

Welcome

- **Craig Rhombs**
- **Retired software guy with background in mapping; long time interest in genealogy; “recent” ancestral composition = 3/8 Alsatian/German, 3/8 British Isles; 2/8 Norwegian**
- **<https://281connections.us>**
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Basic Objectives

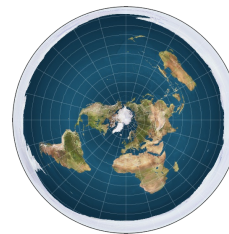
- **Review basic mapping technology**
- **Review some sources of historically interesting maps**
- **Review Land Ownership and Description**
- **Examine a few examples showing integration of map information with other data sources**
- **Provide ideas, incite you to look at something new**

What about you?

- **What are you hoping for?**
- **Why are you interested in maps?**
- **What geographical areas interest you?**
- **What historical eras interest you?**

Mapping Basics

- “A map is a symbolic depiction which denotes relationships between elements of some space such as objects, regions, and themes. Most maps are drawn to a scale to express a ratio between two or more units of measurement.” - <https://www.mapsofworld.com/>
- Mapping addresses the fundamental problem of how to represent a 3-D (pretty much spherical) world in a 2-D form (like paper)
- Earth’s shape is NOT flat
- Projections
 - Mercator; Universal Transverse Mercator (UTM)
 - Conic



Mapping Basics (continued)

- **Images are raster representations**
- **Digital maps (not raster images)**
 - Graphic elements (points, lines, polygons)
 - Non-graphic elements (text, numeric)
 - A map object has both types of properties
 - Spatial analysis (study of objects/entities based on their location & properties)

Mapping Basics (continued)

- **Example objects**
- **Village: a polygon enclosing residence locations**
- **Locations of flu cases (epidemiology)**
- **Locations of ancestors relative to jurisdictional boundaries (polygons), roads (lines), battlefields (complex), etc.**

Types of Maps

- **Physical (show physical features)**
- **Political (jurisdictional boundaries)**
- **Economic (consumption, GDP, . . .)**
- **Topographic**
- **Climatic**
- **Thematic (portray a specific topic's patterns)**
- **Road**

Some Sources of Historical Maps

- **These are examples of general ways to access historical images**
 - <http://www.lib.utexas.edu/maps/histus.html> (world)
 - <http://www.davidrumsey.com/> (world - sophisticated)
 - <http://www.oldmapsonline.org/> (world)
 - <https://dp.la/search?q=maps> (digital public library)
 - https://en.wikipedia.org/wiki/Historical_geographic_information_system (general info)
 - <https://dsl.richmond.edu/historicalatlas/> (US geography)
- **Library of Congress**
 - Overview <https://guides.loc.gov/maps-illustrated-guide/introduction>
 - Sanborn <https://www.loc.gov/collections/sanborn-maps/about-this-collection> (insurance)
 - Marion, OH (example) <https://www.loc.gov/item/2012592377/>
- **Marietta (OH) College Library (example of unique resource)**
 - <http://cdm16824.contentdm.oclc.org/cdm/search/collection/p16824coll6/searchterm/map/field/all/mode/all/conn/and/order/title/ad/asc>
- **Misc. Info: (guide) <https://pubs.usgs.gov/fs/2002/0099/report.pdf> ***
- **Your favorite repository for the geography and era you are researching . . .**

More Examples !

- **See gazetteers and atlases slide later**
- **Original land owners, antique maps:**
<https://historygeo.com/> (\$)
- **Boston Library: (digital collections)**
<https://www.leventhalmap.org/>
- **Get lost in the BYU library: (general reference)**
<https://guides.lib.byu.edu/maps>
- **UK +:** <https://maps.nls.uk/>

And More!

- <https://apps.nationalmap.gov/viewer/> (USGS recent conditions)
- <https://ngmdb.usgs.gov/topoview/> (topos)
- <https://www.mapofus.org/> (US Maps)
- <https://www.newberry.org/> (search for maps)
- <https://ancestortracks.com/wp/home/free-resources/> (PA)

Even More (German focus) . . .

