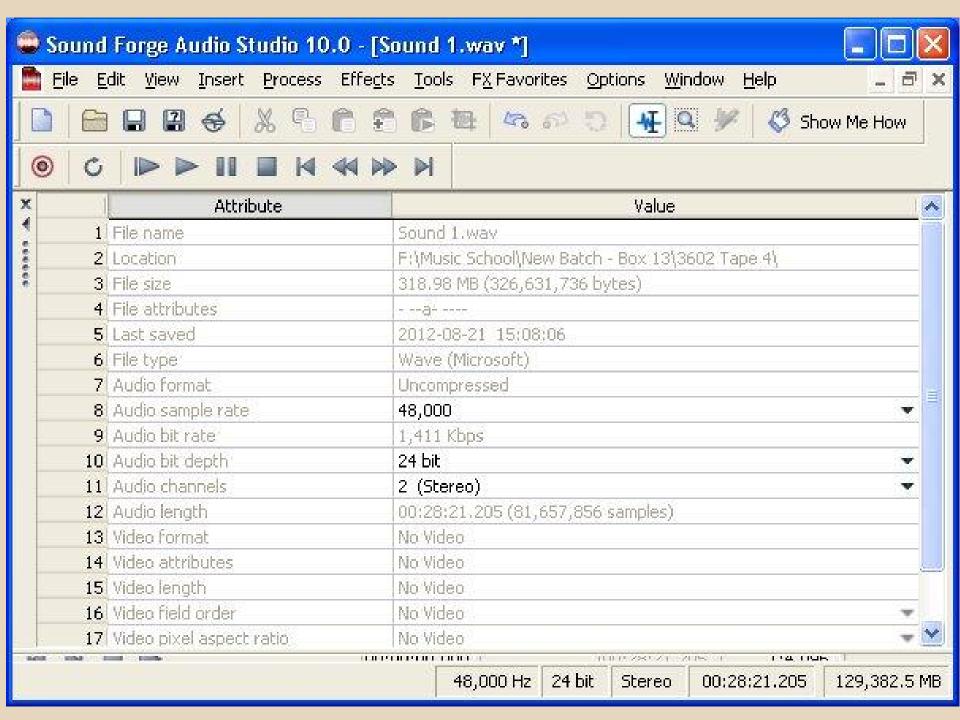
ImageMagick<sup>®</sup> is a software suite to create, edit, compose, or convert bitmap images. It can read and write images in a variety of formats (over 100) including DPX, EXR, GIF, JPEG, JPEG-2000, PDF, PhotoCD, PNG, Postscript, SVG, and TIFF. Use ImageMagick to resize, flip, mirror, rotate, distort, shear and transform images, adjust image colors, apply various special effects, or draw text, lines, polygons, ellipses and Bézier curves.

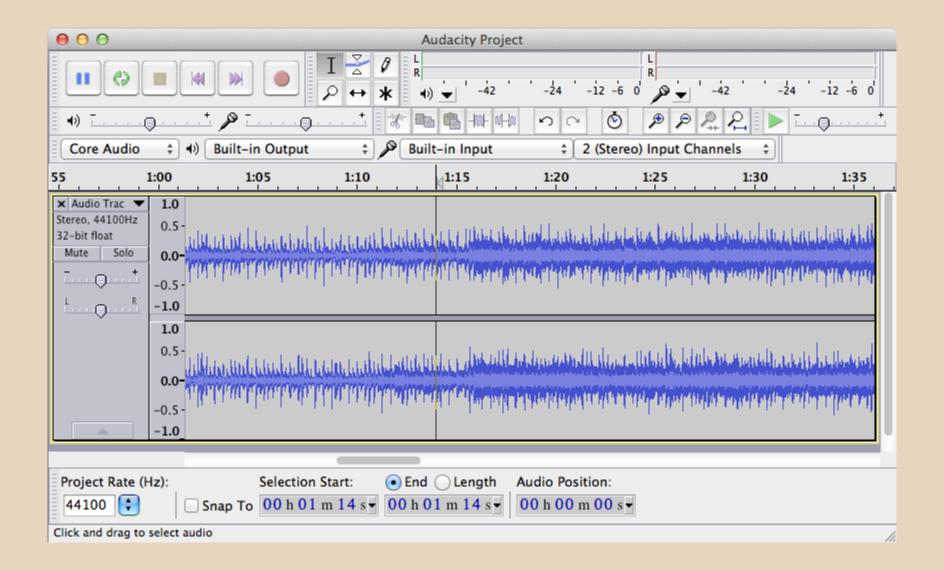
## **Audio DW**

- Bit rate and bit depth define quality
- Recommended: 96 kHz / 24 bit (48/24)
- Broadcast Wave Format (BWF) preferred
  - A form of WAV file
  - Can contain metadata about recording

#### http://www.sonycreativesoftware.com/audiostudio









#### Video DW

- Quality defined by frame rate & resolution
- Variety of codecs and formats a challenge
- JPEG 2000 MXF preferred
  - J2K-encoded frames in an XML wrapper
  - AVI, MOV, MPEG-4 common codecs
  - H.264/MPEG-4 AVC

## http://handbrake.fr/



#### Hand Brake

An open source multiplatform video transcoder

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User Manual

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○ Web ( handbrake.fr

Google Search

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Transmission hiscript

Thanks

SOURCEFORGE.NET®

Start Download www.Donwload.pc...

