Mapping and Genealogy

Location Matters!

By Craig Rhombs

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**

- **Email:** 281connections@gmail.com

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
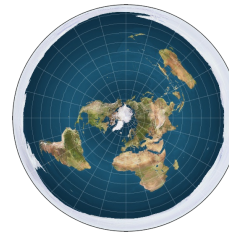
Mapping Basics (continued)

- **Images are raster representations of digital or drawing/drafting elements**

- **Digital maps**
  - 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 *
  - http://www.davidrumsey.com/ *
  - http://www.oldmapsonline.org/ *
  - https://dp.la/search?q=maps
  - https://en.wikipedia.org/wiki/Historical_geographic_information_system
  - https://dsl.richmond.edu/historicalatlas/
- **Library of Congress**
  - Overview https://guides.loc.gov/maps-illustrated-guide/introduction
  - Sanborn https://www.loc.gov/collections/sanborn-maps/about-this-collection *
  - Marion, OH (example) https://www.loc.gov/item/2012592377/
- **Marietta (OH) College Library**
  - 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/ or via American Ancestors at https://www.americanancestors.org/search/external-databases**

- **Boston Library: (digital collections) https://www.leventhalmap.org/ ***

- **Get lost in the BYU library: https://guides.lib.byu.edu/maps**

- **UK: https://maps.nls.uk/ ***

And More!

- **https://apps.nationalmap.gov/viewer/ (recent conditions)**

- **https://ngmdb.usgs.gov/topoview/**

- **https://www.mapofus.org/ (US Maps)**

- **https://www.newberry.org/ (search for maps)**

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.glorecords.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 (meridians)

- **37 meridians**
- **Not 100% regular because of embedded warrants, river shifts, etc.**
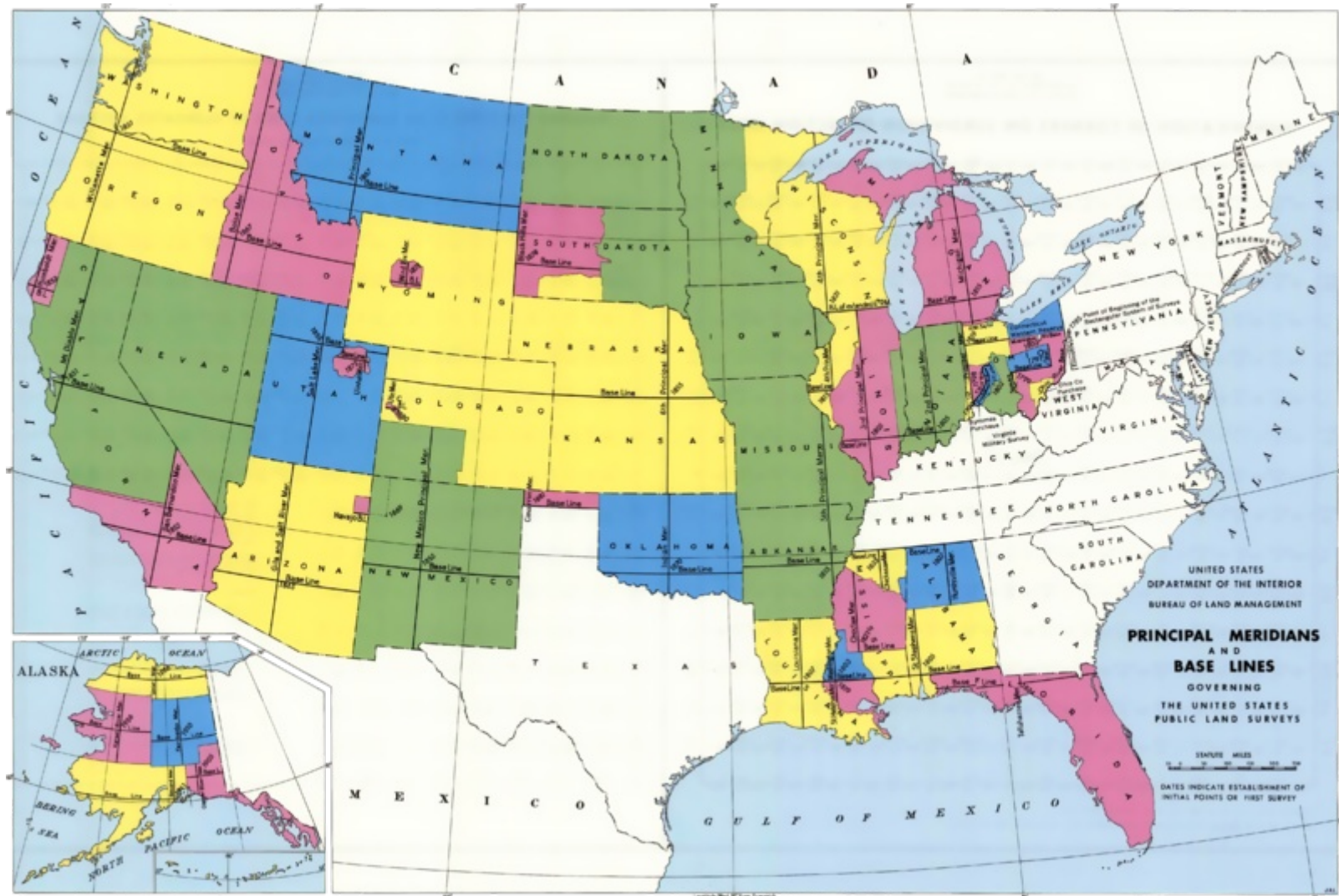
Public Land Survey (hierarchy)