- **Misc:**

- Topo maps search (Germany):

<https://www.ancestry.com/search/collections/1294/>

- Historical Atlas of Germany by J. Beidler

<https://hclib.bibliocommons.com/item/show/5910031109>

- **Spatial distribution of names**

- <https://nvk.genealogy.net/> map (explained at <https://wiki-de.genealogy.net/Namensverbreitungskarte>); also <http://geogen.stoepel.net> .

- Irish surnames:

<https://www.barrygriffin.com/surname-maps/irish/>

Land Ownership

- **Government: How to distribute newly acquired land?**
- **Owners: How to transfer, sell/buy, property?**
- **How to describe a parcel of land?**
 - Public Land Survey
 - Metes and Bounds
 - Units of measure vary by locality and historical era (rods, vara, feet, meters, etc.)

Public Land Survey (PLS or PLSS)

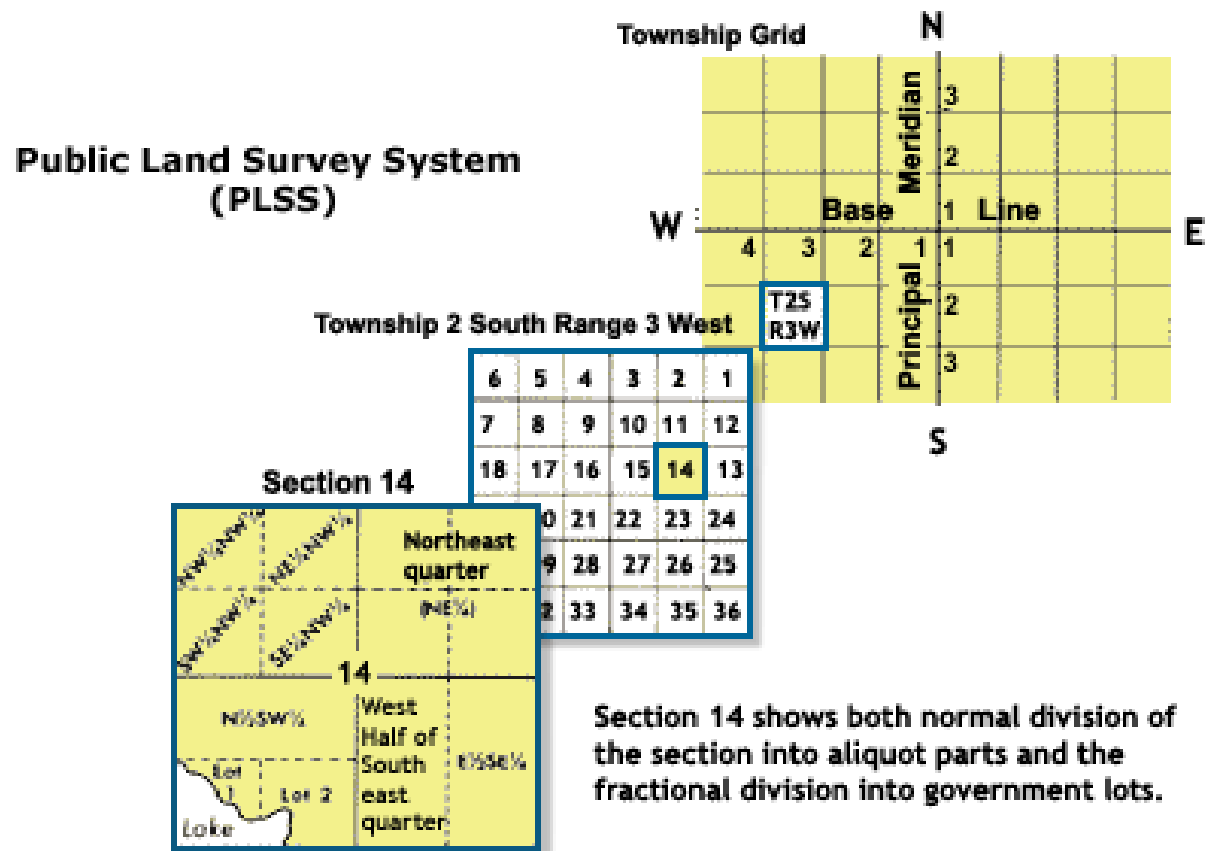
- **Initial purpose = distribution of Fed lands, dates to 1785**
 - https://en.wikipedia.org/wiki/Public_Land_Survey_System
- **Bureau of Land Management (BLM) General Land Office (GLO)**
 - <https://www.glorerecords.blm.gov>
 - <https://www.archives.gov/research/land>

