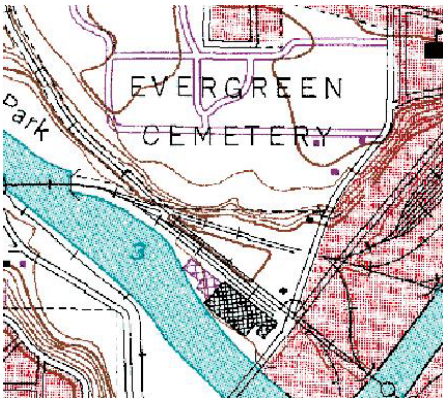
Using USGS Resources for Research in Genealogy

The US Geological Survey, a science agency under the US Department of the Interior, produces several sets of maps and a database that are often quite valuable for research in genealogy.

Maps

Maps provide clues to where ancestors lived, how settlements evolved, and where to look for written records about ancestors.

The USGS has been producing maps since it was founded in 1879. These include topographic maps, aerial photographs, satellite imagery, maps of mines, geology, land use, energy, earthquakes, floods, ecoregions, and much more.



Topographic maps show the landscape in great detail, including fence lines, farmsteads, houses, towns, cemeteries, communities, rivers, mountains, and other physical features. The USGS has mapped the USA at scales of 1:24,000, 1:100,000, 1:250,000, and other scales. Because these maps are so detailed, accurate, and because they were produced for decades at a consistent scale and with the same symbols, they make excellent resources to support genealogical research.

Maps can be obtained through the USGS Map Store, on http://store.usgs.gov, by calling the USGS at 1-888-ASK-USGS, or through private map dealers such as USGS Business Partners, on: http://rockyweb.cr.usgs.gov/acis-bin/querypartner.cgi

Map Indexes

Most USGS topographic maps cover a certain block of latitude and longitude. To order or research the correct map, a map index is quite helpful. The map index below shows 1:24,000-scale USGS map names for a certain area of the country—central Ohio.

These map indexes can be ordered free from the USGS, or examined in digital form on http://store.usgs.gov, and through MapLink on http://maplink.com.

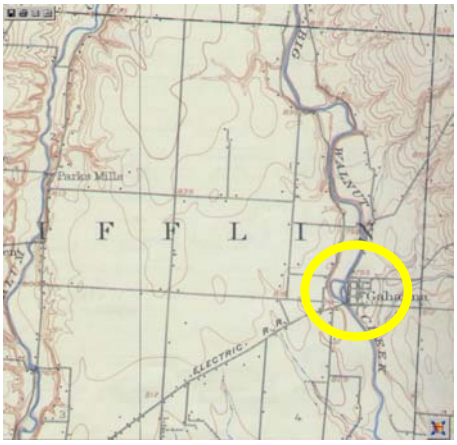
Digital Maps

All of these USGS topographic maps exist in digital form from the USGS or through computer programs such as National Geographic TOPO! software and MapTech's Terrain Navigator Pro. Many of these maps are online, through services such as the extensive Terraserver digital database on http://terraserver-usa.com, and from the seamless topographic map on The National Map: http//nationalmap.gov.

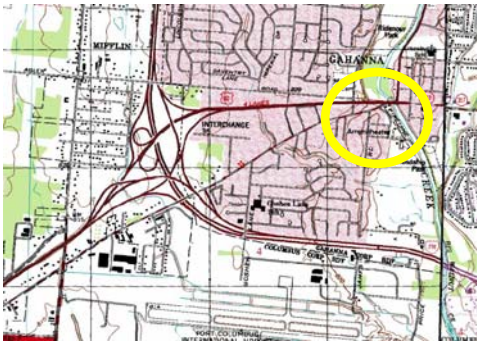
Historical Maps

Changing place names and changing boundaries present a challenge for genealogical research. USGS maps provide a consistent, low cost, and detailed resource. The following example illustrates how USGS historical and current maps might be used.

Gahanna, in central Ohio, was founded along the Big Walnut Creek in 1849 by John Clark, who named his property the Gahanna Plantation. The name Gahanna is derived from a Native American word for three creeks joining into one, and was the former name of the Big Walnut Creek.



By 1904, when the above USGS topographic map was made, Gahanna was still separated from Columbus by miles of farmland, but changes were coming. People could reach Columbus to the southwest via a new "Electric Railroad" indicated on the map. The map contains names that do not exist today, which may help in genealogy research.



By 1995, Gahanna and Columbus shared corporate boundaries, as indicated on this USGS topographic map. Gahanna's old town core can still be seen, but is dwarfed by freeway interchanges and the Columbus International Airport. This newer map contains a wealth of names, all of which can be researched further with USGS and other databases.

To obtain a historical topographic map, call 1-888-ASK USGS. For a minimal cost, you can obtain a black-and-white print of a historical topographic map. The USGS maintains an agreement with some USGS business partners who scan historical maps and can provide them in color, as digital files or prints.

In addition, some private companies and universities serve archives of historical topographic maps on the Internet. One such service from MapTech, on: http://historical.maptech.com/, offers historical topographic maps for free download for much of the terrain from Maine to Ohio. NOAA's Office of Coast Survey's Historical Map and Chart Collection contains over 20,000 maps and charts from the late 1700s to present day. The collection includes some of the nation's earliest nautical charts, hydrographic surveys, topographic surveys, geodetic surveys, city plans and Civil War battle maps, on: http://chartmaker.ncd.noaa.gov/csdl/ctp/abstract.htm.

