

Use of Digital Imaging Technology in Genealogy

Capture of genealogy images / photos

File formats

Meta data

File organization on the computer

Software for working with digital files

Types of Genealogical Images

Contemporary photos

Historical photos

Genealogy documents

Maps

Types of Genealogical Images

Contemporary photos	900
Historical photos	1,600
Genealogy documents	2,800
Maps	1,700
	<hr/>
	7,000

Tools to Capture Images

Digital camera
Scanner
Internet
Other

File Formats

Raster or bitmap (photos)

- BMP (Windows)
- **TIF** or TIF (Tag Image File Format)
- **JPEG** or JPG (Joint Photographic Experts Group)
- MrSID or SID (may be read and converted to JPG with IrfanView)
- RAW – direct data dump from camera sensor (no camera processing)
- DNG (Adobe “standard” raw file format)
- Proprietary (Adobe Photoshop: PSD)
- PNG (Portable Network Graphics)
- GIF (Graphics Interchange Format)

Vector (drawings)

- WMF (Windows Meta File)
- Proprietary (e.g. Adobe Illustrator: AI)

Text (documents)

- TXT (Text)
- RTF (Rich Text Format)
- EML (Outlook Express email)
- DOC (Microsoft Word)
- XLS (Microsoft Excel)

Mixed

- **PDF** (Adobe Acrobat)
- HTML (Hypertext Markup Language)
- CGM (Computer Graphics Metafile)

Genealogical Images

.BMP	700
.TIF	2,200
.JPG	2,700
.PDF	1,100
Other	300
	<hr/>
	7,000

Meta Data

EXIF - Exchangeable Image File Format

- Camera data
- Data includes date & time, camera model, shutter speed, aperture, ISO, etc.
- Supported in JPEG & TIF formats; not in JPEG 2000, PNG, or GIF
- Useful to see how camera settings affect results
- Some programs may discard if image resaved!

Meta Data

IPTC - International Press Telecommunications Council

- User supplied data
- Data includes caption, description, locations, keywords, etc.
- Supported in JPEG & TIF formats; also in JPEG 2000, PNG, GIF, PDF, and others with new XML standard developed by Adobe
- Image programs support to varying degrees
- Useful to preserve data about image contents
- Some programs may discard if image resaved!

Image Management Steps

Capture

Transfer to computer

Organize, cull & view

Modify & enhance

Share & print

Backup! Backup! Backup!

Transfer to Computer

Digital camera

- Direct from camera
- USB card reader

Scanner – direct connection via:

- Scanner software
- Graphics software (e.g. Photoshop Elements)

Internet

- Download
- “Save As”
- Email

Organize on Computer

Windows (or Mac) folder structure

- Image browser/viewer software

Image database

- Image management software

Types of Genealogical Images

Contemporary photos

Historical photos

Genealogy documents

Maps

Contemporary Photos

- 📁 Canon 550 (camera model)
 - 📁 2006
 - 📁 2007
 - 📁 [2007-01-01] New Kitchen Complete
 - 📁 [2007-02-13] Duncanville Quilters
 - 📁 [2007-03-05] Fossil Ridge
 - 📄 IMG_0844.JPG
 - 📄 IMG_0845.JPG
 - 📄 IMG_0846.JPG
 - 📁 [2003-03-06] Ft Worth Stockyards

