

# Early Draft of Digitization Specifications, Standards, and Practices for Saskatchewan History Online

## Purpose:

Saskatchewan History Online (SHO) is a collaborative project involving many different institutions. This guide is designed to set standards and give best practices for digitization of material so that all scans meet sufficient quality control and are consistent throughout the project

## Policy:

Eligible material for digitization includes any cultural artefact created by a person considered to have strong ties to Saskatchewan and cultural artefacts depicting Saskatchewan culture. This includes artefacts created or dealing with pre-1905 date ranges that encompass roughly the boundaries or cultures of contemporary Saskatchewan i.e. North-West Territories, Rupert's Land, "pre-historic" artefacts and Aboriginal artefacts.

Note: The use of artefact in this context implies a physical object of any size, material, or medium that has cultural value relating to Saskatchewan.

Certain materials may be considered priorities that are especially cogent to themes created by SHO to help catalyze the online collection. In concordance, some material may be considered unsuitable due to inappropriate content or dubious cultural value. For more information regarding unacceptable content contact the project lead.

Additionally, content that has previously been digitized, either in another collection that has no affiliation with SHO or by another institution shall not be digitized unless there is a significant difference due to unique markings, or the quality is far superior. This includes different media where no huge significance is present i.e. prints and negatives. Similarly, certain objects which are common to several institutions across the province will not be digitized (except in special cases where the object has extra significant value i.e. belonged to a famous Saskatchewanian). This includes material such as common tools or farm equipment.

## Procedures:

### Equipment:

**A computer** – Windows XP or higher or a Mac with OS X 10.4 or higher is recommended – as long as new scanning or digital camera software (such as Google Picasa, Adobe Lightroom, or whatever came with your camera) and (if necessary) Adobe Photoshop can be installed on the system. If you have other media (Video, Audio, etc.) make sure your computer is capable and running requisite software (iMovie or Garageband (mac), or Adobe Premiere/Audition, Audacity, etc.)

**White cotton gloves** – It is a good idea to prevent fingerprints, especially on negatives, slides, and other sensitive materials, to have a pair of white cotton gloves to handle materials. Additionally, rare, brittle materials can react to the acids from human skin; gloves prevent damage to the material.

**Energetic Staff** – Staff who can properly handle, digitize, and describe an object, including possible research, as well as use software and Islandora effectively.

**Digitization Equipment** - It will depend on what exactly of materials you will be digitizing as to what digitization equipment you will need for reproducing photographic, textual, audio, video, three-dimensional, or other media.

### *Photographic/Textual Materials:*

#### Scanners

Scanner settings for digitizing photographic/textual material will be outlined below, but for 35 mm slides and other small negatives settings of over 3000 DPI are common. When purchasing scanning equipment make sure your scanner is able to meet the requirements as prescribed below for the corresponding content.

Standard scanners commonly have 8.5” x 11” beds: if you have material larger than this than over-size scanners are available (often 11”x17”). If you have a lot of oversize material that won’t fit even on an 11”x17” bed than a digital camera may be required. Additionally, Saskatchewan History Online will have a very over-size scanner and it will be open to use for SHO partners.

#### Cameras

Digital cameras rely on a digital image sensor that captures light (taken in through the lens) and capturing it as millions of pixels each one of millions of colours. This creates the digital image. There are several important differences between how cameras and how scanners create their digital images

The following will explain how to best take digital images with a digital camera. First, what type of camera to use: A DSLR (Digital Single Lens Reflex) camera is best as it will create digital images of much, much higher quality than inexpensive

point-and-shoot cameras.

Important Camera settings explained:

### **Aperture (f-stop)/depth of focus**

Aperture (also known as f/stop) is how large the iris (or eye) of your lens opens up. A larger aperture means a larger opening in your lens for light to pass through. When referring to aperture, a smaller number is always a larger opening. For example, an aperture of f/5.6 is a larger opening, and therefore lets more light in, than an aperture of f/11. Each unit of measurement in aperture is called a 'stop' one stop up would be making the lens opening larger, and one stop down would be making it smaller. A single stop down of aperture lets half the light in that the previous stop did.

### **Comparison of the diameter of different f/stops**

Adjusting aperture also changes your Depth of Field. Depth of field is how much of the area, measuring away from your camera, is in focus. If you are tightly focused on an object which is relatively flat, you have short depth of field. If you are focused on a group of people standing at varying distances, you would need a long (or large) depth of field. Basically, a short depth of field (which would be caused by a large aperture) will be clearly focused on a relatively shallow area. The item you focus on may be sharp and clear, but any objects in the foreground or background may be blurred. A smaller aperture would create a larger depth of field, and bring all objects into perfect focus.

### **Shutter speed**

Shutter speed is simply how long your camera's shutter stays open when you take a picture. These speeds can range from thousandths of a second to 30 or more seconds. The longer your shutter stays open, the more light your camera lets in. A shutter speed of 1 second lets in 4 times the light of a shutter speed of 1/4 second. The shutter speed can also determine the clarity of a picture. A longer shutter speed will blur the shot, and create trails from even the slightest bit of movement in your picture, whereas a shorter shutter speed will 'freeze' any action and create a sharp picture in which time appears to be stopped. For an example, take a picture of a constant drip of water using both a fast and a slow shutter speed. The shot taken with the slow shutter speed will create a soft blur of water, whereas the shot taken with the faster shutter speed will catch every individual drop in mid-air. A fast shutter speed can also help eliminate blur due to camera shake when not using a tripod.