Convert Videos for Free Start Here!



#### HandBrake Release Preview for 0.9.9

Monday, May 06, 2013

"Compatibility means deliberately repeating other people's mistakes."

- David Wheeler

We are getting close to releasing 0.9.9 and require a few more people testing before we can officially push out the new release.

As such, we are releasing a "Preview" build today to showcase the upcoming release.

For those of you that enjoy living on the edge, you can download this build from our <u>sourceforge page</u>.

Ubuntu builds remain as nightly builds on the <u>Ubutu PPA page</u>

Check out the release notes for more details.

Please post any bugs or issues you discover in the bugs forum or let us know via our IRC channels.

[ Comments ] can be discussed on our community forums.

#### HandBrake 0.9.8 Released!

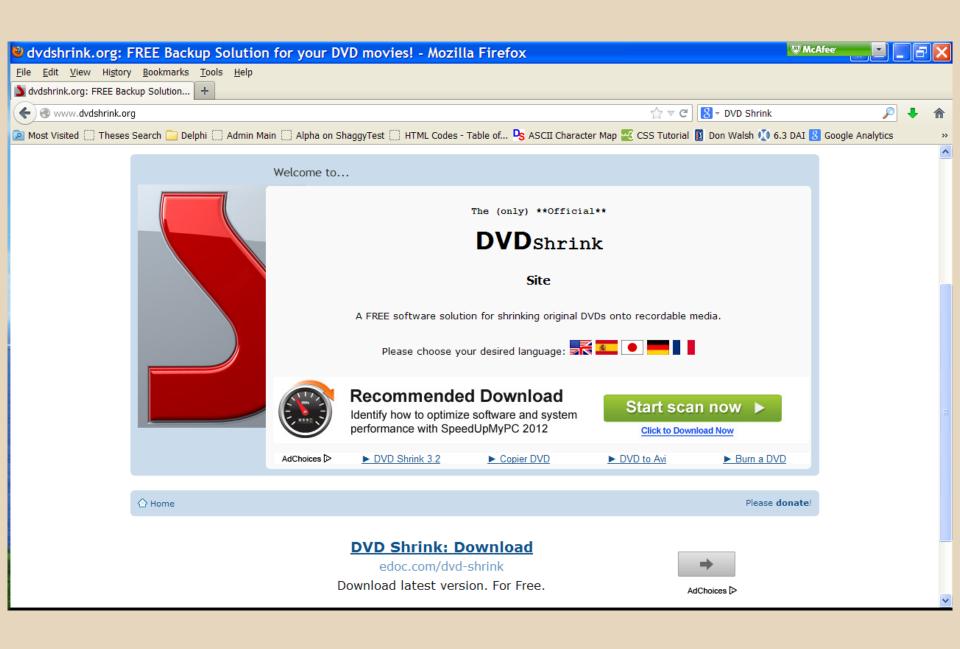
Wednesday, July 18, 2012

"In programming, as in everything else, to be in error is to be reborn."

- Alan J. Perlis

We've decided to push out another release to fix some bugs that cropped up with 0.9.7. This includes all the previous fixes for 0.9.6 including the new AppleTV3 preset and updated iPad preset. Check out the <u>detailed</u> release notes for more details.

# FFmpeg



## Web Archives DW

Websites often disappear and are lost

- For capturing websites
- Web ARChive Format (WARC)
- Preferred, newer spec than ARC
- Better support for harvest, exchange

Blue Squirrel ▼ Products ▼ Buy Now ▼ Account ▼ Cart ▼ Support ▼ Privacy Policy

#### Offline Browser, Grab-a-Site 5.0 Software

Copy one page, or an entire site to your computer!



Grab-a-Site 5.0 is a file-based **Offline Browser** that combines speed, stability, and powerful filtering capabilities. If you need an *industrial-strength* tool that can download an entire web site while retaining the original filenames and directory structure, Grab-a-Site is for you!

Purchase Grab-a-Site \$69.95 ADD TO CART

Download a Trial Version

DOWNLOAD

#### CONTROLLED downloading to the detail!

Downloading web pages and all their supporting files (such as graphic files, sound files, etc.) by hand can be inconvenient, time consuming and frustrating.

Blue Squirrel's Grab-a-Site addresses these problems by allowing you to download a quantity of information or an entire web site to your hard drive.