Contemporary Photos

Name	Size	Modified	Type
IMG_0844.JPG	3.85 MB	3/5/2007 2:02 PM	JPG File
IMG_0845.JPG	2.21 MB	3/5/2007 2:04 PM	JPG File
IMG_0846.JPG	2.90 MB	3/5/2007 2:06 PM	JPG File
IMG_0848.JPG	2.08 MB	3/7/2007 9:52 AM	JPG File
IMG_0849.JPG	2.53 MB	3/7/2007 9:52 AM	JPG File
IMG_0850.JPG	3.88 MB	3/5/2007 2:14 PM	JPG File
IMG_0851.JPG	3.49 MB	3/7/2007 9:53 AM	JPG File
IMG_0852.JPG	3.37 MB	3/7/2007 9:53 AM	JPG File
IMG_0853.JPG	4 MB	3/5/2007 2:17 PM	JPG File
IMG_0854.JPG	3.95 MB	3/5/2007 2:18 PM	JPG File
IMG_0855.JPG	4.99 MB	3/5/2007 2:21 PM	JPG File
IMG_0856.JPG	4.91 MB	3/5/2007 2:22 PM	JPG File
IMG_0857.JPG	3.85 MB	3/5/2007 2:42 PM	JPG File
IMG_0858.JPG	4.76 MB	3/5/2007 2:42 PM	JPG File
IMG_0859.JPG	4.49 MB	3/5/2007 2:43 PM	JPG File
IMG_0860.JPG	3.24 MB	3/5/2007 2:48 PM	JPG File
IMG_0861.JPG	4.96 MB	3/5/2007 2:52 PM	JPG File
IMG_0862.JPG	3.81 MB	3/5/2007 2:55 PM	JPG File
IMG_0863.JPG	3.53 MB	3/5/2007 4:36 PM	JPG File
IMG_0866.JPG	3.46 MB	3/5/2007 4:38 PM	JPG File
IMG_0867.JPG	3.69 MB	3/5/2007 4:39 PM	JPG File
IMG_0868.JPG	2.88 MB	3/5/2007 4:40 PM	JPG File
IMG_0869.JPG	2.41 MB	3/5/2007 4:40 PM	JPG File
IMG_0870.JPG	2.76 MB	3/5/2007 4:40 PM	JPG File
IMG_0871.JPG	3.44 MB	3/5/2007 5:17 PM	JPG File
IMG_0872.JPG	4.75 MB	3/5/2007 5:18 PM	JPG File
IMG_0873.JPG	5.03 MB	3/5/2007 5:18 PM	JPG File
IMG_0874.JPG	3.98 MB	3/5/2007 5:21 PM	JPG File

Historic Photos

- ☐ Photos – Morris Historic
 - ☐ Collie M Kueterman (owner/repository of original photos)
 - ☐ Corrinne M Frost
 - ☐ CMF0001 Jerry & Corrine Sewell (baby).bmp
 - ☐ CMF0002 F C Marchal Gas City house.bmp
 - ☐ CMF0003 Group by F C Marchal house.bmp
 - ☐ Diane E Morris
 - ☐ Gary E Commerford
 - ☐ Jerry P Marchal