### **iFilm speed (ISO)**

Film speed (or ISO) is a measurement of how sensitive your camera's sensor (or in the case of a film camera, your camera's film) is to light. The larger the ISO (higher number), the more sensitive it is to light. The smaller the ISO (smaller number), the less sensitive it is to light. Each step up in

ISO doubles the amount of light sensitivity (ISO 400 is 2x as sensitive to light as ISO 200). Using a higher ISO, you can sometimes get shots in low light that would have required a longer shutter speed or a larger aperture if you were using a lower ISO. However, this does not come without its setbacks. The higher the ISO is set, the grainier your picture will appear. At higher ISOs, you will notice some extremely substantial grain. ISO noise is much less noticeable in DSLR and other large sensor cameras than it is in point-and-shoot cameras. Below are some general ISO guidelines that you can follow.

**100 ISO** - Less grainy, good for shots with plenty of light.

**200 ISO** - Still not very grainy, don't need as much light as ISO 100. Grain will be more noticeable when printed in larger formats.

**400 ISO** - Mainly used for shooting lower-light outdoors or indoors without a flash, but with an ample amount of light. Slightly more grainy than ISO 200, but not by much.

**800 ISO** - Very grainy, but will give 8x the light sensitivity of ISO 100.

*(Digital camera information from  
[http://www.photography101.org/basics/camera\\_settings\\_explained.html](http://www.photography101.org/basics/camera_settings_explained.html))*

## Setting Up Your Equipment:

### For scanning visual media:

- Create a local folder directory to store the images with logical naming scheme. Often the entire call number can be used, with each folder-level material getting its own destination folder inside of a box-level folder  
i.e. MSS 4 -> Box 2 -> A-2354-7  
MSS 4 -> Box 2 -> A-2354-8, etc
- Calibrate your scanner and monitor, if necessary. For more information see your product information or visit this webpage for some useful tips:  
[http://www.pcworld.com/article/241957/how\\_to\\_calibrate\\_your\\_monitor.html](http://www.pcworld.com/article/241957/how_to_calibrate_your_monitor.html)
- Wipe scanner with non-scratching (i.e. microfiber) cloth to remove dust and/or other particles, fingerprints, etc. from scan bed surface(s). Repeat this process every time you begin scanning and as often as necessary
- Open desired scanning software
- Make sure to disable features that might digitally alter the image such as Digital ICE or other unsharp masking, etc. as this suggests the source item was in better condition than it really was. **Note: These digital scans should be archival records. Any image altering can be done afterwards in photo editing software.**
- Set the scanner's gamma to 2.2 and/or set the colour profile to Adobe RGB 1998. Next, select type of scanning processes: "Reflective" for opaque objects (photograph prints, manuscript pages, etc. or "Transmission" (or "Film") for negatives, slides, transparencies, etc.

- Select positive or negative - this may take a few test scans to confirm the correct setting.
- Select colour or black and white - this may also take a few test scans to confirm the correct setting.
- Ideally, set bit-depth to 48 for colour scanning and 16 for black and white scanning. 48-bit photographs are larger, so if file size is an issue then using 24-bit is acceptable
- Set naming scheme – often it is a call number, or perhaps other logical name (fonds name). Most software will append a multi-digit integer after the file name so that folders with multiple images for instance can be differentiated easily.
- Select file destination – put the files into the folders made in step 1. When scanning a new folder/object/item etc. make sure to check the destination folder so you can easily find the scanned images.
- Press “Preview.” Click and drag and adjust the marquee (size box) to include the image AND image matte, frame etc. if the frame and matt are important to the artefact ie. matte has information written or printed on it, frame is itself historical, etc.
- At this point, see below for specifics on settings. When those have been reviewed and adhered to press “SCAN” → Always save as a Tagged Image File Format (.TIFF file). Refer to “Naming” section for more details.

## **Scanning Process:**

### Reflective Scanning:

- If your scanner allows for transparent scanning make sure the document cover is in the top of your scanner lid (The white reflective plastic). If you are unable to find it, or your scanner didn't have one, use a thick piece of white paper. This prevents bleed-through or opacity in the scan in things like carbon paper.
- Encapsulated items should be removed from their sleeves if possible. If glare is an issue they should be reconsidered for digitization or, if necessary, digitized with a DSLR camera
- Items featuring embossed or wax seals should be digitized on a scanner set to use one directional light if possible
- Place the object on the scan bed with the edge of the item next to the arrow at the corner of the scan bed, which indicates is the proper place for the object (if possible). Otherwise put it up against a corner or edge of the bed. This will help to straighten edges.
- Close the lid. This will reduce glare. If object is large or delicate closing the lid may not be an option. If the scans are too faded, glare occurs, or is otherwise compromised, consider a digital camera as source for digitization.
- Make sure the “thumbnail” box is NOT checked off (if using software that has it); Hit preview; After a preview of the image comes up, use the size selector tool to highlight only the desired size of the image. Generally the long-side of the image should be 4000 pixels. If, after the size-selector tool is adjusted the number of long-side pixels is too small or too big adjust the drop down menu for DPI (dots per inch) to either higher or lower until the number is above but the closest possible to 4000 pixels. If, due to interpolation the choice is either very close to

- 4000 but below or quite a bit above 4000 you may choose to be slightly below 4000 for storage space considerations. Interpolation is explained below.
- Exceptions: Certain bigger file sizes will require more pixels on the longer edge (Because the ratio of document-size to digital size will be too small if kept at 4000 for the larger items).

