A Will for the Woods Questions on Green Burial:



1. What is the definition of "green burial"?

According to the GBC: "Green burial is a way of caring for the dead with minimal environmental impact that furthers legitimate ecological aims such as the conservation of natural resources, reduction of carbon emissions, protection of worker health, and the restoration and/or preservation of habitat."

We will often elaborate on that by defining it as: Green burial is a simple and natural alternative to resource-intensive contemporary burial or cremation. The deceased is laid to rest in the earth using only biodegradable materials and without a vault or toxic embalming, in a woodland or other natural setting, often with a fieldstone or indigenous plant marking the grave. This practice can be used as a conservation tool, enabling the acquisition, restoration, and stewardship of natural areas. Simple natural burials were prevalent for thousands of years (and still are in many parts of the world, including in traditional Muslim and Jewish burials) before the contemporary funeral industry propagated expensive and elaborate funerals as the standard.

2. Can you elaborate on the terms green funeral, green burial, and green cemetery?

Often when people talk about wanting this option, they really mean they want all three aspects to be green. A green funeral involves no chemical embalming (or more commonly, none at all) and uses only non-toxic, biodegradable materials for body preparation. For a green burial, the container and anything placed into the earth must be non-toxic and biodegradable, and no vault is permitted. It is the cemetery which makes the decision about whether or not they allow for green burials, either exclusively or in combination with conventional burials.

In an ideal situation, not only is the burial itself green, but the care of the burial ground is, as well. The Green Burial Council has three tiers of certification for green cemeteries, and the higher two require that all burials performed are green and that there are efforts toward ecologically responsible land care, which involves minimal watering and mowing; not using chemical pesticides, herbicides, or fertilizers; and in the highest cases, active restoration and conservation. (For further explanation of these three tiers, see question 15 or the GBC website, greenburialcouncil.org.)

3. What are some of the most common misconceptions about funerals and the funeral industry?

The following common myths are NOT true:

- That conventional burial is more respectful of the deceased.
- That loved ones should want to preserve the body for as long as possible in a casket and keep it away from the earth.
- That loved ones don't want to participate in the funeral process or be involved in rituals like decorating a casket or digging a grave.
- That one must use the services of a funeral director.
- That contemporary funeral practices are traditional. (See Q.25-28)
- That contemporary American funeral customs are the norm and that the rest of the world embalms and uses large caskets and monuments. (See Q.21-23 & Q.25-28)
- That cremation is green. (See Q.14)
- That dead bodies are dangerous or a health risk. (See Q.21)
- That embalming is required. (See Q.21-23)
- That vaults are necessary for safety reasons. (See Q.13)

4. Can you provide some statistics on the funeral industry?

What has come to be known as the American style funeral is the most resource intensive funeral in the world.

The following statistics represent the materials used annually in American funerals:

• 30-plus million board feet of hardwoods – mostly tropical and precious (used in caskets).

• 2,700 tons of copper and bronze (caskets).

• Over 100,000 tons of steel (caskets and vaults). This equals enough metal to rebuild the entire Golden Gate Bridge every year.

• 1.6 million tons of reinforced concrete (vaults). If you were to lay that concrete down it would be about the length and width of a two-lane highway stretching all the way across the continental US.

• 827,000 gallons of embalming fluid. This is enough formaldehyde and other toxic chemicals used in embalming to fill over one Olympic-size swimming pool every year.

Cremation – The following statistics on cremation are commonly quoted, and we've done our best to verify their accuracy:

• You could drive an average car around the equator 3 million times on the energy used annually for cremations in China, Japan, India, the UK, Canada, the US, Australia and New Zealand combined (based on government statistics 2008).

• You could drive about 4,800 miles on the energy used to cremate one person — and around the equator 85,000 times on the energy from all cremations in one year in the US.

• "The cremation process consumes fossil fuels and releases more than 23 million pounds (10.4 million kilograms) of CO2 into the atmosphere annually (as well as a host of toxic pollutants)." -Robert Larkins, Funeral Rights

• During cremation the average person produces about 110lbs (50 kg) of carbon dioxide as the body is heated to 1270°F (690°C) for 70 to 90 minutes. -Professor Roger Valentine Short, University of Melbourne, 2007.

• Approximately 40% of American dead currently receive cremation.

• The British Environment Minister estimates that by 2020 crematoriums will be the biggest single contributor to mercury emissions in the UK, although some countries are now moving towards higher filter standards.

• Among the most significant noxious emissions produced by cremation are: Carbon Dioxide, Hydrogen Chloride, Carbon Monoxide, Formaldehyde, Organochlorines, Dioxins, Furans, and Mercury.