An Aside on Pertinent Laws

- **These may help explain what land your ancestor acquired and when.**
- **Preemption Act of 1841**
 - Sign intent to become a citizen
 - Live on the land for 14 months
- **Homestead Act of 1862**
 - Live on the land 6 mo./year for 5 years
 - Become a citizen
- **Timber Culture Act of 1878**
 - No residence requirement
 - Become a citizen

Public Land Survey (hierarchy)

- Section, twp, rng, meridian
- Aliquot parts: quarters or halves
- Further subdivisions to locate things like oil wells
- Correction for earth's curvature
- Section 16 for support of schools
- Example for Johannes Rombs: SW1/4, sec 10, twp 120N, rng 69W, 5th meridian



Public land Survey (Ohio is Special)

Ohio is where they
“warmed up” before they
proceeded to other areas.

The Official Ohio Land
Book -

<https://ohioauditor.gov/publications/docs/OhioLandsBook.pdf>



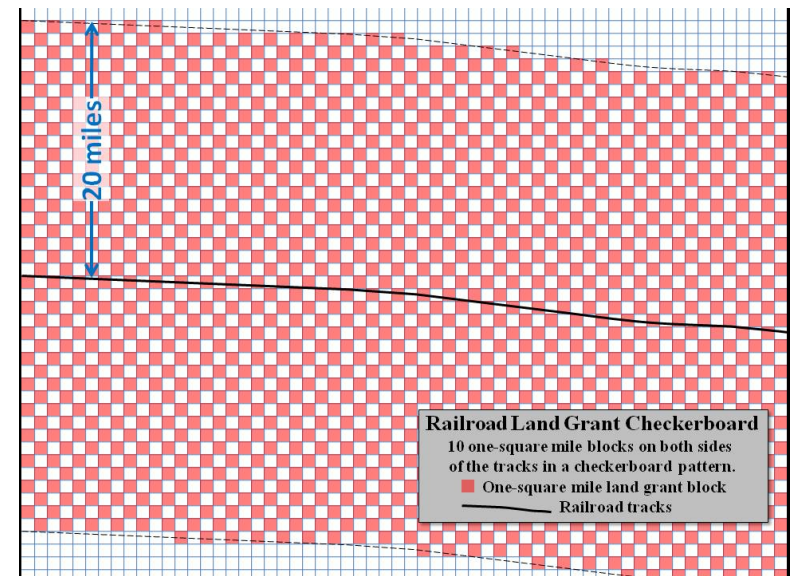
Grants to Railroads & Others

- **Land Companies (speculators):**

https://www.familysearch.org/wiki/en/Grants_to_Land_Companies_and_Railroads

- **Railroads:**

<https://www.coxrail.com/land-grants.asp>



What about the rest of the country?

- It is complicated!
- Retained metes & bounds.
- Many special cases.
- Texas . . .



Don't forget Texas!

- **Spanish influence**
- **A league of land equals 4,428 acres and a labor, 177 acres, combined they add up to 4,605 acres. This was the amount of a headright (first-class) granted to "all persons except Africans and their descendants, and Indians, living in Texas on the day of the Declaration of Independence... if they be heads of families... and if a single man, 17 years or older, one-third league" (1,476 acres).**
- **Again, it is complicated and beyond this presentation**
 - https://en.wikipedia.org/wiki/Texas_land_survey_system
 - <https://s3.glo.texas.gov/glo/history/archives/land-grants/index.cfm>






Metes and Bounds

- **Traced back to 13th Century England**
- **Beginning at a point, . . . , and back to the point of beginning.**
- **Example**

Beginning at a point on the Southerly line of said Lot 4 distant thereon North 45° East 150.00 feet from the most Southerly corner thereof; thence along said line North 45° East 300.00 feet to the beginning of a tangent curve concave Northwesterly and having a radius of 100.00 feet; thence Northeasterly along said curve through a central angle of 45° 30¢ an arc distance of 79.00 feet to the beginning of a compound curve concave Southwesterly and having a radius of 50.00 feet; . . . thence Southeasterly 68.00 feet to the point of beginning.