If a photograph is much larger including the matting/frame scan the whole thing but use the specs as if scanning for the smaller image (i.e. so the *image* itself is 4000 pixels on long side – the entire scan might be many more pixels on long side)

If the image is 8” x 10” up to 11” x 14” scan the long side at 6000 pixels

If the image is larger than 11” x 14” scan the long side at 8000 pixels

### **Interpolation:**

“Best practice often recommends that a scanner be set at its native resolution – being its highest optical resolution – or at a setting equally divides into it to minimize interpolation (see table below for settings for common scanner optical resolutions). Scanners should not be set above the optical resolution even if the software allows it, as all those settings will be interpolated.”

*(Interpolation information and scanner interpolation chart from DigitalNZ  
<http://makeit.digitalnz.org/guidelines/creating-digital-content/photography-and-imaging>)*

Sizes:

<b>6400ppi optical scanner</b>	<b>4800ppi optical scanner</b>	<b>4000ppi optical scanner</b>	<b>3600ppi optical scanner</b>	<b>2400ppi optical scanner</b>
6400	4800	4000	3600	2400
3200	2400	2000	1800	1200
1600	1600	1000	1200	800
1280	1200	800	900	600
400	960	500	720	480
320	800	400	600	400
	600		450	300
	480		400	
	400		360	
	320			
	300			

Note: Most scanning software will recognize the maximum resolution and only give you the proper options

### Transmission Scanning [aka Film Scanning]:

- Select positive or negative depending on the orientation of the object. Always scan in colour if possible, for greater grey tonal variation and to catch any irregularities or hand-coloured touch-ups. Also, negatives should be scanned in negative mode – this can be altered to positive during the upload process (this

- however is not yet implemented. If necessary, negatives can be scanned as positives in the interim)
- When transmission scanning make usually the emulsion (chemical) side is up, if possible; if you are using slide holders that they are placed correctly into them. Make sure they are entered straight and the slide holders are properly placed onto the scan bed, as crooked scans may result. Remove the white reflective screen from the scanner lid.
  - To reduce flare in both positive and negative transmissions scanning, cover the scanner glass so that only the area of the item being scanned is exposed. Using slide cradles will help this as well
  - Click “preview” – this will quickly show what the final scan would look like
  - If scan previews look incorrect (ie. out of focus, colours way off, etc.) check to make sure the slides are in the holders correctly (including having the proper orientation), the holders are in the proper place on the scan bed, and that the scan mode/type is set to transmission or film scanning. Even if the images you have do not perfectly fit in scan holders, you may want to use some anyway if they can hold the image on at least 2 sides to prevent curling/warping etc.
  - If you are using the slide or negative holders then perfectly sized previews should show in the window. Make sure they look correct before continuing.
  - If you are not using them and the image shows up very small then surround it with the size selector tool and click “zoom” which will re-preview the item much larger. Then you can set the image size selector to take only the desired portion of the image to be scanned.
  - Also, if possible/desirable, you may include a small sliver of black along one side of the negative to show the dark black side for improved contrast/colour density.
  - Use things like text, body language, or other clues as to whether the transparencies might be backwards: flipping the image in post-production is not ideal.
  - Make sure the preview has a long edge (i.e. the bigger number) of 4000 pixels (for large exceptions see below). If the number is too small or too big adjust the drop down menu for DPI to either higher and lower until the number is closest possible to 4000 pixels. Ideally err on the large size, unless file size is an issue.
  - Make sure to select TIFF (make sure to select uncompressed if there is an option) Click “scan.”

Scan sizes: For 35 mm up to 4”x5” negative film (Genrally 2800 DPI for 35 mm up to 800 DPI): 4000 pixels across long dimension, excluding uninformative borders;  
For negatives 4”x5” up to 8”x10” scan the long-side at 6000 pixels  
For negatives larger than 8”x10” scan the long side at 8000 pixels

### Book Scanning (bookedge scanner):

Information Forthcoming

### Book Scanning (Camera-cradle set up):

Information Forthcoming

## Naming Files

For naming files first go with whatever local practice/standard has been approved. If none such exists then the following is a guideline to help name digital files. The importance of naming the file is to facilitate connecting it to the physical document if the file is for some reason separate from the accompanying metadata.

The following comes from Brett Loughheed's research at the U of M:

- Name each master file according to predetermined naming conventions
- File names should be unique, consistently structured, well-defined, persistent, and observant of any technical restrictions (such as using special characters and punctuation). Leading zeros are used to facilitate sorting in numerical order.
- Don't use capital letters unless necessary (this reduces error)
- Don't use spaces or periods as these can cause problems during the upload process. Replace them with underscores.

The following convention should be used when naming files. It is based upon the provenance and arrangement of the source originals:

1. Institution Name – i.e. wdm (for Western Development Museum) or uofsarchives
2. Collection Number – mss for textual records, pc for graphic materials, mc for cartographic records, followed by the three digit collection number (ex. MSS 24 = mss024)
3. Accession Number – “A” followed by two digits of first portion of number, a hyphen, and three digits of second portion of the number (ex. A.80-17 = A80-017)
4. Box Number – three digit number (ex. Box 2 = 002)
5. Folder Number – four digit number (ex. Folder 1 = 0001)
6. Item Number – three digit number (ex. the 10<sup>th</sup> item in a folder = 010)
7. Page or Part Number – four digit number (ex. page 2 of a letter = 0002)
8. File format extension (ex. TIFF = .tif)
9. All portions of this naming convention should be separated by underscores ( ).



