Conservation Burial Best Practices

by Dr. Billy Campbell, Memorial Ecosystems.com

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Availability is pretty obvious; spending a lot of time evaluating sites that are not known to be available can waste time and effort. In most cases, getting the advice of local land protection groups/advocates can be beneficial. It can also help avoid conflicts with land protection groups that might consider a potential site inappropriate for this use. Keep in mind "availability" can also include zoning restrictions ("available for this purpose").

Botanical baseline/Ongoing botanical monitoring

Aldo Leopold said, "To keep every cog and wheel is the first precaution of intelligent tinkering", and establishing a baseline is critical. Also, because a one-season botanical inventory might miss species, ongoing monitoring and inventory efforts are required. Best Practice here would involve procuring a thorough base-line inventory by a competent field biologist, with volunteers and/or staff continuing to search for new species. Photo documentation is suggested.

Burial Density

Contemporary cemeteries might have an average of 1,000 burials per acre, with nearly every square foot disturbed by the end of its capacity, potentially disturbing a conservative estimate of 30,000 square feet per acre, or 69% of each acre. In a conservation burial ground, 300 burials per acre could disturb about 9,000 square feet per acre, or about 20%, but the reduction in use due to natural terrain that includes unusable portions, such as ravines, wetlands, slopes, and flood plains gives us a more fluid estimate closer to 6%. Burial planning that utilizes nodes of density, meadow burial, perimeter burial, and other alternatives to the outdated and unfeasible method of gridding or plat mapping makes density choices more fluid and organic. Operators and the organization holding the easement should come up with a number based upon not only the direct impacts, but indirect impacts as well.

Care of grounds

- Identify sources for local cultivars of native, rare, or endangered plants.
- Identify appropriate plant location according to native growth habits.
- Consider propagation of rescued plants and seeds collected on site.

Direct and Indirect Impacts on Soil and Vegetation When Grave Siting

- 1. Survey grave footprint for vegetation and what plants might be worth rescuing. If an item is significant and non-movable, consider moving the footprint.
- 2. Survey area around the grave for rare or sensitive species.
- 3. Plan for where attendees should stand. Rope off sensitive or potentially dangerous areas (for example, in a regenerating forest, rotted tree stumps can form deep holes).
- 4. Rescued plants should be cared for appropriately (depends on plant, season, other conditions).
- 5. Excavated dirt should be placed on tarps. Consider raised temporary platform (concrete blocks and marine plywood) in rare circumstances where the overburden could damage significant plants at the wrong season or conditions.
- 6. Keep soil horizons in separate piles. In eastern deciduous forests, where a duff layer exists, it can be turfed off in strips and placed in an area where it will not be trampled.
- 7. The piles of soil should be kept dry and covered in wet climates.
- 8. In some, hand digging graves is preferable to back-hoes related to site damage and ease of hand-covering graves (backhoes can create large clogs of dirt in many soils).
- 9. If the grave is off trail, a temporary trail should be established to minimize trampling by excavators and attendees.
- 10. If an area has known or discovered significant Native American cultural artifacts (a village site, burial site, etc.), it should be off limits for burial, and the operator should contact an archeologist. If the site has random, less significant artifacts (projectile points, for example), an effort to recover these items and record the locations would be appropriate.
- 11. Excavation may require special techniques in unstable soils (high sand content, for example) or special conditions (glacial erratics, unexpectedly shallow basement rock).
- 12. In rocky conditions, removed rock might be re-purposed to naturalize and stabilize the grave mound.

Easement/Deed Restriction

- Land Trust
- Conservation districts
- Contract with families that also serve as deed restrictions
- Entity should not have a direct financial incentive to raise the number of burials above that originally agreed-upon, the type and number of memorials, or other profiteering scheme.

Land Selection

- Availability
- Affordability
- Possibility of partnerships
- Accessibility
- Position in Landscape
- Naturalness/Sensitivity/ Beauty
- Restoration potential
- Adequate areas suitable for graves (soil depth, slope, water-table, etc.)
- Association with respected social institution or local government
- Size
- Expandability
- Water resources
- County Zoning
- State Cemetery Laws

Layout of internal transportation plan

- Redundancy
- Plant rescue
- Water run-off
- Foot paths and paths for golf carts or other vehicles
- Parking area

Naturalness/Sensitivity/Beauty

"Naturalness" is nebulous, but some extant floral and faunal diversity can be important in the early years of a project, as can be the ambient soundscape, geological features-especially water features. Keep in mind that not all portions of the project need to be "inventory". Wetlands can contribute to the overall ecological value of the project, as well as creating opportunities for marketing, education, boardwalks, and memorial gifting if restoration is required.

Operations and Management

- Provide monitoring plan for ongoing documentation of flora and fauna. Avoid digging in areas where a regionally rare plant that has no above ground vegetation except when it blooms. Consider conducting an annual botanical survey.
- Where possible, use ground disturbance to enhance plant diversity. If you are still "impacting" plant diversity, even minimally, you are probably doing it wrong (too sensitive of a site, failing to re-vegetate properly, etc.).

Position in Landscape

- Ecological considerations.
- "Soft cost" mitigation. If the project is in an area that local governments are targeting for landscape level land protection (green belts, etc.), then it might be easier to get approval from zoning boards.

Preservation and Stewardship

- The Operating and Maintenance costs of conservation burial should be in the order of magnitude less than contemporary cemeteries. Consider whether the long-term fund interest could be used for other activities in keeping with the mission and vision of the project (education, for example).
- Sound ethical practices dictate that the holder of the easement should not have a direct financial interest in each transaction/sale. The organization that might have to say "no, you cannot increase density over and above the original agreement" ethically should not financially benefit from amending the agreement. This does NOT mean that land trusts cannot be sole proprietor or a partner in a project. However, even if the trust is the sole proprietor, the easement should be monitored by another organization without financial interest in each transaction. We suggest that client friends and families consider a memorial donation to the organization.

Site planning

- Ecological assessment should be done by qualified expert(s)
- Ensure that the cemetery operation would not degrade existing ecological value of the land.
- Internal transportation plan should allow for trail redundancy so a service on one trail does not shut down access to "down-stream" areas of the project.
- Infrastructure: parking, bathrooms, visitor contact areas, and security, etc., should be carefully considered.

• See the section on Density.

Surveys/Other Information

- Botanical baseline
- Archeological resources
- Wetlands
- Estimation of capacity
- Review of rare communities and plants of the region

Restoration/Maintenance Plan

Should be based on a three main factors:

- Existing conditions
- Potential conditions
- Economic considerations

Tips and Tasks

- Have a sign-in book at the entrance to cover liability for people visiting; also use it to capture
 names and contact info
- Create liability waivers for volunteers
- Establish written safety protocols
- Create your own guidelines for families
- Create your own guidelines for funeral directors
- Purchase child-sized shovels

Visitor Management/Services

What sort of activities are allowed /encouraged. This will vary from site to site, but because the projects are actual functioning nature reserves, they will inevitably be more than one-dimensional cemeteries. Suggested activities include but are not limited to:

- educational presentations
- guided nature walks
- birdwatching
- community activity days
- family events
- baby blessings
- weddings
- funerals

Other considerations:

- Pet policy
- Provide a liability waiver on check -in
- Limitation on size of funeral parties