Downloading can be done in off peak hours when access lines are available and less expensive. The data may then be edited, browsed, studied, or used in any way offline at your convenience.

This makes the use and modification of the information gathered more economical and efficient. It is simple to use and cost effective for anyone working with web content.

Updated: November 14, 2011

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Commission Co-Counsel

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FAQs

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#### Commission of Inquiry on Hormone Receptor Testing

The Honourable Margaret A. Cameron, Commissioner, presented the Report of the Commission of Inquiry on Hormone Receptor Testing to the Minister of Health and Community Services, Ross Wiseman, in St. John's, Newfoundland and Labrador, on March 1, 2009.



The Report

(printed copies of the report are available from the Office of the Queen's Printer at queensprinter@qov.nl.ca or (709) 729-3649)



Media Advisory - Presentation of Report to Government



About the Commission of Inquiry



# MUN Digital Preservation Plan

Preservation Plan 8 May 2013

## Structured Data ML

- Databases, spreadsheets, etc.
- Recommended: SIARD or CSV-style files
  - SIARD for storing databases, capturing the structure and content, uses XML
  - CSV a flat file rendering of tables & data, may need data models/dictionaries
- DDI also for complex statistical data

# Sustainability ML

- Sustainability of digital collections increasingly tied to local vs external
- Cost effectiveness depends on availability of local IT resources
  - Local still good for large volumes > 10 TB
  - Cloud viable for smaller < 10 TB</li>
- Consortial approach brings both potentially

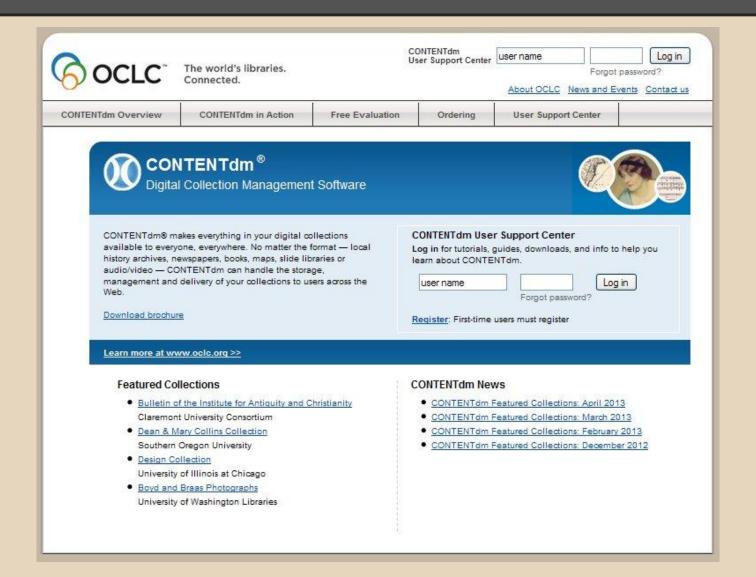
# Hosted/Cloud Options ML

- Cloud options similar to hosted
- Amazon EC2 most common cloud platform
- OpenStack an open source alternative to building "private" cloud services
- DuraCloud uses variety of cloud providers to facilitate back-up/preservation services