BLM General Land Office Example

- **Example: Johannes Rombs in SD (immigration in Nov, 1884)**
 - JR patent link

Image	Accession	Names ↑	Date	Doc #	State	Meridian	Twp - Rng	Aliquots	Sec. #	County
	SD0540 .109	 ROMBS, JOHANNES	7/13/1889	13933	SD	5th PM	120N - 069W	SW¼	10	Faulk
	SD0730 .190	 ROMBS, JOHANNES	10/18/1892	4709	SD	5th PM	120N - 069W	SE¼	9	Faulk
---	SDMTAA 038418	 ROMBS, JOHANNES	10/4/1900	2620	SD	5th PM	120N - 069W	E½NW¼	9	Faulk
							120N - 069W	NW¼NW¼	9	Faulk
							120N - 069W	SW¼NW¼	9	Faulk

Metes and Bounds Example

- Land patent to Dolores Garcia in 1838 in TX
- About 2 years after TX Republic established
- About 7 years before statehood
- Note the scale shown in the sketch.



Integrating Non-Graphic Data

- **This is where real value lies for genealogy, even if done just with images of maps.**
- **Portray (render) some concept in geographic terms to show why location matters**
- **Demonstrates possible unrealized relationships between/among different types of data**
- **Can be used to show temporal changes**

Temporal Changes

- **Atlas of County Boundaries:**

- <https://digital.newberry.org/ahcb/index.html> (can be very important)

- **Mass migrations:**

- <http://www.rootsandroutes.net/roots.htm> (not up to date tech; migrations tab)
- https://www.familysearch.org/wiki/en/United_States_Migration_Internal (good)
- The map section of The Handy Book for Genealogists

- **National Historical Geographic Information System**

- <https://www.nhgis.org/> (complicated – probably ignore)

- **Example of land ownership changes in SD:**

- 1910:
<http://www.historicmapworks.com/Map/US/50159/Freedom+Township/Faulk+County+1910/South+Dakota/>
- Settlers: Faulk County, SD, courthouse; See next page.

Temporal Change Example - SD

Settlers c.1890

FREEDOM

HOMESTEAD TOWNSHIP MAP

TOWNSHIP: 120 N.

RANGE: 69 W.

George Pool	Theodore Pool	Joseph Wisebeck	John Adams Bretsch	Henry Mouth
John Whitehead	Johanna Romba	Anna Jonas	David Bovine	John Kopelman
John Whitehead	Augusta Fenske	Johanna Romba	Johanna Romba	Wilhelm Bulachen
Jonas Hilde		Jacob Schmidt	Jacob Schmidt	William Molchen
Delia Sonnes		Dieterich	Henry Bouman	Karl Fischer

Owners c.1910

Singer	Peter Peterso 160	Pickler Hoy 160	Hasting 160
D.K. Parson 160	Peter Peterso 160	Pickler & Frad 160	H.H. Pevey 160
H.N. Ward 160	A.W. Morse 160	Jos.N. Brown 160	R.E. Ormsby 160
A.E. Ward 160		School 160	Minnie O'Neil 160

Another Example Based on Patents

- **Campbell County, SD**
- **Late 19th century**
- **Illustrates a group migration from PA**
- https://281connections.us/281connections_Wiki/South_Dakota_Families/Loy-Allen/meadville-migration.pdf

USGS Place Names (GNS/GNIS) needs update

- **Root:** <https://www.usgs.gov/core-science-systems/ngp/board-on-geographic-names>
- **Foreign:** <https://www.usgs.gov/us-board-on-geographic-names/foreign-names>
- **Domestic:**
<https://www.usgs.gov/core-science-systems/ngp/board-on-geographic-names/domestic-names>
- **Domestic Download Example:**
<https://www.usgs.gov/core-science-systems/ngp/board-on-geographic-names/download-gnis-data>
<https://edits.nationalmap.gov/apps/gaz-domestic/public/search/names>
- **Use quick link to “Download Domestic Names”**
- **Choose state, then a delimited file will be downloaded.**
- **Open the file inside the compressed file using your favorite spreadsheet software like LibreOffice Calc or Excel. (File contents are “pipe” delimited records.)**
- **Filter the contents based on heading categories to select the named features you want to see (e.g., cemeteries)**
- **Note lat/long coordinates and create your own scatter plot (map) that can be overlaid on a Google Earth rendering.**
- **I have used this approach to find cemeteries in an area.**
- <https://www.usgs.gov/us-board-on-geographic-names/download-gnis-data>