Therefore, the scanned TIFF of the second page of the 10<sup>th</sup> item in the 1<sup>st</sup> folder of the 2<sup>nd</sup> box of MSS 24 (A.80-17) would be named:

uofsarchives\_mss024\_A80-017\_002\_0001\_010\_0002.tif

- Use only as much information as you have.
  - Save to folder in established directory

For non manuscript-holdings such as published books:

- Book title
- LC Call number
- Scan number (starting with front cover/front matter – not the actual page number)
  - i.e.: historic\_architecture\_of\_saskatchewan\_na746s3h57\_001.tif

For Newspapers:

- Institution Repository
  - Name of Newspaper
  - Date of Newspaper in YYYY-MM-DD format or YYYY-MM-Week#  
(if weekly)
  - Section number (if applicable) i.e. A; B; C; Sports;
  - Scan number (starting with front page)
  - i.e.: uofsspeccoll\_saskatchewan\_herald\_1905-02-01\_a5.tif

### **Three-Dimensional Objects (Creating 3-d digital models instead of 2-d digital pictures):**

#### **Videographic materials**

Generally only analogue forms of videographer material will be digitized as videographic, i.e. moving GIF images or photographic bursts are not assembled to make digital motion pictures. Video graphic formats include: 8mm film, 35 mm film, film strip, Beta, VHS, Mini Camcorder tape, laser disc, digital video disc, high-definition digital video discs, Blu-Ray digital video disc, MPEG4 (and other born digital).

#### **Audio materials**

Equipment required depends on what media the audio is stored. Audio formats include: gramophone, phonograph, vinyl record, 1/4" reel-to-reel tape, eight-track, cassette tapes, compact/micro cassettes, compact discs, Super Audio Cds, mini-discs MP3, AAC, WAV, MP2, MP4 (and other born digital).

*(Guide created with help from Brett Lougheed (sp) draft for U of M and with documentation from Digital NZ, as well as LOC, LAC, and various other digital humanities digital specification guidelines)*

## Metadata Elements for Large Image content Model With “Image MODS with Location” form:

Note that custom forms (with pre-filled in fields) can be created. Initially this will be done by SHO staff. If you have large collections with oft-repeated metadata contact SHO about creating a template form that will be based on the Image MODS with Location form and will contain the same fields.

*<titleInfo>*: A word, phrase, character, or group of characters, normally appearing in a resource, that names it or the work contained in it.

**Title:** A word, phrase, character, or group of characters that constitutes the chief title of a resource (i.e. the title normally used when citing the resource). Anything written on the document that seems to be written as a title or label will be taken for as a title and should be reproduced exactly (possible exception: extremely unusual letters are that cannot be duplicated); for instance, if the photographer writes “Bulyea” on the paper part of a Kodachrome slide it shall be considered the title. If a block or paragraph of text is written somewhere on the document with no clear demarcation of title then do not use as the title. Instead, quote it in the description field in quotation marks with written on back/front/side preceding it. For example: written on back: “content written”

If the correction to an inaccuracy is known and the correct title won't be entered elsewhere to be searched then use “i.e.” and the correction in square brackets. Inaccuracies are transcribed as they appear on the source of information. Including the correction helps researchers in locating or understanding the work.

Examples include: Burdoch i.e. [Burdick].

If the document has no formal title than follow local practice for the institution (if available) and/or use old titles created by the institution. If the institution has not yet created their own title, whoever is in charge of the material (collection owner, archivist/librarian in charge, or the digitization technician, if empowered) shall create a title concisely describing the action and surround the word with square brackets to indicate this title is supplied by the technician, not the author. Only the first letter should be capitalized in this case.

i.e. [Man sitting on chair]

**Subtitle:** A word, phrase, character, or group of characters that contains the remainder of the title information after the title proper i.e. words after a colon. Example: if the full book title is *Saskatchewan: A New History* the subtitle field would be: A New History

Note: Inaccuracies and subtitle creation are to be handled the same way as the

**title** field. Seldom will a technician ever have to supply a subtitle field when creating a title, but if he or she does, follow the title field convention.

<*Name*>: The name of a person, organization, or event (conference, meeting, etc.) associated in some way with the resource

**Type:** This attribute indicates the type of name. Two types are available to this content model in a drop down box. “personal” for singular or multiple authors and “corporate” for an institutional/organizational creation

**Name:** Personal: For the main author use an authority like Library and Archives Canada (<http://www.collectionscanada.gc.ca/canadiana-authorities/index/index?lang=eng>) Additionally, try Library of Congress name authority (<http://authorities.loc.gov/>) or the Getty Authority (<http://www.getty.edu/research/tools/vocabularies>). If the name does not exist in an authority use an official list or document as precedent (name as it appears in fonds/collection, or other institutional documentation). If no such document exists or if it is insufficient, use the format last name, first name, middle name [initial] (if available). If using a middle initial then place a period after the letter.

Personal: Hans S. Dommasch; Riel, Louis, 1844-1885; Doe, John E.

Corporate: i.e. Government of Canada; University of Saskatchewan

**Role:** A term(s) that designates the relationship (role) of the entity recorded in name in relation to the resource. Use an authority such as the Library and Archives Canada or Library of Congress or Getty Thesaurus for Art & Architecture

(<http://www.getty.edu/research/tools/vocabularies/aat/index.html>). If the exact role doesn't exist, find an appropriate authority that is similar or contact Craig @ SHO to choose a role which will become a *de facto* standard.

i.e. Photographer; Governing Body; Publisher;

Multiple name/roles can be added. The name and role are submitted by selecting the “add” button after entering the information, at which time the text fields will go blank. Repeat this process for as many different name/role combinations as desired.

**Personal Name:** This attribute indicates all the names of the identifiable people (or animals) mentioned in the *content* of the object. This could include people pictured in a photograph, mentioned in a letter, authors, contributors, addressees, etc. Use an authority such as such as the LOC or Getty.