- **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 System (PLSS)

Township Grid

Township 2 South Range 3 West

Section 14

Section 14 shows both normal division of the section into aliquot parts and the fractional division into government lots.
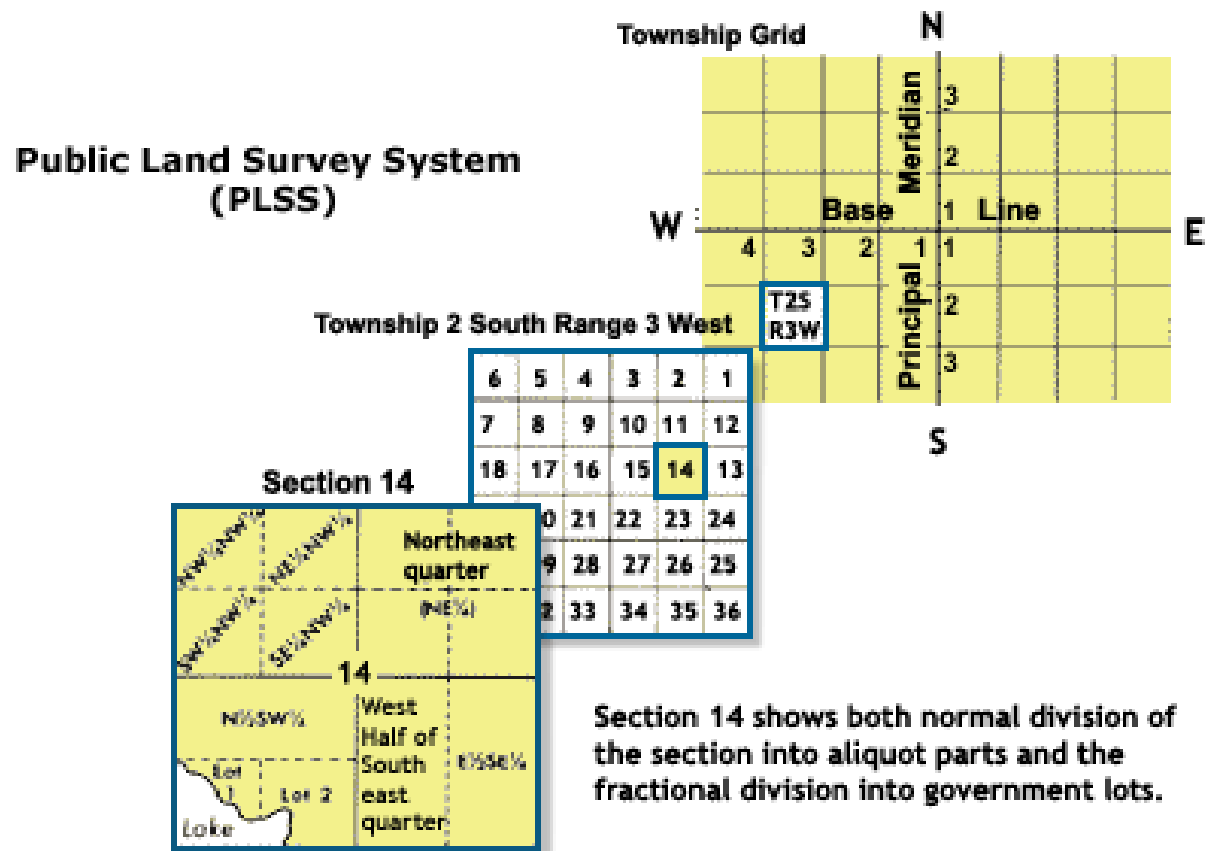
Public land Survey (Ohio is Special)