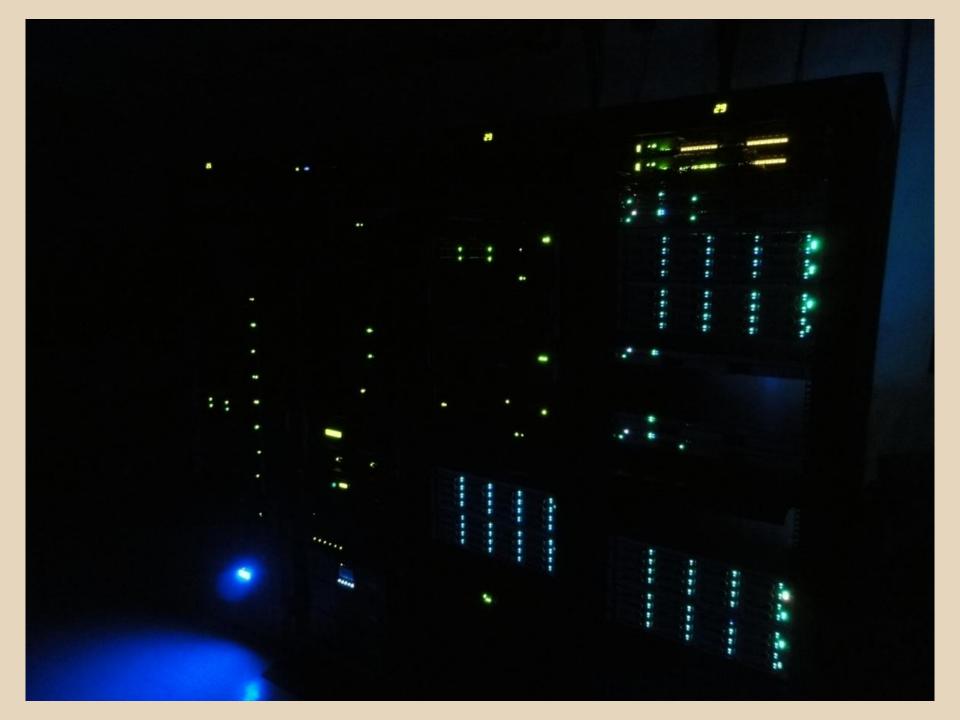
# Persistent Identifiers

- PURL, Handle, ARK, DOI
- Support for PURLs does not guarantee persistence or permanence
- Organizations must maintain systems regardless of type of PURL
- G. Bilder's post on DOIs is a must read

# **MUN Operations DW**











# Shared Systems/Collaboration ML

- Software systems increasingly capable, esp.
   when it comes to consortial hosting
- Save on cost of staff, gear, SW
- Centralized service reduces overhead, but may restrict flexibility
- Shared framework may provide additional copies/options for preservation copy



## Council of Atlantic University Libraries CAUL ATLANTIC ISLANDORA REPOSITORY NETWORK

About Repository

The Network

Reference List

Contact

Search

a 1

#### **Welcome to CAIRN**

CAIRN is a CAUL initiative, aimed at providing information about digital collections and data held by Atlantic Canada's post secondary institutions, and working toward both a single point of access and search for Atlantic Canadian collections and a strong network supporting best-practices data stewardship, ensuring the continuance of the history, culture, and research performed in this region.



#### The Repositories

Acadia University
Atlantic School of Theology
Cape Breton University
Dalhousie University
Mount Allison University
Mount Saint Vincent University
NSCAD
Nova Scotia Community College
Saint Mary's University

#### The Repositories

Memorial University of Newfoundland St. Francis Xavier University University of King's College University of New Brunswick - Saint John University of New Brunswick University of Prince Edward Island Université Sainte-Anne Université de Moncton

# Examples: Open Source

- Easy to install & maintain
- Digital Library Collections
  - Omeka, Greenstone
- Institutional Repositories
  - DSpace, EPrints
- Islandora
  - Flexible, useful for DLCs, IRs, Research Data and any kind of digital data
  - Based on Drupal/Fedora
  - Strong multi language support
  - Solution pack approach, releases
  - Growing community



#### Collecting and Preserving the Stories of Katrina and Rita

The Roy Rosenzweig Center for History and New Media (CHNM) at George Mason University and the University of New Orleans organized the Hurricane Digital Memory Bank (HDMB) in 2005 in partnership with many national and Gulf Coast area organizations and individuals. HDMB was awarded the Award of Merit for Leadership in History, and is the largest free public archive of Katrina and Rita

Search

Advanced Search

Home

with over 25,000 items in the collection. Read More.

About this Project

Items

Collections

Add to Memory Bank

#### Featured Image



DSC\_6833.jpg

We welcome contributions form survivors, first responders, relief workers, family, friends, and anyone with reflections on the hurricanes and their aftermath

Add to the Archive

#### **Featured Stories**

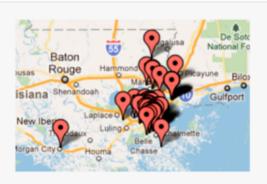
"My family and I evacuated the Sunday before Katrina. We intended on staying and riding out the storm, but when we saw how much strength it had gained during the previous days of tracking it, we had no choice but to pack a couple of days' worth of clothes and food, and head out on a journey that we never would have expected." More...

"I evacuated to Baton Rouge for Hurricane Katrina. It was the most horrible experiences of my life. We were living in an apartment with fifteen other people. It was air matresses lined up from door to door. My parents and my... More...



Images Stories Oral Histories Video

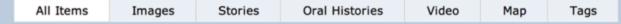
#### Map



Tags

Katrina, New Orleans, st bernard parish, Rita, hurricane, Hurricane Katrina, nola, justice system

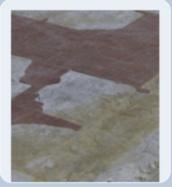
#### Items (936 total)







2005-27843.jpg...







2005-28567.jpg...



2005-28163.jpg...





2005-28037.jpg...





2005-28572.jpg...

5

1 2

3

4

Next

Last

### 2005-28567.jpg (Object)



Collection Smithsonian National Museum of American History Hurricane Katrina Photos

Lakeview District

#### Citation

Smithsonian, "2005-28567.jpg (Object)," Hurricane Digital Memory Bank, accessed March 3, 2013, http://hurricanearchive.org/items/show/1677.