**NOTE:** DOES NOT YET EXIST

<*typeOfResource*>: A term that specifies the characteristics and general type of content of the resource

**Type of Resource:** Pull down from the list to find the most appropriate type: Text: language material. If material is predominately text, but includes other types (such as a letter or article with figures, pictures, or maps) choose text as type of resource and include references to other types of material (if important) in the note field.

Cartographic: Maps or map-like material. Any cartographical 3-dimensional objects (i.e. sextant) should be considered a Three-Dimensional Object

Notated Music: Sheet and notation paper and tablatures

Sound Recording: This value by itself is used when a mixture of musical and nonmusical sound recordings occurs in a resource or when a user does not want to make a distinction between musical and nonmusical.

Sound Recording-Musical: Used when a resource is predominately a musical sound recording

Sound Recording-Non Musical: used when the sound recording is nonmusical in nature.

Moving Image: Motion pictures, videorecordings, television programs, digital video and animated computer graphics, but not slides and transparencies. It does not include moving images that are primarily computer programs, such as computer games or computer-oriented multimedia (these are included in "software, multimedia")

Three-Dimensional Object: indicates that the content of the record is for a three-dimensional artifact or a naturally occurring object. This includes man-made objects such as models, dioramas, games, puzzles, simulations, sculptures and other three-dimensional art works, machines, clothing, toys, and stitchery. It also includes naturally occurring objects such as, microscope specimens (or representations of them) and other specimens mounted for viewing.

*Note*: a digitization (i.e. photograph, three-dimensional digital object, video, etc.) of a three-dimensional artefact held by an institution is considered to be a three-dimensional object type. If the repository holds only the digitization of the object (and not the object itself) in the collection then it should be considered a still image (for photographic material) or moving image (for video type material). Certain 3-dimensional objects are scanned as multiple two-dimensional images i.e. a book (unless a special case is made to view the book as an artefact) and would not be considered a three-dimensional object.

Software, Multimedia: This value is appropriate for any electronic resource without a significant aspect that indicates on of the other <typeOfResource>

categories. It includes: software, numeric data, computer-oriented multimedia and online systems and services.

**Mixed Material:** Use when there are significant materials in two or more forms that are usually related by virtue of their having been accumulated by or about a person or body. Mixed material includes archival fonds and manuscript collections of mixed forms of materials, such as text, photographs, and sound recordings.

*Note:* the preceding is generally for higher-level records. For item level records (i.e. an entry that corresponds to one particular object like a photograph) mixed material suggests that two or more materials have been combined by an individual with purpose i.e. a scrapbook, collage. In this case use Three-Dimensional Object.

**Still Image:** Photographs, plate prints, daguerreotypes, etc. Slides and transparencies are also considered still images in MODS. Anything that scans as a two-dimensional digital photographic image is a still image

**Genre:** A term(s) that designates a category characterizing a particular style, form, or content, such as artistic, musical, literary composition, etc. Select something (if applicable) from the following authority list: (<http://www.hahnlibrary.net/libraries/formgenre-categorized.html>). This field is optional, so if no compelling argument can be made for inclusion of genre from the authority it should be omitted.

**<originInfo>:** Information about the origin of the resource, including place of origin or publication, publisher/originator, and dates associated with the resource

**Date Issued:** the date that the resource was published, released, issued, or created. Format is YYYY-MM-DD; be as specific as possible i.e. if you know the exact date, fill it in, but if you know only the year then write only the year. Examples include: 1977-09-31; 1987-09; 1999; 1985-??-04 (if day and year, but not month is known)

If you are taking an educated guess use a square bracket and a question mark to indicate it is an estimate i.e. [1979?]. If you only know the date within a few years, use the following format to indicate you know the decade or century in which it was created  
i.e. [198-]; [19--]

**Publisher:** The name of the entity that published, printed, distributed, released, issued, or produced the resource. If there is no official publisher (i.e. for manuscript pages, self-developed photographs, etc.) leave blank.

**Country:** The country where the publisher resides OR the country in which the item was created. If Publisher operates in more than one country choose

the country where a) the book is printed b) the book is distributed or c) the head office/main branch for publisher. If the item was not published enter the country in which it was created i.e. if a letter about Saskatchewan was written in France, the country would be France.

**Place:** The city, town, or other similar jurisdiction where the publisher resides. If the city is unknown but more general region is available than use that information, but always be as precise as possible. i.e. Saskatchewan, Shropshire, etc.

*Note:* if the objects are images or videos than the country/place will likely be the same as the hierarchical Geographic due to the nature of photography. Enter the information in both places.

**<relatedItem>**: Information that identifies other resources related to the one being described. In our case it is repository information for the object.

**Important:** The related item tag contains a sub-branch. Always fill in the Location (institution information). If there is a sub Location (described below) or a note (described below) use the <holding simple> sub-branch (which includes the sub Location, Shelf Location, URL, and NOTE fields). If there is a no sub Location, fill in the shelf location and URL below and DO NOT fill out the <holdingSimple> (sub, shelf, url and note fields)

Location

Location the Item is stored

**Physical Location:**  
  
Place an Item is stored

**shelf Location:**  
  
Only use this field if there is no sublocation information available

**URL:**  
  
Use this for primary location URL

holdingSimple

General information about what the institution identified in physicalLocation holds of the resource and its specific location.

copyInformation

**sub Location:**

**Shelf Location:**

**URL:**

**Note:**

**Location:** "location" identifies the institution or repository holding the resource, or a remote location in the form of a URL where it is available.  
i.e. University Library, University of Saskatchewan; Western Development Museum

**shelfLocation:** Shelfmark or other shelving designation that indicates the location identifier for a copy. Usually describes specific collection/fonds within department - i.e. Shortt Collection; Hans Dommasch fonds;

**URL:** Use this for primary location URL. This can be the URL to your institutional website, an online database containing similar or identical information (i.e. catalogue) or a URL that furthers the content  
i.e. <http://sundog.usask.ca>; <http://wdm.ca>; <http://library2.usask.ca/hiebert/>

<holdingSimple>: General information about what the institution identified in physicalLocation holds of the resource and its specific location. Refer to shelfLocation and URL as above when entering holding simple.