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**

20 miles

Railroad Land Grant Checkerboard
10 one-square mile blocks on both sides of the tracks in a checkerboard pattern.
One-square mile land grant block
Railroad tracks
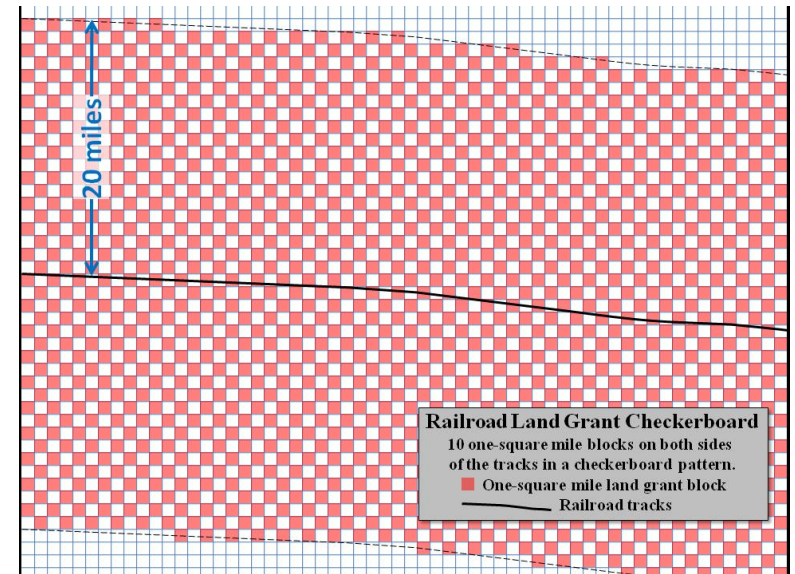
What about the rest of the country?

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

State Land Claims and Cessions
To the Federal Government, 1782-1802
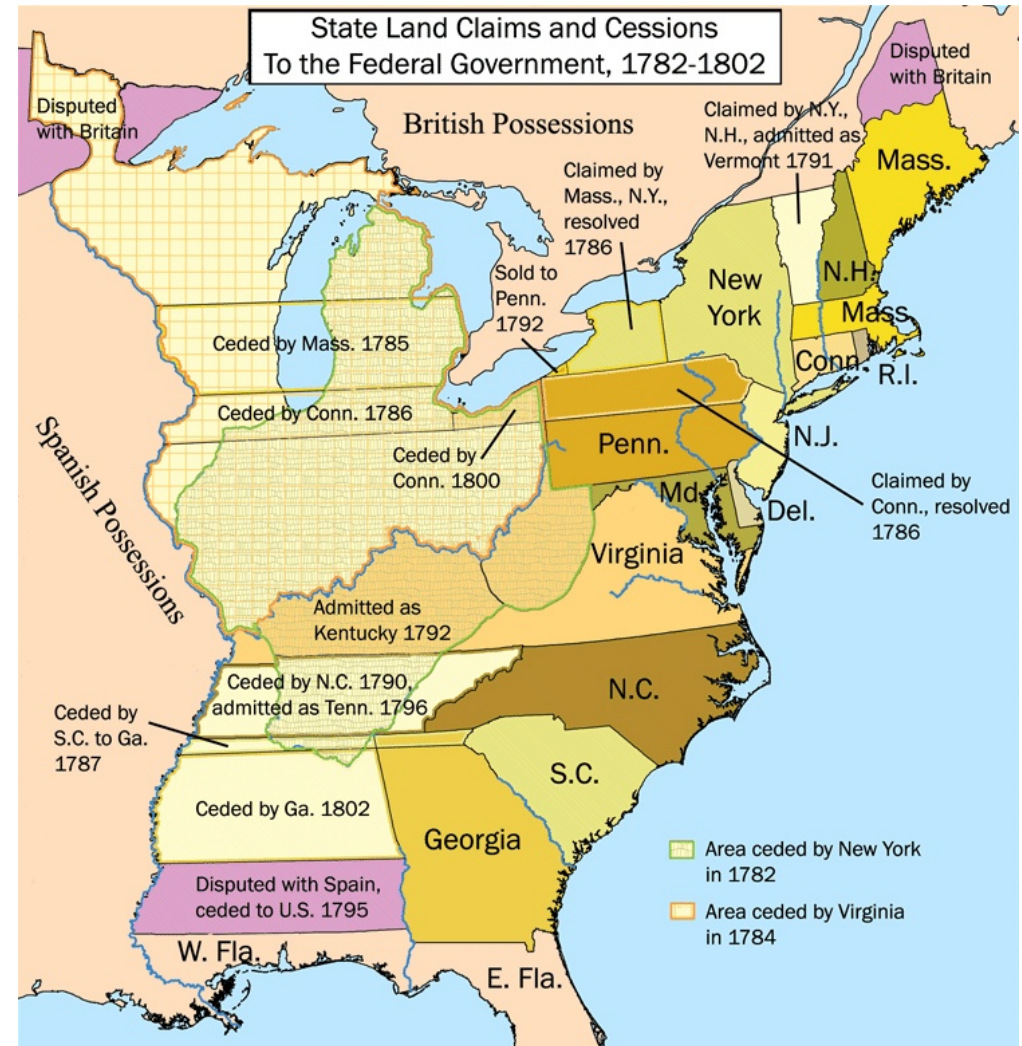
Don't forget Texas!

