GPS, GIS AND ARCGIS: THE CASE OF THE NEVADA CITY CEMETERY

John W. Olson – The Extreme History Project

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Montana History Foundation
Discussion

- Who I am
- Terms: GPS, GIS, and “the cloud” as they relate to cemetery mapping
- The Nevada City Cemetery Project
- How we are using the data we collected to tell the stories of the people doing the work and the people in the cemeteries via Story Map and a database

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John W. Olson

- Montana State University, May 2016
- Anthropology, focus Archaeology, minor GIS
- Field School, Virginia City, 2013
- Volunteer/work for Extreme History Project since 2013
- Nevada City Cemetery, 2015
- Current Museum Store Manager/Buyer Museum of the Rockies
GPS

- Global Positioning System
- 24 Satellites orbiting the Earth
- Atomic clocks
- GPS receiver and times
GPS

By using 4 satellites, we measure the distance from satellites to the GPS receiver
Typical uses of GPS

- Get from point A to B to C
- Deliver packages
- Mapping and surveying
- Geocaching, 656 around Helena
- Find your lost child, adult, or pet
- Map graves
- Find graves or significant finds out in the wilds of Montana
GIS

- Geographic Information Systems or Sciences
- Using spatial information to create visual representation of data
- Used every day to calculate and represent millions of types of data to help people do the things they are passionate
The cloud

- Information shared between computers, servers, and apps and is available through various devices via the internet.
Cemetery Mapping

- **Preparation**
- Use GPS mapping device and forms
- Process data gathered
- Store in “the cloud”

Hand Map of Nevada City Cemetery located in Madison County, Montana with Sections 1-5 of 8 listed.
Cemetery Mapping

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technofaq.org and trimble.com
GPS accuracy

Purpose?
Cemetery Mapping

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Cemetery Mapping

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Nevada City Cemetery Project

- Everything is spatial and temporal
- Story Maps
- Archaeology of the Slave Cemetery at George Washington's Mount Vernon
Nevada City Cemetery Project

Story Map

Nevada City Montana Cemetery Project

Nevada City, Montana.

According to the Nevada City website it is a, "...town that literally has resisted change since 1863!"

The population has changed dramatically over the years. Approximately 10,000 people lived in the area of Nevada City and Virginia City Montana. During the heyday of the gold mining days and it was estimated that around 100 million dollars worth of gold was extracted over the years.

With so many people in one area it is not surprising that there were deaths. Some deaths were from natural causes, the harsh environment, the inclement weather and of course, other people. Deaths probably occurred...
Nevada City Cemetery Project

- Database
- Work in progress

Welcome to the Nevada City Cemetery database website!

Making History Personal: The Nevada City Cemetery Project

https://nevadacitycemeterymt.org
Nevada City Cemetery Project

- Benefits
  - Digitized records for preservation
  - Spatial analysis within cemetery
  - Larger spatial analysis with addition of other cemetery data
  - Savings on time in the future

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How to use the data to tell stories

- Recap
- Nevada City Cemetery Project
- Stories

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- The City of Virginia City
- The Montana Historical Society
- The State of Montana DNRC
- The McFarland Curatorial Center
- The State Historic Preservation Office
- The Thompson-Hickman Library and Archives
Questions/Comments

- Thank you for your passion and interest
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