**subLocation:** Department, division or section of an institution holding a copy of the resource  
i.e. University Archives; Special Collections; Diefenbaker Centre

**Note (holdingSimple):** This note is used for contextual information about the collection (i.e. information relevant to the object itself, such as certain provenance or biographical information about the collection donor or subject).  
i.e. Hans Dommasch donated these photographs which were taken for his book Prairie Giants;

**Identifier:** "identifier" contains a unique standard number or code that distinctively identifies a resource. It includes manifestation, expression, and work level identifiers. It should be repeated for each applicable identifier recorded, including invalid and canceled identifiers. It is the identification information for each digital file as it corresponds to the physical file from which it was scanned. Examples of identifiers include call numbers, either Local or Library of Congress, archival numbers, binder numbers, or other labelling strategies - i.e. PR9299.9 A87; MSS 4, Box 2, File 11, Item 2; PA28834;WDM-5-15

*Note:* If an object has more than one identifier (i.e. an old or alternate one) put the main one in the Identifier field and put any others in the note field for now, unless Identifier becomes a repeatable element, which it may

**Language:** a designation of the language in which the content of a resource is expressed. Use the 3-digit ISO 639-2 Language code (<http://www.loc.gov/standards/iso639-2>); it is always in lower case. If more

than one code exists (as in German and French) use the bibliographic code (B). Don't indicate which code you are using in the record. Separate multiple languages with a semi-colon, with the dominant language(s) (if applicable) first - i.e. eng; fre; ger; cre

**Description:** may be used to give a textual description for a name when necessary, for example, to distinguish from other name. This will be a brief description of the content of the letter trying to highlight as many key points (prominent action, people, objects) as possible in as few words as necessary. Try to use words that are highly searchable by researchers and words that might not be found in other fields. Include such specific information as the name's of local shops, the street addresses (if known), etc. The description may take a small amount of research in the case of older images, and always keep in mind not to take too long making a good description if you have a large number of objects to upload.

*Note:* Always include Image of, or Video Recording of, or Diary of, etc. when beginning the description.

i.e. Image of two men hunting in the woods...; Image of two well-dressed women riding bicycles on 2<sup>nd</sup> avenue in Saskatoon...; Video of Gordie Howe...

*Note:* Anything written on the object or information about the object coming from a specific source i.e. article, book, person with knowledge" should be quoted. Use Chicago Style Manual for referencing unless local practice insists otherwise.

*<physicalDescription>*: is a wrapper element that contains all subelements relating to physical description information of the resource described. Data is input only within each subelement.

**Form:** a designation of a particular physical presentation of a resource. Sometimes the form and the type will be identical but enter information from the drop down menu in this field regardless. Select the appropriate item from the drop-down list.

**Extent:** a statement of the number and specific material of the units of the resource that express physical extent. For singular objects write the number in and the medium and dimensions in metric form (i.e. cm) unless otherwise stated on the material object. Always put width first in the dimensions. Three-dimensional objects may be labeled as "physical object" if not something more specific (use an authority if possible). Refer to RAD standard for more information for each medium.

Examples: 1 photograph: col.; 10x14 cm;

1 photograph: b&w film negative; 35mm

1 physical object;

For textual material measure the width of the material in mm, i.e. a stack of papers might be 6 mm, so write 6 mm of textual material



**Note (field):** general textual information about the physical description of a resource, including other information for context. Use the Chicago Style Manual for any referencing unless local practice insists otherwise.

**accessCondition:** information about restrictions imposed on access to a resource. These conditions will typically be written by institutions on a collection by collection basis and material in one collection could vary in terms of access conditions.

<Subject>: A term or phrase representing the primary topic(s) on which a work is focused.

*Note:* subject fields are repeatable fields meaning that each entry requires the user to enter the data and then press the to add the tag. If successful the entered data should appear below the text-entry box with a , which can be used to delete the entered data. Multiple entries can be created this way.

**Topic:** Topical subject added entries may consist of general subject terms including names of events or objects. Search the content of the object for the most relevant objects and/or events. Topics should be taken from major authorities such as the Library of Congress (LOC) Authority (<http://authorities.loc.gov/cgi-bin/Pwebrecon.cgi?DB=local&PAGE=First>) or Getty Thesaurus for Art & Architecture (<http://www.getty.edu/research/tools/vocabularies/aat/index.html>). Use authorized subject headings when possible. Copy the subject exactly as it appears. If the subject/topic you are looking for does not seem to exist, check for variant spellings, synonyms, or other alternates for the subject - i.e. Grain elevators; Railroad cars

*Note:* Do not use non-authorized headings. If some information in the document seems insufficiently represented by authorized subjects then work the information into the description field

**Geographic:** Geographic information to do with land forms pertaining to the object, if applicable. Use an authority like the previously mentioned ones or the Natural Resources Canada, Canadian Geographical Names Database (<http://www4.nrcan.gc.ca/earth-sciences/geography-boundary/geographical-name/search/name.php>) or Getty Thesaurus of Geographic Names (<http://www.getty.edu/research/tools/vocabularies/tgn/index.html>) - i.e. South Saskatchewan River

**Temporal:** The temporal field refers to the date the *content* of the digital item occurs. A Letter written in 1968 about events that occur in 1933 would have a temporal field relating to 1933. <originInfo> will refer to when the item was created. The field always has a 10-year date range that starts at the beginning of a decade. The preceding example would have a temporal date range of

1930-1939.