## ՃԱՀԱԶԵԼ ԶԻՄԱԱՏՈԻԹԻԻՆ ԵՎ ԶԻՄԱՏ, ԻՄԱՆԱԼ ԶԲԱՆԱ ՀԱՆՃԱՐՈՅ



Geo. location

Dedicated to the 500th anniversary of Armenian book printing (1512-2012)

Search in	Text	•	for [	some	\$ of the words	Begin Search

Author | Titles | Publishers | Place | Year of publication

Equipment for digitisation activities was funded by "Endangered Archives Programme" supported by Arcadia and administrated by the British Library through the EAP180 project.

#### About this collection

The first Armenian book was printed in Venice in 1512 by Yakob Meghapart. Between 1512 and 1513 he printed five titles: "Urbatagirk", "Parzaytumar", "Pataragatetr", "Altark" and "Tagharan". Following the initial period Armenian printing spread rapidly during the XVI-XVIII centuries into cities with large Armenian presence such as Venice, Constantinople, Rome, Lvov, Milan, Isfahan, Livorno, Marseilles, Amsterdam, Madras, Calcutta, Smyrna, Etchmiadsin, Trieste, Petersburg, Nor Nakhijevan, Astrakhan. Thanks to Armenian bibliographers Dr. Ninel Voskanyan, Revd. Dr. Vrej Nersessian and other scholars the early printed book collection has been catalogued to the highest standard in three sequences: 1512-1800; 1801-1850 and 1851-1900.

Successful realisation of this project will:

- · improve the facilities for Armenian and international users' accessing Armenian rare book collections;
- supply researchers with easy access to high-quality, well structured unique resources and the tools, interfaces to help them effectively organise research processes;
- · open the material to scholars worldwide, currently unable to study them firsthand due to distance;
- · prevent further physical deterioration of the collections.

The complete collection comprises 2 subcollections. Those currently available are:

Armenian Early Printed Books Armenian Rare Books





# AUGUSTI SHUTUUSNIPAHG GU STUPUS, PUTUGUL GRUGU ZUGAUNN3



Dedicated to the 500th anniversar of Armenian book printing (1512-2012)

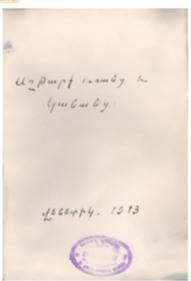
Search Author

Titles

Publishers | Place | Year of publication

Holdings | Geo. location | Title U-₽

Armenian Books DETACH NO HIGHLIGHTING



Click the cover to view the interactive book.

Requires Adobe Flash Player 8+. (Download)

Title: Աղթարք (լուսապատճեն)

Publisher(standardized): Հակոբ Մեղապարտ

Place (standardized): Վենետիկ

Year of Publication: 1513

Notes: Աղթարք արանց և կանանց։

Շարվ. 11x6,5 սմ։

380 էջ։

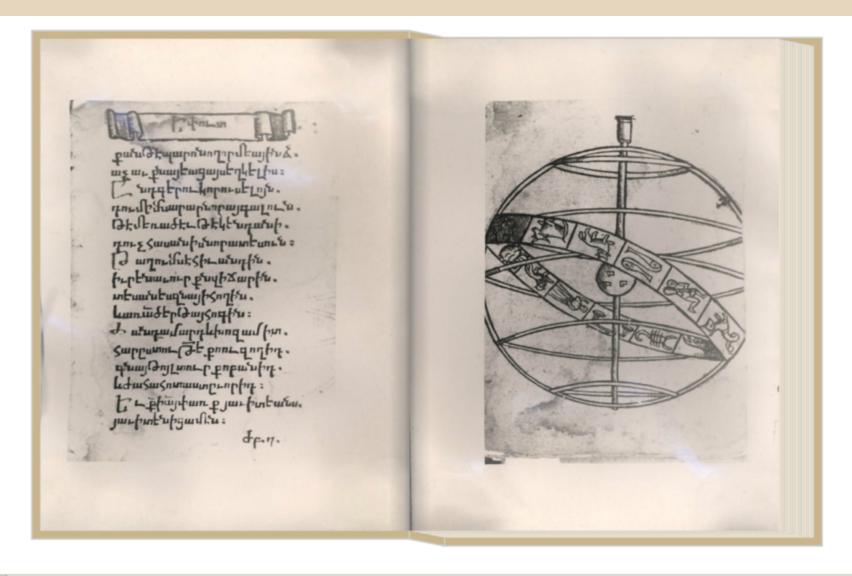
File size: 53,2 MB

**Holdings:** Armenia, Yerevan, National Library of Armenia

Year and Place of Digitization: 2012, National Library of Armenia

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# PRINCE EDWARD ISLAND LEGISLATIVE DOCUMENTS ONLINE

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an<del>d</del>

**Full Text** 

search

#### Navigation

- Journal of the Legislative Assembly
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- Audio Recordings
- Images



Public Gardens, Province House, Charlottetown, ca. 1894 Source: Public Archives and Records Office - Acc3218/39

#### Welcome

This site provides access to the full text of the Journals of the Legislative Assembly of Prince

Jim Bagnall (Montague-Kilmuir)

Motion was CARRIED UNANIMOUSLY and resolved accordingly.