USGS Place Names (continued) needs update

USGS
science for a changing world

SCIENCE: Topics, centers, missions
PRODUCTS: Maps, data, publications
NEWS: Releases, I'm a reporter
CONNECT: Contact, chat, social media

U.S. Board on Geographic Names

HOME | MEMBERSHIP | RESOURCES | **DOMESTIC NAMES** | FOREIGN NAMES | ANTARCTIC NAMES | UNDERSEA FEATURES

Home

The U.S. Board on Geographic Names (BGN) is a Federal agency established in its present form by Public Law in 1947 to maintain uniformity in the naming of geographical features. The BGN comprises representatives of various Federal agencies and provides information, population, ecology, and management data.

Domestic Names

HOME | MEMBERSHIP | RESOURCES | **DOMESTIC NAMES** | FOREIGN NAMES | ANTARCTIC NAMES | UNDERSEA FEATURES

The BGN's Domestic Names Committee provides information relating to domestic names; new name and name change proposals; the principles and policies by which it reviews name proposals; past and pending cases; and meeting schedule are available.

- [Search Domestic Names](#)
- [Download Domestic Names](#)
- [Principles, Policies, and Procedures](#)
- [Propose or Change a Domestic Name](#)
- [Minutes](#)
- [Quarterly Review List](#)
- [Meeting Schedule](#)

Download GNIS Data

HOME | MEMBERSHIP | RESOURCES | DOMESTIC NAMES | FOREIGN NAMES | ANTARCTIC NAMES | UNDERSEA FEATURES | NAMES | ORGANIZATIONS | HOW DO I?

The Board on Geographic Names has many files available for download. Please contact us for more information and metadata for specific information regarding each file. If you have questions regarding downloading please view the Download Data section of the How Do I? page. If you have any questions regarding downloading please send an email to gnis_manager@usgs.gov

The GNIS will be down beginning 3 pm MT Friday, October 25 through Sunday October 28. Users will also be unable to download files during this time. The system is expected to be back online on Monday, October 29.

All files are pipe-delimited text files and were last updated September 1, 2019. Click on the link for more information.

Metadata [text](#) | [xml](#)

[GNIS File Formats](#)

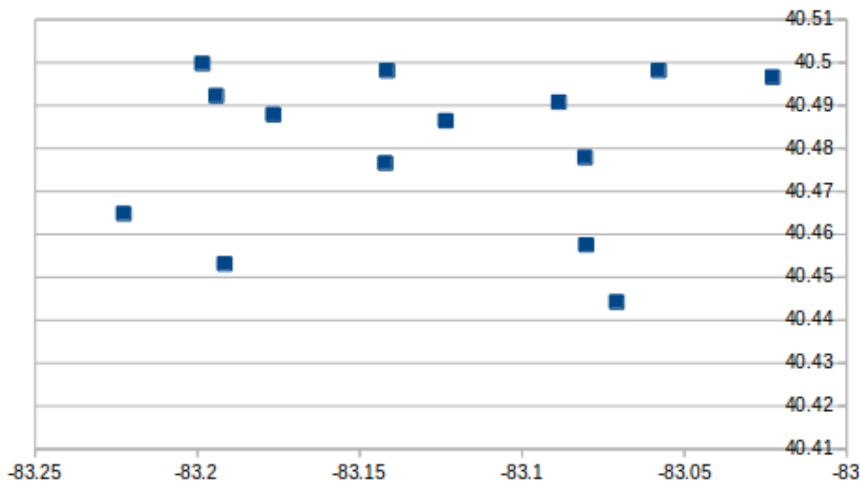
State, Territories, Associated Areas of the United States

- [National File](#) (all features in one file)
- [All States File](#) (individual state files in a single .zip file)
- Individual State Files:**
 - [Alabama](#)