If content takes place over more than one decade, or if the exact date is unknown but is within a certain time frame that includes possibly more than one decade than multiple date ranges may be used.

I.e. for WWII: 1930-1939; 1940-1949

i.e. for a picture that was taken between the wars sometime: 1910-1919; 1920-1929; 1930-1939

<*hierarchicalGeographic*>: geographic name given in a hierarchical form relating to the resource. The geographic information field refers to the geographic information of the creation of the digital files. A letter written by someone in Regina about Saskatoon would have Geographic Information relating to Saskatoon. <originInfo> will refer to where the item was created:

**Continent:** Choose appropriate continent i.e. North America

**Country:** Choose appropriate country i.e. Canada

**Province:** Choose appropriate province/state/other similar political state i.e. Saskatchewan

**Region:**

*For Indo-European Content:* For region enter the SARM Division name followed by number. There are 6 regions that make up most of the populated portion of Saskatchewan:

Division 1 – South East;

[http://sarm.ca/aboutsarm/members/Members\\_Division\\_1](http://sarm.ca/aboutsarm/members/Members_Division_1)

Division 2 – South Central;

[http://sarm.ca/aboutsarm/members/Members\\_Division\\_2](http://sarm.ca/aboutsarm/members/Members_Division_2)

Division 3 – South West

[http://sarm.ca/aboutsarm/members/Members\\_Division\\_3](http://sarm.ca/aboutsarm/members/Members_Division_3)

Division 4 – North East;

[http://sarm.ca/aboutsarm/members/Members\\_Division\\_4](http://sarm.ca/aboutsarm/members/Members_Division_4)

Division 5 – North Central;

[http://sarm.ca/aboutsarm/members/Members\\_Division\\_5](http://sarm.ca/aboutsarm/members/Members_Division_5)

Division 6 – North West;

[http://sarm.ca/aboutsarm/members/Members\\_Division\\_6](http://sarm.ca/aboutsarm/members/Members_Division_6)

An inclusive list of all the RMs within each Division can be found here:

<http://sarm.ca/aboutsarm/members>

If the town/city/village etc., exists north of the these divisions then enter the Region as “Northern Saskatchewan”

*For Aboriginal Content:* For Aboriginal Content the region field should contain the Treaty Land Number (if available).

The following resource lists all of the Bands and the Treaty number in which they are located:

(<http://www.kstrom.net/isk/maps/saskmap/saskbandslist.html> - i.e. Treaty 2; Treaty 4; Treaty 5; Treaty 6; Treaty 10;

**County:**

*For Indo-European Content:* Enter the Rural Municipality which the content of the object takes place or the Rural Municipality which surrounds the area (i.e. Corman Park for something in Saskatoon) – this is to help with searchability. Always include the Name of the RM and the number in the following format i.e. RM of Happyland No. 231

*NOTE:* one exception for Prince Albert National Park, which can be entered as the County for material which refer to this area

List of Resources for finding RMs:

Map: <http://www.municipal.gov.sk.ca/MID/Maps/Sask-Base-Map>

List of RMs:

[http://en.wikipedia.org/wiki/List\\_of\\_rural\\_municipalities\\_in\\_Saskatchewan](http://en.wikipedia.org/wiki/List_of_rural_municipalities_in_Saskatchewan)

*For Aboriginal Content:* Enter the name of the Reserve on which the content of the object takes place

List of Resources for finding Reserves:

For reserves follow the format i.e. Reservation name No. XX (if available)

A list of Reserves exists on Wikipedia:

[http://en.wikipedia.org/wiki/List\\_of\\_Indian\\_reserves\\_in\\_Saskatchewan](http://en.wikipedia.org/wiki/List_of_Indian_reserves_in_Saskatchewan)

A very useful database listing Saskatchewan Reserve Land including the bands associated with each Reserve (Reserve/Settlement/Village link at side):

<http://pse5-esd5.ainc-inac.gc.ca/fnp/Main/Search/RVListGrid.aspx?lang=eng>

A map of all the reserves in Saskatchewan is found here -

[http://class.nrcan.gc.ca/images/CanadaCarte-IndexMap\\_SK.pdf](http://class.nrcan.gc.ca/images/CanadaCarte-IndexMap_SK.pdf)

An interactive map found here (geographical link on side): <http://fnpim-cippn.inac-ainc.gc.ca/index-eng.asp>

List of some reserves and co-ordinates associated with them:

<http://www.topozone.com/regions/Saskatchewan.asp?feature=Indian+Reserve>

*Note:* Make sure to list any bands associated with the object in the Description field!

**City:** geographic name given in a hierarchical form relating to the resource. The official and recognized name for a city/town/village/hamlet, etc. i.e. Saskatoon; Rosthern; Maymont;

**citySection:** Name of a smaller unit within a populated place, e.g., suburbs,

neighborhoods, or parks. The neighbourhood or large park or other sub-city geographic section (if applicable) within the city or large town

i.e. for Saskatoon: Nutana; Lawson heights; Friendship Park

Official municipal websites often have neighbourhood maps which will help identify which city section the content takes place

i.e.:

[http://www.saskatoon.ca/DEPARTMENTS/Community%20Services/PlanningDevelopment/Documents/Mapping/Wall\\_maps/index\\_nhhoods\\_map.pdf](http://www.saskatoon.ca/DEPARTMENTS/Community%20Services/PlanningDevelopment/Documents/Mapping/Wall_maps/index_nhhoods_map.pdf)

`<cartographics>`: "cartographics" is a wrapper element that includes cartographic data indicating spatial coverage

**Coordinates:** contains a statement of coordinates covered by the resource. One or more statements may be supplied. If one is supplied, it is a point (i.e., a single location); if two, it is a line; if more than two, it is a n-sided polygon where n=number of coordinates assigned. No three points should be co-linear, and coordinates should be supplied in polygon-traversal order.