#### Adjournment

8:56 On Motion of Sonny Gallant (Government House Leader), seconded by Cynthia Dunsford (Stratford-Kinlock), and with unanimous consent, the House adjourned until 2:00 p.m. on Wednesday, April 28, 2010.

#### WEDNESDAY, 28 APRIL 2010

The House met at 2:00 p.m.

#### Prayers

#### Routine Proceedings

#### Journals

Journals for Friday, 23 April 2010 were adopted by the House without amendment.

Doors were opened

#### Matters of Privilege

None

#### Statements by Members

Pat Murphy (Alberton-Roseville) made a Statement recognizing volunteer fire fighters in West Prince, PEI. 2:13 Charles McGeoghegan (Belfast-Murray River) made a Statement on the start of the spring lobster fishing season.

2:15 Hon. Leader of the Opposition made a Statement on ArtsSmart projects.

#### 2:16 Questions by Members

#### Statements by Ministers

2:59 Hon. Allan Campbell (Innovation and Advanced Learning) made a Statement announcing the expansion of Advantage Communications to Summerside.

Hon. Janice Sherry (Community Services, Seniors and Labour) made a Statement recognizing today, April 28 as the annual Day of Mourning, honouring those injured or killed in the workplace.

3:05 Hon. Doug Currie (Education, Early Childhood Development and Attorney General) made a Statement on new initiatives of government in math curriculum.

Hon. Carolyn Bertram (Health and Wellness) made a Statement on the establishment of an Organized Stroke Care Model in Prince Edward Island.

3:10 Hon. Janice Sherry (Community Services, Seniors and Labour) made a Statement on Government's intentions with respect to the minimum wage on PEI.

#### Presenting and Receiving Petitions

None

JOURNAL OF THE LEGISLATIVE ASSEMBLY 163 213 Charles McGeoghegan Belfast-Murray River made a Statement on the start of the spring lobster fishing season 215 Hon Leader of the Opposition made Page 153





#### What is Island Voices?

The first phase of Island Voices (2010 – 2012) is a project focussing on the digitization of one of Prince Edward Island's most important collections of folklore and oral history field recordings, the Reg "Dutch" Thompson archive. Future phases of the project will develop a more comprehensive online archive of PEI spoken word and music recordings.

#### view the collection









# ▼ Audio

#### Recording Details: Lloyd Gates T2 [Tape Two]:

\*\*\*This interview is

SIDE A only,

Download MP3

SIDE B is blank.

SIDE A 00:00:00 -- 00:06:11 Discussion about his service in WWII continues on from Tape One; medals, WWII, air force, RCAF, aircraftman, American soldiers, Holland, Dutch.

SIDE A 00:06:11 -- 00:08:03 Discussion about trips into Charlottetown and learning to drive; Charlottetown, driving, Market Square, movies.

SIDE A 00:08:03 -- 00:12:05 Discussion about serving in France

#### Overview:

#### Interviewee(s):

Gates, Lloyd

#### Playing Time:

00:32:06

#### Interview Date(s):

2009-01-00

#### Interview Summary:

This is an interview with Lloyd Gates of West Royalty, Charlottetown, PEI. In this interview Lloyd talks about his service in WWII with the RCAF, driving, serving in France, Holland, coming home after the war, changes in West Royalty, hauling ice, the end of the mill, home remedies, radio, the Upton Airfield, Christmas, and various other topics.

#### Place(s) Discussed:

France; Holland; Charlottetown, PE; West Royalty, PE; Bell's Hill, PE

#### Time(s) Discussed:

WWII, 1967, 1946

#### Rights Information:

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#### User login

Log in

3	
Username: *	
Password: *	

Create new account Request new password

# Moving Image Research Collections Digital Video Repository

#### Search

#### Search

Field:	Search terms:		
Search All \$		+	Search

#### **Featured Item**



# Valentine's Day Feature: Harry and Lucille's wedding party at the Aldine, 1917–Birch–home movies

Its Valentine's Day this week and MIRC wants to celebrate the joys of our friend cupid, who can even manage to coax a gritty young newsreel cameraman to fall in love. Ninety-six years ago Harry Birch wed his sweetheart, Lucille Horton. This film shows us the beginning of their life-long partnership.

Browse the Collection | View All Featured Items

1 of 23

•



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#### User login

Username: \*

Password: \*

|

Log in

Create new account Request new password

# Moving Image Research Collections Digital Video Repository

Home Moving Image Research Collections Milliam and Harry Birch collection Harry and Lucille's wedding party at the Aldine, 1917--Birch--home movies

Play

Metadata

Player



Basic Metadata

#### Title:

Harry and Lucille's wedding party at the Aldine, 1917--Birch--home movies

#### Description:

Scenes of Harry and Lucille's wedding party at the 543-545 Aldine, Chicago, IL. The couple was married in Milwaukee. This film is a 16mm optical reduction from the original 35mm nitrate.