USGS Place Names (continued) needs update

A	B	C	D	E	F	G	H	I	J	K
FEATURE	FEATURE_NAME	FEATURE_CL	STATE_ALP	STATE	COUNTY_NA	COUNT	PRIMARY_LAT_D	PRIM_LONG_D	PRIM_LAT_D	PRIM_LONG_D
1037533	Augenstein Cemetery	Cemetery	OH	39	Marion	101	402927N	0830519W	40.4907654	-83.0886823
1037875	Berringer Cemetery	Cemetery	OH	39	Marion	101	402948N	0830122W	40.4965683	-83.0228078
1038378	Brown Taylor Cemetery	Cemetery	OH	39	Marion	101	402753N	0831322W	40.4647814	-83.2226938
1044221	Otterbein Cemetery	Cemetery	OH	39	Marion	101	402932N	0831139W	40.4922177	-83.1941906
1044778	Prospect Cemetery	Cemetery	OH	39	Marion	101	402711N	0831130W	40.4531073	-83.1915772
1045046	Riverside Cemetery	Cemetery	OH	39	Marion	101	402953N	0830328W	40.4981044	-83.0578916
1047517	Walls Cemetery	Cemetery	OH	39	Marion	101	402836N	0830831W	40.4765544	-83.1420646
1048056	Wolfinger Cemetery	Cemetery	OH	39	Marion	101	402911N	0830724W	40.4864187	-83.1234587
1072206	Drake Cemetery	Cemetery	OH	39	Marion	101	402840N	0830450W	40.4778723	-83.0805858
1072235	Mounts Cemetery	Cemetery	OH	39	Marion	101	402916N	0831036W	40.4878293	-83.1765767
1072266	Wyatt Cemetery	Cemetery	OH	39	Marion	101	402639N	0830415W	40.444208	-83.0708412
1960534	Markel-Kirts Cemetery	Cemetery	OH	39	Marion	101	402959N	0831154W	40.4997381	-83.1984448
1960544	Schweinfurth Cemetery	Cemetery	OH	39	Marion	101	402953N	0830830W	40.4980922	-83.1415577
1960547	Waldo Cemetery	Cemetery	OH	39	Marion	101	402727N	0830449W	40.4575524	-83.0801841

Marion County Cemeteries



Iowa Cemeteries

- https://data.iowa.gov/Community-Development/Cemeteries-in-Iowa/6qh2-3hz2/explore/query/SELECT%0A%20%20%60inv_num%60%2C%0A%20%20%60county_name%60%2C%0A%20%20%60cem_name%60%2C%0A%20%20%60alter_name%60%2C%0A%20%20%60location%60%2C%0A%20%20%60the_geom%60%2C%0A%20%20%60%3A%40computed_region_y683_txed%60%0AOR%20BY%20%60county_name%60%20ASC%20NULL%20LAST/page/filter

GeoNames needs update

- **National Geospatial-Intelligence Agency - a way to search for named places outside the USA**
- **<https://www.nga.mil/> ---**
 - <https://geonames.nga.mil/geonames/GNSHome/index.html>
- **Choose “Geographic Names Search Application”; enter country and name**
- **Funky interface**

Insurance Maps at Library of Congress (LOC)

- **General:**

- <https://www.loc.gov/maps/collections/> (try finding land ownership map for Crawford Co., PA)

- **Sanborn Maps Collection**

- <https://www.loc.gov/collections/sanborn-maps/about-this-collection/>
- Example: (find the beer cooler in 1887 map)
- <https://www.loc.gov/resource/g4184am.g081981887/?sp=1>

Gazetters & Atlases

- **Place names & descriptions; may include maps**
- **Old style version of the GNIS mentioned earlier**
- **FamilySearch wiki list**
 - <https://www.familysearch.org/wiki/en/Gazetteers>
- **Atlas of Germany by Beidler**
 - https://www.amazon.com/Family-Tree-Historical-Atlas-Germany/dp/1440354642/ref=redir_mobile_desktop?ie=UTF8&%2AVersion%2A=1&%2Aentries%2A=0
- **Meyers Gazetteer as an example**
 - <https://www.meyersgaz.org/>
- **Tool to Calculate distance given lat/long:**
 - <https://www.nhc.noaa.gov/gccalc.shtml>