- **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	P ROMBS, JOHANNES	7/13/1889	13933	SD	5th PM	120N - 069W	SW¼	10	Faulk
📄	SD0730__.190	P ROMBS, JOHANNES	10/18/1892	4709	SD	5th PM	120N - 069W	SE¼	9	Faulk
---	SDMTAA 038418	P 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 *
- **Mass migrations:**
  - http://www.rootsandroutes.net/roots.htm (migrations tab)
  - https://www.familysearch.org/wiki/en/United_States_Migration_Internal
  - The map section of The Handy Book for Genealogists
- **National Historical Geographic Information System**
  - https://www.nhgis.org/ (complicated)
- **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

Owners c.1910

Another Example Based on Patents

- ## Campbell County, SD

- ## Lat 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)

- **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.**

USGS Place Names (continued)

USGS Place Names (continued)

	A	B	C	D	E	F	G	H	I	J	K	
	FEATURE	FEATURE_NAME	FEATURE_C	STATE_ALP	STATE_	COUNTY_NA	COUNT	PRIMARY_LAT_D	PRIM_LONG_D	PRIM_LAT_D	PRIM_LONG_D	SOU
	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

Rhombs — Maps & Genealogy
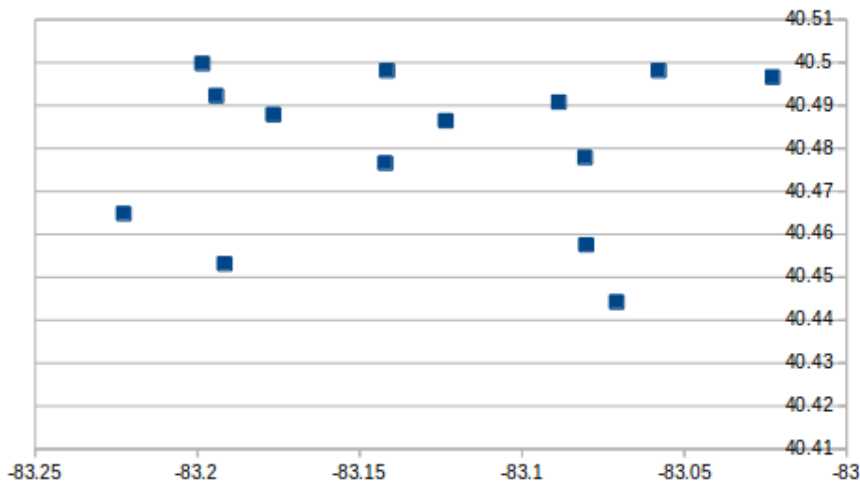
GeoNames

- **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.g08198 1887/?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-iqS2sNeeTPZ6-Jd8I&ll=23.65842181872636%2C44.696406250000011&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 <u>The Civil War</u> 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
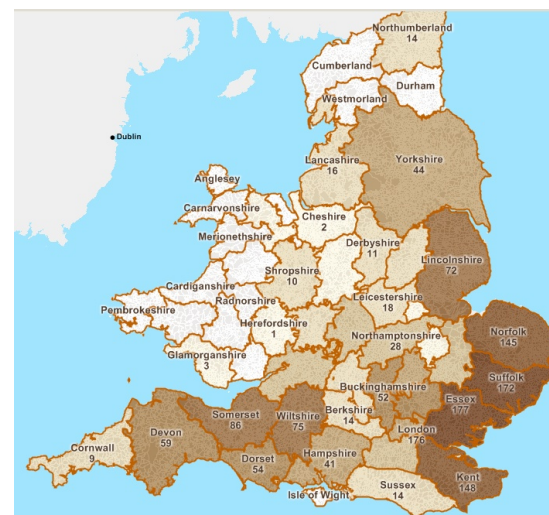
Google Earth