While the above discussion focuses on USGS maps, older historical maps made by other organizations and individuals do exist. The above discussion focuses on the USA, but historical maps do exist for other parts of the world. One of the best sources is the David Rumsey Historical Map Collection (www.davidrumsey.com), which includes over 11,000 maps online. The collection focuses on rare 18th and 19th century North and South America maps and other cartographic materials, but also includes historic maps of the World, Europe, Asia, and Africa. Collection categories cover antique atlases, globes, school geography, maritime charts, state, county, city, pocket, wall, children's and manuscript maps. Another rich resource is the University of Texas' Perry-Castaneda Map Library, on: http://www.lib.utexas.edu/maps/historical/index.html, and the University of Georgia, on: http://www.libs.uga.edu/darchive/hargrett/maps/maps.html.

Aerial Photographs

Aerial photographs may provide clues about abandoned structures, old railroad lines, and other historical features. The USGS has current aerial photographs as well as historical photographs dating back to the 1930s. These can be ordered from the USGS, and sometimes have resolutions of less than one meter per pixel. One of the richest sources for USGS aerial photographs in the USA is Terraserver (http://terraserver-usa.com). The National Map (nationalmap.gov) also contains aerial photographs, roads, rivers, land cover data, and much more.

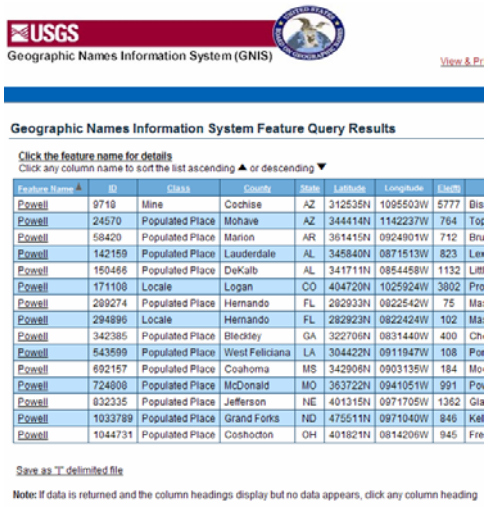
Above, USGS aerial photograph of a section of a cemetery.

Many state governmental portals offer historical aerial photographs, such as Illinois' 1938-1941 database from the Illinois State Geological Survey on meltwater.isgs.uiuc.edu/website/ilhap/viewer.htm, the Louisiana Digital Library on louisdl.louislibraries.org/LSAP/Pages/home.html, the University of Colorado Library's 1930s through 1970s aerial project on ucblibraries.colorado.edu/aerialphotos/about.asp, and the 1948 aerials on the California State GIS site, gis.ca.gov. Most of these sites offer new aerials as well, so students can compare how the physical and cultural landscape changes over time.

Many local governments offer historical aerials, such as King County, Washington, which features historical aerials viewable with a sliding toolbar, allowing the user to view selected portions of photographs of different ages on dnr.metrokc.gov/topics/map/aerials/Compare.htm.

Geographic Names Information Systems Database

Names on the landscape are a doorway to history, providing clues about who lived in the region and when they were settled. The USGS maintains the Geographic Names Information System (GNIS), the Nation's official data base of place names, contains over 2 million entries, including the names of places that no longer exist, as well as variant names for existing places.


USGS
Geographic Names Information System (GNIS)

Geographic Names Information System Feature Query Results

Click the feature name for details
Click any column name to sort the list ascending ▲ or descending ▼

Feature Name	ID	Class	County	State	Latitude	Longitude	Elevft	
Powell	9718	Mine	Cochise	AZ	312535N	1095503W	5777	Bis
Powell	24570	Populated Place	Mohave	AZ	344414N	1142237W	764	Top
Powell	58420	Populated Place	Marion	AR	361415N	0924901W	712	Bru
Powell	142159	Populated Place	Lauderdale	AL	345840N	0871513W	823	Lee
Powell	150466	Populated Place	DeKalb	AL	341711N	0854458W	1132	Litt
Powell	171108	Locale	Logan	CO	404720N	1025924W	3802	Pro
Powell	289274	Populated Place	Hernando	FL	282933N	0822542W	75	Mas
Powell	294896	Locale	Hernando	FL	282923N	0822424W	102	Mas
Powell	342385	Populated Place	Bleckley	GA	322706N	0831440W	400	Chr
Powell	543599	Populated Place	West Feliciana	LA	304422N	0911947W	108	Por
Powell	692157	Populated Place	Coahoma	MS	342906N	0903135W	184	Mor
Powell	724808	Populated Place	McDonald	MO	363722N	0941051W	991	Pow
Powell	832335	Populated Place	Jefferson	NE	401315N	0971705W	1362	Gla
Powell	1033789	Populated Place	Grand Forks	ND	475511N	0971040W	846	Kel
Powell	1044731	Populated Place	Coshocton	OH	401821N	0814206W	945	Fre

Save as "I" delimited file

Note: If data is returned and the column headings display but no data appears, click any column heading

The above image shows the result of a query to the GNIS on the place name "Powell."

The GNIS contains information on names of rivers, cemeteries, villages, counties, and hundreds of other features that appear on present or historical USGS topographic maps. The results include the latitude and longitude coordinates of each location where the name exists, so that you can then find it on a map.

For More Information

See the USGS Fact Sheet: Using Maps in Genealogy: http://erg.usgs.gov/isb/pubs/factsheets/fs09902.html

The USGS information sheet entitled "Looking for an old aerial photograph" on mac.usgs.gov/isb/pubs/factsheets/fs12796.html provides information on how to obtain aerials from the USGS, from the National Archives, and from the Library of Congress.

Contact the USGS:

http://www.usgs.gov
http://ask.usgs.gov
http://education.usgs.gov

US Geological Survey
Map Distribution
Denver Federal Center
Box 25286
Denver, Colorado
80225-0286 USA

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