Germans from Russia

- **Google Earth and Germans from Russia**
 - <https://www.germansfromrussiasettlementlocations.org/2016/12/selz-kutschurgan.html>
 - <https://www.google.com/maps/d/viewer?mid=1Sz-Sn4I1F-igS2sNeeTPZ6-Jd8I&ll=23.65842181872636%2C44.69640625000011&z=3>
 - <https://america.germansfromrussiasettlementlocations.org/home>

Civil War Maps

- **Confederate & Federal sources**
- **National Archives is a great source**
 - <https://www.archives.gov/research/military/civil-war/resources.html>
- **Some states have great archives as well**
- **Read a book like The Civil War by Shelby Foote.**
- **Watch a video:**
 - <https://www.civilwar.org/learn/maps/entire-civil-war-animated-map>

Civil War maps (continued)

- **Nat. Archives:**

- <https://www.archives.gov/publications/prologue/2003/summer/civil-war-maps.html>
- <https://www.archives.gov/files/publications/general-info-leaflets/guide-to-civil-war-maps.pdf>

- **VA:**

- <https://www.lva.virginia.gov/public/guides/Civil-War/Maps.htm>

- **TN:**

- https://www.civilwartrails.org/docs/Tenn_PDF-mapguide.pdf

- **NC:**

- <http://dc.lib.unc.edu/cdm/landingpage/collection/gilmer/>

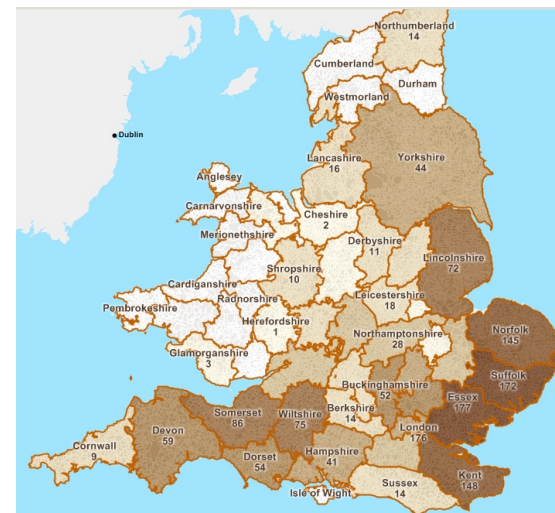
The Great Migration

- “In early 2015 I had just completed work on **Great Migration Directory**, which contained abbreviated entries for each known head of household or isolated individual participant in the Great Migration. The result was an alphabetical listing of about 5,700 families or individuals. For about 1,800 of the entries, the English origin (defined as the last known residence in England before migration) was known.” - Robert Charles Anderson
- The parish map is at <https://www.americanancestors.org/publications/great-migration-study-project/parish-map>