Inicio

Arte

Música

Conferencias

Ciencias Sociales

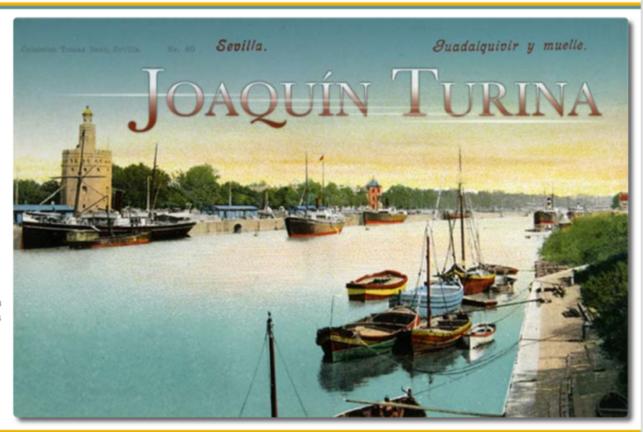
Biblioteca

INICIO > BIBLIOTECAS > COLECCIÓN DIGITAL DE TURINA > INICIO



"Para mí, la música es un "diario" de la propia vida" (1944)

El Legado del compositor Joaquín Turina constituye un recorrido apasionante a través de su vida y su obra, y en suma es un fiel retrato de la época de grandes cambios que le tocó vivir.



**CONTENIDO** 

**COLECCIONES** 

ÍNDICES Autores **BUSCAR** 

Jacquila Turina

Mining

INICIO > BIBLIOTECAS > COLECCIÓN DIGITAL DE TURINA > RESULTADOS





#### **BÚSQUEDA**

#### Búsqueda actual

(-) \*:\*

#### Filtro activado

(-) = Manuscrito

#### **FILTROS**

#### Autor

- Turina, Joaquín 1882-1949 (55) + -
- Barrios Masero, Manuel. (1) +-
- Franco, Enrique 1920-2009 (1) +-
- Machado, Manuel 1874-1947 (1)
- Martínez Sierra, Gregorio 1881-+-1947 (1) +-

#### Ver más

#### Fecha

• ca.1940 (6) +• 1943 (4) +• 1944 (3) +• 1949 (2) +• [19--7] (2) +-

#### Ver más

Fecha de publicación

#### RESULTADOS

(1 - 20 de 73)

1 2 3 4 siguiente > último »

Título: [Inventario de sus composiciones musicales]

Autores: Turina, Joaquín, 1882-1949

1. Archarde .

2. White sales !

2. A mass vier.

Featur Nactional de La Habenia .

Septembra. Mindra, para pinal

I. Bambra. .

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V. Secre Martin.

V.

Título: Noche en blanco

Autores: Turina, Joaquín, 1882-1949

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(8 - He Gilley de top (H. Browth)

(9 - He Gilley de top



#### [INVENTARIO DE SUS COMPOSICIONES MUSICALES]

#### [Inventario de sus composiciones musicales]

No abstract.

Autores Turina, Joaquín, 1882-1949

Descripción 1 v.; 12 cm.

física

Notas · Legado Joaquín Turina.

> Inventario de todas sus obras ordenado cronologicamente.