Historic Photos

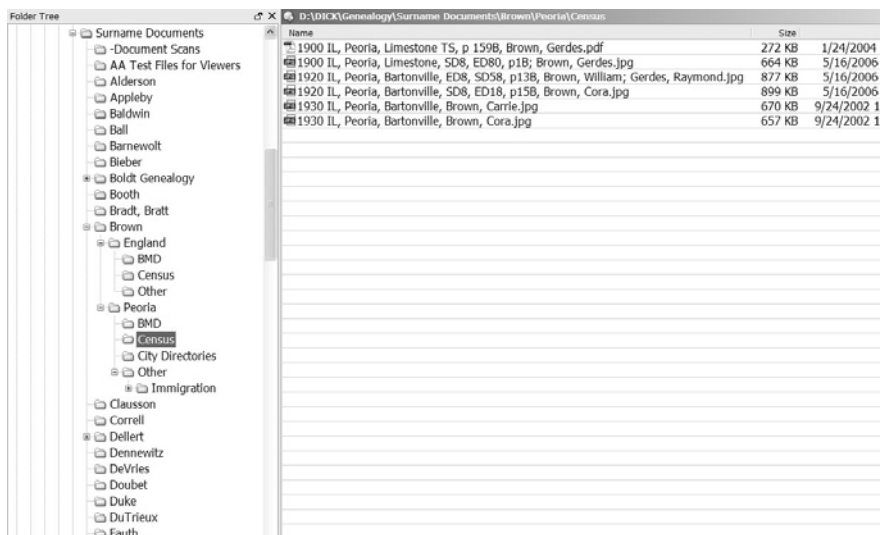
Name	Size	Date
☐ CMF0001 Jerry & Corrine Sewell (baby).bmp	2.05 MB	6/6/1998
☐ CMF0002 F C Marchal Gas City house.bmp	6.18 MB	6/6/1998
☐ CMF0003 Group by F C Marchal house.bmp	4.60 MB	6/6/1998
☐ CMF0004 Marchal, Meyers, Jerry & Corrinne, 4 generations.bmp	2.53 MB	6/6/1998
☐ CMF0005 Obits, Mary Meyers Pittsenbarger, Katie Marchal, Mrs.Edw Chas. Meyer.bmp	536 KB	6/6/1998
☐ CMF0006 Peter Meyers naturalization top.bmp	1.35 MB	6/6/1998
☐ CMF0007 Peter Meyers naturalization bottom.bmp	1.35 MB	6/6/1998
☐ CMF0008 Old house with 2 persons.bmp	4.29 MB	6/6/1998
☐ CMF0009 Clara & Joe Meyers 50th Anniv 1.bmp	1.33 MB	6/6/1998
☐ CMF0010 Clara & Joe Meyers 50th Anniv 2.bmp	1.25 MB	6/6/1998
☐ CMF0011 Clara & Joe Meyers 50 Anniv 3.bmp	1.31 MB	6/6/1998
☐ CMF0012 Interior of GP Marchal's grocery store.bmp	3.94 MB	6/6/1998
☐ CMF0013 Man, woman, Margaret Marchal, & boy.bmp	1.92 MB	6/6/1998
☐ CMF0014 Checkered Front Market.bmp	5.14 MB	6/6/1998
☐ CMF0015 Grandma Marchal with furniture.bmp	1.58 MB	6/6/1998
☐ CMF0016 Willie H Marchal clipping.bmp	2.22 MB	6/6/1998
☐ CMF0017 Jack Webb & Margaret Beers.bmp	1.72 MB	6/6/1998
☐ CMF0018 Clipping re Marchal reunion in Lake Wawasee.bmp	67.7 KB	6/6/1998
☐ CMF0019 Clipping re Sewell Western vacation.bmp	67.5 KB	6/6/1998
☐ CMF0020 John A Meyers death.bmp	326 KB	6/6/1998
☐ CMF0021 Francis & Bill Marchal wedding.bmp	1.52 MB	6/6/1998
☐ CMF0022 Frank & Marge Nicaise wedding 1.bmp	1.31 MB	6/6/1998
☐ CMF0023 Frank & Marge Nicaise wedding 2.bmp	1.34 MB	6/6/1998
☐ CMF0024 F C Marchal Gas City delivery wagon.bmp	2.26 MB	6/6/1998
☐ CMF0025 Cousins hand in hand, Frank, Corrinne, Leo, Mary, Bob, Charmaine.bmp	3.20 MB	6/6/1998
☐ CMF0026 Sewell reunion in 1971 right.bmp	5.28 MB	6/6/1998
☐ CMF0027 Sewall reunion in 1971 left v2.bmp	5.21 MB	6/7/1998
☐ CMF0027 Sewell reunion in 1971 left.bmp	5.12 MB	6/6/1998
☐ CMF0028 Charmaines wedding with cake.bmp	2.22 MB	6/6/1998
☐ CMF0029 Charmaines wedding by car.bmp	1.69 MB	6/6/1998
☐ CMF0030 Charmaines wedding in dress.bmp	2.65 MB	6/7/1998
☐ CMF0031 Jerry Marchal, Ann wife & dr, Lisa.bmp	693 KB	6/7/1998
☐ CMF0032 Chuck Klass Xmas 1972.bmp	1.32 MB	6/7/1998
☐ CMF0033 Corrinne Klass Xmas 1972.bmp	1.21 MB	6/7/1998
☐ CMF0034 Cousins in boats.bmp	3.06 MB	6/7/1998
☐ CMF0035 Girls chinings- unknown, Geraldine, unknown, Margaret.bmp	1.03 MB	6/7/1998

Genealogy Documents

(organized similar to paper files)

- ☐ Bradt, Bratt (surname)
- ☐ Brown
 - ☐ England (place)
 - ☐ Peoria
 - ☐ BMD (document type)
 - ☐ Census
 - ☐ 1900 IL, Peoria, Limestone, SD8, ED80, p1B; Brown, Gerdes
 - ☐ 1920 IL, Peoria, Bartonville, ED8, SD58, p13B; Brown, Gerdes
 - ☐ City Directories
 - ☐ Other
- ☐ Claussen

Genealogy Documents



Maps

- 📁 Maps - US
 - 📁 Illinois
 - 📁 Peoria
 - 📁 1896 Peoria County Atlas
 - 📁 Sanborn
 - 📄 Bartonville 24K fr TopoZone.jpg
 - 📄 IL, Peoria, Bartonville, Section 25.png
 - 📄 IL, Peoria, Coal Mines, 2005 (incl Section lines).jpg
 - 📁 Springfield
 - 📁 Indiana
 - 📁 Kentucky

Maps

The screenshot shows a Windows Explorer window with the following content:

Folder Tree:

- Maps - Foreign
 - England
 - Europe
 - France
 - Germany
 - From www.frieslan.com-deut
 - German Atlas, 1883
 - Maps from FEEFHS.org Site
 - Scans of German Road Map
 - Great Britain
 - Ireland
 - Netherlands
 - Switzerland
 - Wales
- Maps - US
 - Illinois
 - Peoria**
 - 1896 Peoria County Atlas
 - Sanborn
 - Springfield
 - Indiana
 - Kentucky
 - New York
 - Albany Area
 - Buffalo
 - Cayuga Co
 - Harlem
 - Hoom's Hook
 - Lower Manhattan
 - NYC Slide Show
 - Philip DuTreaux Study
 - Ohio
 - Railroads

File List:

Name	Size	Modified
1896 Peoria County Atlas		5/26/2006 7:33 PM
Sanborn		6/14/2006 11:05 AM
Bartonville 24K fr TopoZone.jpg	319 KB	6/7/2006 6:36 PM
IL, Peoria, Bartonville, Section 25.png	187 KB	6/8/2006 7:47 PM
IL, Peoria, Coal Mines, 2005 (incl Section lines).jpg	15 MB	5/31/2006 4:49 PM
IL, Peoria, Hollis, 1873 (fr Peoria web site).jpg	513 KB	2/2/2007 11:06 AM
IL, Peoria, Limestone1, 1873 (fr Peoria web site).jpg	507 KB	2/2/2007 11:06 AM
IL, Peoria, Limestone2, 1873 (fr Peoria web site).jpg	480 KB	2/2/2007 11:04 AM
North Side of Peoria, 1951.jpg	140 KB	3/31/2005 12:57 PM
South Side of Peoria, 1951.jpg	104 KB	3/31/2005 12:56 PM
Springdale Cemetery Map.gif	52.4 KB	6/4/2006 10:26 AM

Types of Graphics Software

Downloaders

Browsers

Managers

Editors

Image Browser Software

Browse thumbnails

View full screen

Compare / delete

Resize / rename

Slideshow

Basic editing & printing

Image Management Software

Create database file

- Thumbnails
- EXIF data
- IPTC data
- Categories / keywords
- Custom data fields

Search

View

Basic editing & printing

Image Editing Software

Crop

Resize, compress

Eliminate red eye

Adjust brightness & contrast

Correct color

Sharpen

Modify, repair

Graphics Software (IBM)

Downloaders

Downloader Pro v2.01	\$30	breezesys.com	30 day demo
PixOrt v1.5.5	25	pixort.com	v1.1.3 free
Cam2PC v4.6	30	nabocorp.com	30 day demo

Browsers

* Fast Stone Image Viewer v3.2	free	faststone.org	-
BreezeBrowser Pro v1.6.3	70	breezesyst.com	15 day demo
* XnView v1.9	free	xnview.com	-
* IrfanView v4.0	free	irfanview.com	-
* Photo Explorer v8.5	30	ulead.com	30 day demo

Managers

* iMatch v3.5	60	phtools.com	30 day demo
* ACDSee v9 (also Pro v1)	40-130	acdsee.com	30 day demo
Picasso v2	free	google.com	-

Editors

* Photoshop Elements v5	100	adobe.com	30 day demo
* Photo Impact v12	100	ulead.com	30 day demo
PaintShop Pro v11	80	corel.com	30 day demo

Other Useful Software (IBM)

File Managers

* Directory Opus v9	\$70	gpsoft.com	60 day demo
* PowerDesk Pro v6	40	v-com.com	free lite version

GEDCOM Browser

* GenViewer v1.21	20	mudcreeksoftware.com	free lite version
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Other

* Fast Stone Screen Capture v5.3	free	faststone.org	-
* WinPatrol Plus v2007	30	winpatrol.com	free lite version
* HTTrack Website Copier v3.41-2	free	httrack.com	-
* The Font Thing v0.8	free	http://members.ozemail.com.au/~scef/ftf.html	

Some Good Practices

Set standards early for naming files & folders
Save your original image files unchanged
Work on a duplicate copies of your files
Take multiple shots (digital "film" is reuseable!)
Throw away bad shots right away
Effective image cropping is the #1 enhancement
Be aware of aspect ratio (e.g. 3x4, 4x6, 8x10)
Backup!

Benefits of Digitization

Reduce paper
Protection
Easy to travel
Ease of use
Ease of sharing
Preservation