- **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.**
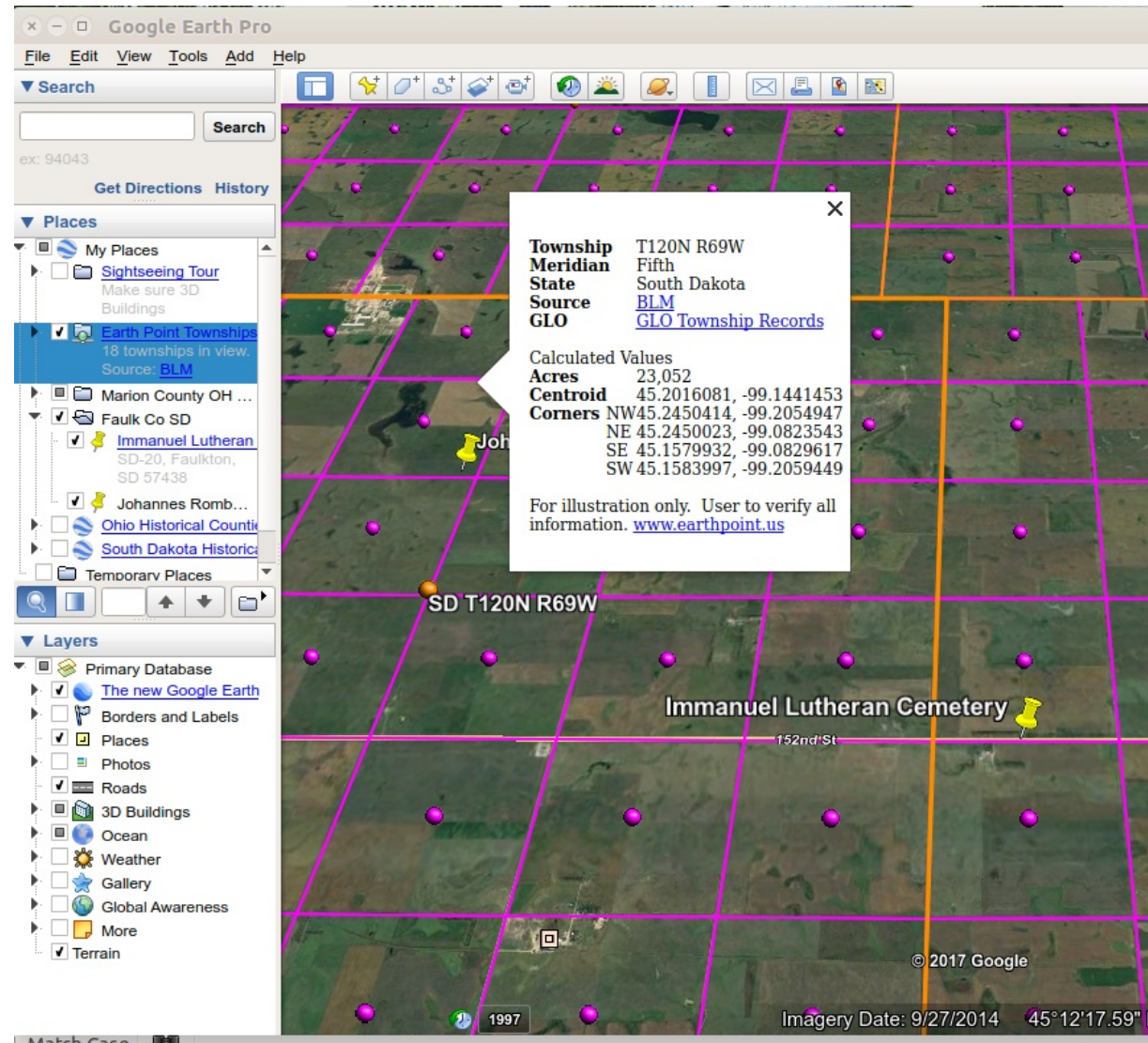
Integrate with <u>Your</u> Timeline

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_mtxt_s%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.)