Materias

Turina, Joaquín, 1882-1949----Catálogos

Turina, Joaquín, 1882-1949----Autógrafos

Tipo

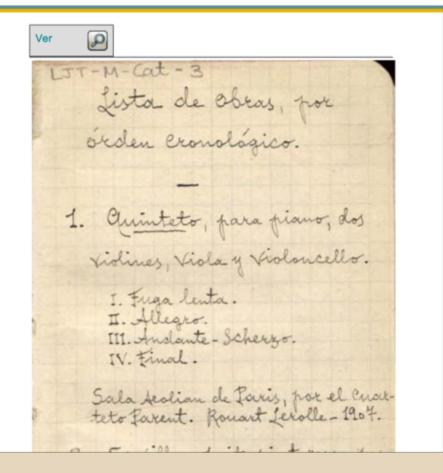
Manuscritos

Catálogos

Autógrafos

Descargar PDF





















EST. 1785















TUDelft Total













**Prince George** 





NORTHERN COLORADO















LAWRENCE BERKELEY NATIONAL LABORATORY A-Z INDEX | PHONE BOOK | CAREERS |











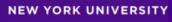


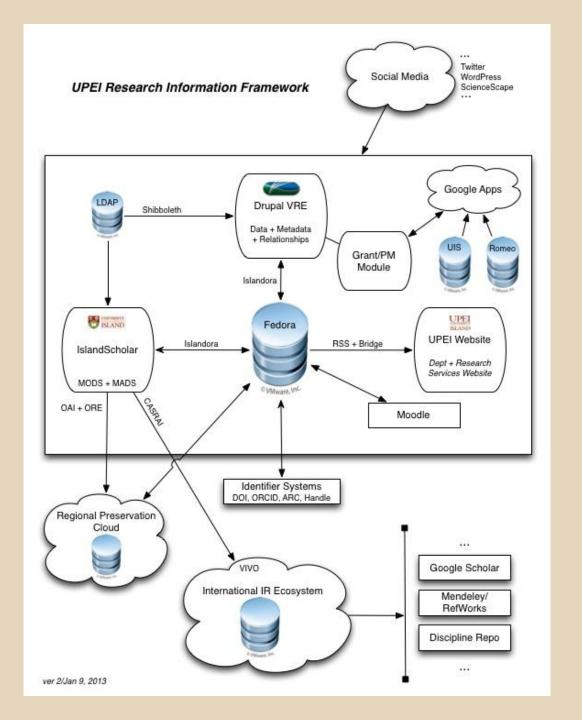




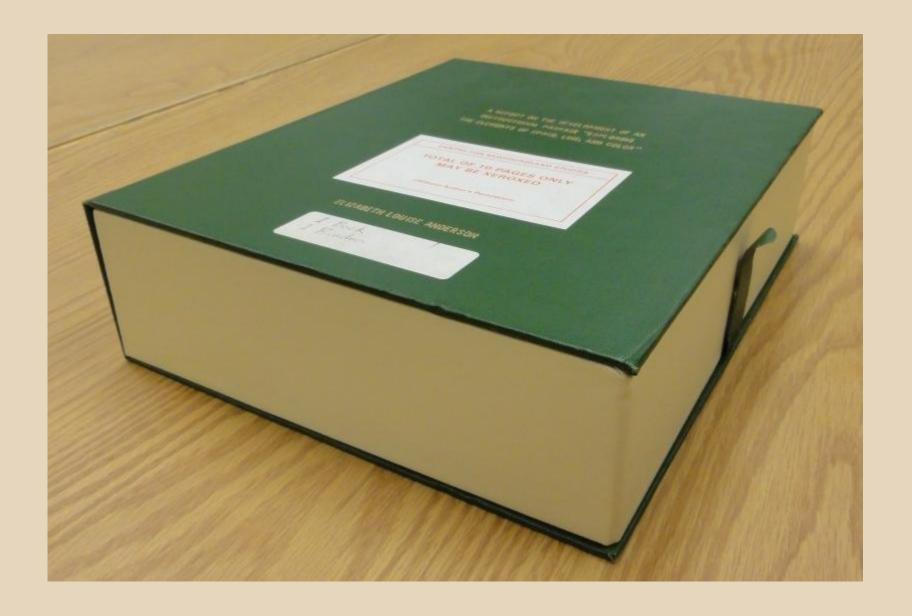




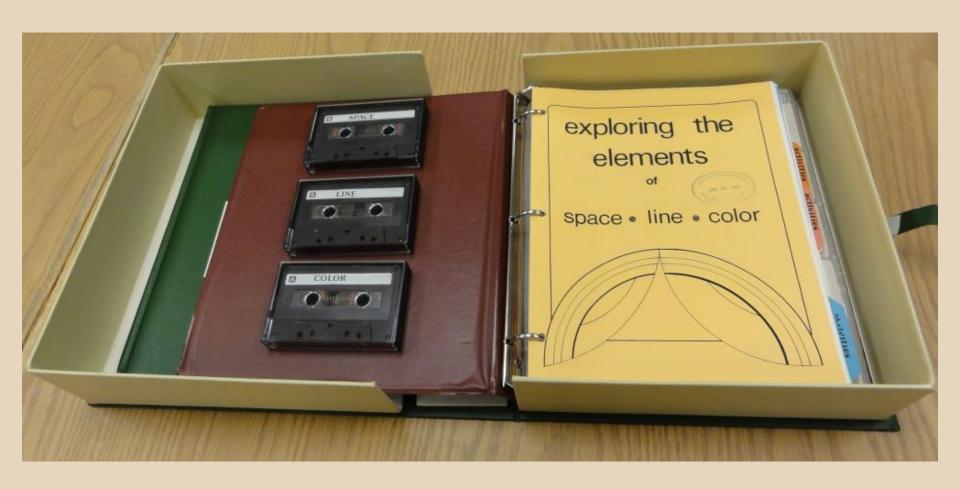




## Think outside the box... or in this case inside the box



# Be prepared for anything



# You never know what might come your way



# Digital Archives Initiative (DAI)

Memorial University's Digital Archive

http://collections.mun.ca

UPEI's IslandArchives.ca

http://islandarchives.ca/



http://digitalpreservation.ncdcr.gov

# Questions?

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