Quick Find. . .

Historic Cemetery Grants

Do you know of a historic cemetery that is in desperate (or, even not-so-desperate) need of some TLC? The Oregon Commission on Historic Cemeteries (OCHC) offers grants to provide financial assistance in the following general categories:

- Security, restoration, and preservation
- Education and training
- Research and interpretation

Eligible projects may address security needs, training, conservation of historic elements (e.g., curbs, markers), documentation/mapping, signage, landscape restoration and planning. If considering remote sensing, please note the information on the reverse side, specifically Doing Your Homework.

There will be two grant cycles in the 2015–2017 biennium, and awards are typically between $1000 to $4000. The deadline to submit a proposal for the first grant cycle is 30 April 2015 (11:59 PM).

Grant Information and Application

All Oregon Heritage grant applications must be submitted using Oregon Parks and Recreation Department's (OPRD) online grant application system. Visit Oregon Heritage's Financial Assistance website for general information on Oregon Heritage Grants, including Historic Cemetery Grants.

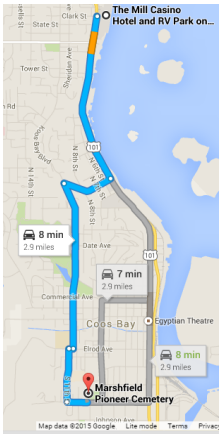
Additional Resources

All of this, and other, information may accessed from OPRD's website (http://www.oregon.gov/oprd/pages/index.aspx), and contact information for Oregon Heritage is provided at the bottom of the reverse side. If viewing this document electronically, click the links below for direct navigation.

- OCHC Website
- Remote Sensing Summary
- Oregon Cemetery and Mortuary Board

Oregon Heritage Workshop: Remote Sensing Techniques for Cemetery Mapping

As remote sensing or archaeo-geophysical techniques become a more common tool for historic cemetery mangers, there is a greater need to understand which methods are appropriate for each cemetery location. This workshop compares the abilities and limitations of ground-penetrating RADAR (GPR), magnetometry, metal detectors, conductivity, and resistivity to help cemetery managers determine the best method to use, optimal conditions for their use, the order in which they should be used, and the cost. Examples of how these non-destructive techniques have been used in the Pacific Northwest to locate and map cemeteries and their varying degrees of success will be presented. An afternoon field demonstration of the techniques will be conducted at Marshfield Cemetery, 700 Ingersoll Avenue in Coos Bay, Oregon.



What is *remote sensing*?

Magnetometry

Remote sensing refers to an array of techniques for observing properties of a physical object or the environment by interpreting imagery and and measures of energy from non-contact (i.e., *remote*) sensors. **Geophysical** methods make use electrical, magnetic, and seismic measurements and are often classified as remote sensing, though not all methods are strictly non-contact. Remote sensing and other geophysical techniques allow for the non-intrusive investigation of near sub-surface features.

For cemeteries, remote sensing surveys can provide essential information for management planning and mapping purposes. Some specific uses include the following: locating unmarked burials; locating cemetery boundaries; linking historic cemetery plats to their physical location; determining used/unused areas for cemetery management; and verifying past exhumations or cemetery removal.

Remote Sensing Techniques

Remote sensing techniques entail much more than those covered in this workshop, for example aerial photography, satellite imagery, and other other laser-scanning technologies. This workshop focuses on several methods already commonly used in cemetery-related projects. These include the following:

- Magnetometry
- Ground-penetrating RADAR (GPR)
- Electrical resistivity
- Electromagnetic (EM) conductivity
- Metal detector
- Soil compaction

Electrical resistivity

Each of these techniques has its advantages and limitations and, thus, optimal environmental conditions for obtaining high-quality data. Ideally, a cemetery survey would include data from multiple methods, which could be used for cross-validation and (potentially) fuller interpretation of the results. See the Remote Sensing Comparison box on the reverse side for a general list of some of the advantages and limitations of the different techniques presented in the workshop.

Doing Your Homework

Whether applying for a Historic Cemetery Grant or not, before pursuing remote sensing within a cemetery, one should:

- Consider whether remote sensing is necessary. If all one requires is a detailed cemetery map, a professional land surveyor may be a cost-effective alternative.
- Obtain permission from the owner or managing body for the cemetery.
- Gather historical information the cemetery and its present condition, including maps, records, newspaper clippings, etc.
- Gather genealogical information for those buried within the cemetery.

Historical and genealogical information may be found at the Clerk's Office of the county in which the cemetery is located. The County Clerk is required by law to maintain a map of all cemeteries within the county. Local historical/genealogical societies are also great sources of information. Additional resources are provided by the Oregon Historical Society and Oregon Heritage's History and Archaeology Library.

Remote Sensing Can't. . .

A remote sensing survey can provide useful information in some cases, but this isn't true in *all* cases. Remember that current conditions (for example, soil moisture, the presence of buried metal, previous disturbances) may produce ambiguous results. Follow-up excavations are often required to confirm the presence of a grave. Please keep in mind that remote sensing surveys do not produce images that illustrate human skeletal remains or coffin. **Under no circumstances will remote sensing survey results indicate the age or sex of buried remains.**

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Remote Sensing Comparison

Below is a list of *some* of the advantages and limitations of the methods covered in this workshop. For more, see OPRD's Remote Sensing Summary.

Method	Advantages	Limitations
Magnetometry	Relatively rapid data collection & processing; good for uneven terrain	Sensitive to nearby magnetic sources; Less-accurate depth reading
GPR	High-resolution; good for burials; more-accurate depth reading	Brush & uneven terrain problematic; sensitive to cellular interference
Resistivity	Easy to perform; cheaper equipment; robust data viewed in field	Larger crew needed; brushy terrain problematic; slower for lateral survey
Conductivity	Fast for lateral survey; operable by one person; better for brushy terrain	Sensitive to nearby fences & power lines; sandy soils problematic
Metal detector	Small & easy to transport; cheaper; measurements made rapidly; clearing modern metal from grid	Only sensitive to metals; interference from nearby metals; no automatic data logger; shallow depth
Soil compaction	Inexpensive and relatively fast	Physically demanding

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Workshop Facilitators

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