Initially we will only be including points (single locations) where we enter the coordinates as latitude,longitude (separated by a comma, no space)

i.e. 52.11679,-106.63452

This in-house resource (<http://tada.usask.ca/newlocation.html>) will give you the ability to search by city/town and get the base latitude/longitude coordinates for the town, and supply a map to give you the ability to choose a more specific location.

Additionally, this Harvard map is very good for similar information, esp. which not available on our in-house map

(<http://maps.cga.harvard.edu/samples/gpf.htm>).

Always try to be as specific as possible. Remember to copy all of the numbers, as specific numbers especially can be very long.

Geonames (<http://geonames.org>) is also a great resource for finding coordinates for cities and towns, but it cannot find precise locations on the map, and it uses a different format than the type Islandora recognizes and the local in-house resource map produces, so they will need to be converted.

## Metadata Elements for “Books” content model (Currently in Production)

This ingest form is for groups of images that constitute a “book” – usually published bound books but other such material (like Journals) may appear here as well. There will be a few changes in the metadata fields, with some additions, some subtractions, and a few may have different entries. For all fields that occur in the Books ingest forms but do not appear in the list below, follow the “Large Image Collection” model above. For the rest of the fields rely on information

below:

- To upload a book enter the metadata first. After which you can modify the object and add pages by clicking the “Append or Insert Pages” button under “Manage”
- Next click on “Add files to upload queue” to add an uncompressed .zip file (of original .TIFF images) of all the pages
  - After the queue is filled click “Ingest Uploaded files” Note: Since uploading several hundred pages at once may be too large a file for the browser to handle, and will take a very long time, it is recommended you chunk-up the book into segments (10 or 20 pages with a maximum size of 2MB) and make individual .zip files for each, named accordingly so that they will be entered in the correct order

**Note:** Since it takes a lot of processing power for the server to complete these queues, it might be necessary to do them at off-peak times, such as at night (they can be done from anywhere with an internet connection)

#### Zippping files

The format for the Book Module is .zip, which is generally a type of compression added to files with a new extension. We will be making .zip files WITHOUT compression, however, to maintain the quality of the files. You can use an open-source program like 7-zip

Using a Zip program (like open-source 7-zip: [HYPERLINK "http://www.7-zip.org/" http://www.7-zip.org/](http://www.7-zip.org/)). Select the setting “uncompressed,” and make sure the extension is set to “.zip.” Then select “Update and add files.” (in 7-zip) and create a new .zip file which should be the same size as the original folder.

**Genre:** A term(s) that designates a category characterizing a particular style, form, or content, such as artistic, musical, literary composition, etc. MarcGT? <http://www.loc.gov/standards/valuelist/marcgt.html>

**Form:** a designation of a particular physical presentation of a resource. Select one of the following words from the marcform list (found here: <http://www.loc.gov/standards/valuelist/marcform.html>):  
Braille;  
electronic;  
microfiche;  
microfilm;  
print;  
large print;

**Extent:** a statement of the number and specific material of the units of the resource that express physical extent. The following resource explains what information is required for different types of media: ( [HYPERLINK](#)

"<http://www.loc.gov/marc/bibliographic/bd300.html>"  
<http://www.loc.gov/marc/bibliographic/bd300.html>). For book and book-like material the number of pages, illustrations, and height of spine (in cm,) are generally recorded. This information can often be copied (but double checked!) from library catalogue records, removing any unnecessary spacing between elements  
i.e. 184 p. : ill. (some col.) ; 23 cm becomes 184 p.: ill. (some col.); 23 cm

**ISBN:** The International Standard Book Number identifies the title or other book-like product (such as an audiobook) to which it is assigned, but also the publisher to be contacted for ordering purposes. The ISBN can be found in catalogue entries (including the LOC, found here: [HYPERLINK "http://www.loc.gov/index.html"](http://www.loc.gov/index.html) <http://www.loc.gov/index.html>). Use the 10 digit number unless the object only has a 13 digit number

**Coordinates:** Make sure the coordinates are for the CONTENT of the book if possible. For instance, a Local History about Duck Lake could use the standard Town coordinates for Duck Lake as per the local in-house. If a book has a wider scope i.e. 3 or 4 towns, put the RM coordinates; if even broader than leave the coordinates blank. Note that works of fiction that takes place predominantly in one town/area is also a candidate.

**Classification (LCC):** a designation applied to a resource that indicates the subject by applying a formal system of coding and organizing resources according to subject areas. The library of congress classification is a standard call number system used by many libraries for general stacks/published books. Information about LCC can be found here: [HYPERLINK "http://www.loc.gov/catdir/cpsolcco/"](http://www.loc.gov/catdir/cpsolcco/) <http://www.loc.gov/catdir/cpsolcco/>. Generally the easiest way to find an LCC# for a published book is to search university or public libraries or simply search LOC database and copy the call number into this field: [HYPERLINK "http://www.loc.gov/index.html"](http://www.loc.gov/index.html) <http://www.loc.gov/index.html>. (Make sure to select “all items” and not just “online only” so that records show up.) Use no spaces - i.e. NA746.S3H57

Metadata Elements for “Audio” content model  
Metadata Elements for “Video” content model

**Coming soon**

**SHO Staff Jan 18 2013**