LivingDNA



Great migration



Google Earth

- **Installing (browser versus pro for desktop)**

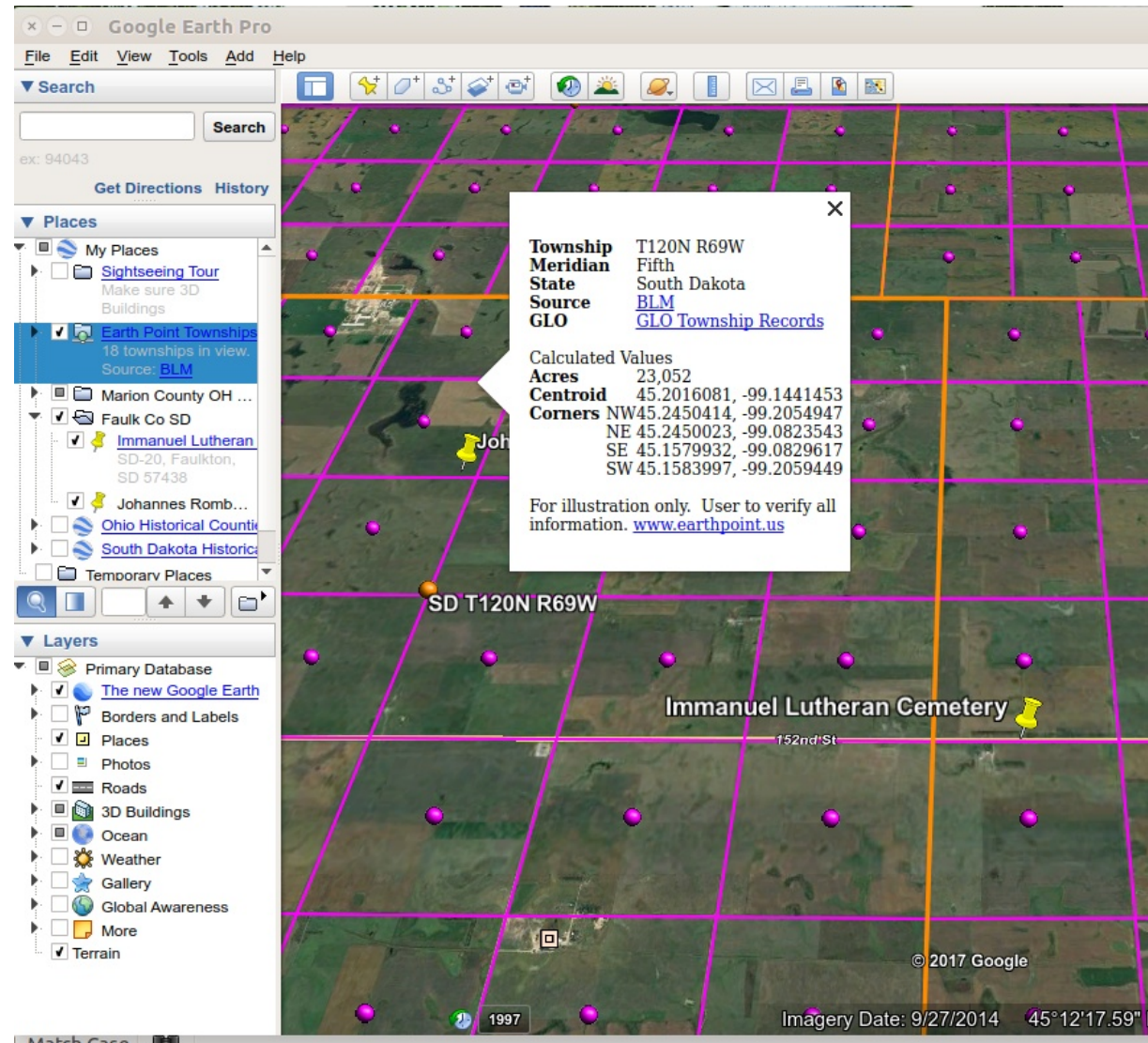
- <https://www.google.com/earth/versions/>
- Demands chrome browser!
- Pro for Desktop: Linux, Windoz, MacOS
- iOS, Android apps?

- **Navigating Pro**

- Search, places, layers
- Public land survey data (<http://www.earthpoint.us/>)
- Saving data (my places)
- Saving KML (<https://developers.google.com/kml/>); save to cloud, share link that others can use (web version - settings, allow kml import, then go to my places to import)
- Integrating old maps (add, image overlay, etc)
- Note: KMZ file is a zipped version of a KML file.

Adding Public Land Survey Data

- See <http://www.earthpoint.us/> and follow instructions. May not be free.



Integrate with Your Timeline

Migration of the Maternal Ancestors of Marian Loy from the 17th through the 19th Centuries



More Places to Get Lost In

- <https://library.harvard.edu/libraries/harvard-map-collection>
- https://digitalcollections.nypl.org/search/index?filters%5BphysicalLocation_mt%5D%5B%5D=Map+Division&keywords=&sort=dateDigitized_dt+desc
- <http://www.old-maps.com/index.htm>
- <https://collections.leventhalmap.org/>
- <http://www.historicmapworks.com/>
- <http://digital2.library.ucla.edu/viewItem.do?ark=21198/zz0028tr8x>
- <https://www.philageohistory.org/tiles/viewer/>
- <http://www.chicagoinmaps.com/index.html>
- **Good overview video:** https://youtu.be/Tii0ig0_FuM

Thanks for you time!

AND if you are REALLY into maps, try this reference.

The History of Cartography, vols. 1, 2, 3,
ISBN: 9780226316338 Published May 1987

Available for about \$300 per volume or free (!) in pdf form at

<http://www.press.uchicago.edu/books/HOC/index.html>

(The first two volumes are at the Central Branch of the Hennepin County Library as well.)