In 2014 there were over 40 GBC approved green burial cemeteries in the United States, and around 100 including the non-certified cemeteries. Since we began making *A Will for the Woods*, the number of green cemeteries has doubled and is continuing to grow.

5. How can I find out if I can have a green burial and funeral in my area?

In the US and Canada, you can start with resources like The Green Burial Council (GBC) or The Funeral Consumers Alliance (FCA). Green burial is also offered in the UK and Australia. For these countries, please refer to the Natural Death Centre and the Natural Death Care Centre, respectively — see question 30 and the resources section for more details. The movement is ever-expanding, and many countries have intact traditions of natural burial, so an internet search may be worthwhile to see what's happening in your area.

The GBC certifies funeral homes and cemeteries (as well as some funeral products), and lists them on their website. They have established standards and best practices for what should be considered "green", and they verify that certified providers are adhering to those standards. The FCA is a national organization in the US with affiliate chapters in regions across the country, often run by volunteers. Their mission is to protect consumers' rights around funeral choices, and they are another very well-informed and helpful resource.

Not all green providers choose to be certified by the GBC. If you conduct an independent search for funeral homes and cemeteries in your area, you may discover that some non-certified places are in fact offering green services. Keep in mind that without certification, standards may vary.

If providers are making green claims, you should feel free to ask questions. You may want to refer to the GBC Four-Part Green Burial Guide (see the resources section), which offers guidance in making informed decisions when dealing with providers, whether GBC-certified or not.

6. Can I be buried on my own property?

The laws regarding this vary by location, but are generally more permissive than one might expect. Among other regulations, states may stipulate minimum property size, allowed proximity to water, and that an easement be placed on the property. This last item can affect the value of the property, but some states make allowances in their tax code to incentivize easements. If there is a natural burial preserve near your home, burial there may offer the most ecological value.

7. If someone has had radiation, chemotherapy, or an infectious disease, can they still receive a green burial?

Yes. The vast network of roots, fungus, microbes, and animals in the earth function as a remarkable filtration system. As an extra precaution, most guidelines require burial plots to be at least 50 feet from water. Furthermore, disease ceases to be infectious soon after death, and radiation and chemo will dissipate. Also, the conventional alternatives do not actually offer the sealing away of those things, as popular belief may lead one to think.

8. I like the idea of green burial for myself or a loved one, but I don't know if I want the home funeral aspect. Can I do one without the other?

Certainly. One can choose green burial without a home funeral and vice versa. There are many funeral directors who will accommodate a green funeral, and there is no expectation that you or your community need to be equipped to handle a home funeral. It's simply a matter of knowing what you want, knowing your rights, and finding the right provider who will work with you.

9. Can I donate my organs to science but still have a green burial?

Generally speaking, yes, one's organ or organs can be removed prior to green burial. One exception would be that in the case of whole body donation, eventual green burial would probably not be possible, as bodies used in laboratories and medical school classes are typically embalmed the conventional way.

10. Can a pet be given a green burial?

Many natural cemeteries allow the interment of pet remains, whether whole body or cremated. There is sometimes an assumption these days on the part of veterinary staff that a deceased pet's human companions would prefer cremation, but many people find the

ritual of returning their pet's whole body remains to the earth preferable to cremation. As with natural human burial, many derive comfort from knowing that their companion is now a part of the earth and plants in that particular place. Some choose to bury their animal friend close by in their own yard, and others find comfort in choosing a green cemetery dedicated to ecological preservation and restoration, knowing that it will help ensure habitat for the many other animals.

Some state laws or specific cemeteries may prohibit human and animal burial in the same area, but that is not always the case. We asked Dr. Billy Campbell, green burial pioneer and co-founder of Ramsey Creek Preserve, to share something on the meaning of offering green burial to a beloved pet. He told us this beautiful story:

"When asked if we bury pets, our answer is 'of course we do'. Ramsey Creek is a nature preserve, and all sorts of animals live and die there: it is their home, after all. The land is the birthplace and graveyard for all manner of insects, reptiles, mammals and birds...this is actually true for most conventional cemeteries, but more-so at places like Ramsey Creek because we have better habitat. Why cemeteries would single out pets as beings-non-grata is beyond me.

"Other than lying on the couch with us, our Jack Russell Phoebe was happiest walking and running in the woods, where the smells must have been fantastic for her. When an accident claimed her life we were crushed, but I knew where she had to be buried: next to my spot down by the creek, where we planted a rhododendron on her grave. She died in the spring, and every year I think of her when the rhododendron blooms."

11. What are the ways in which green burial protects and restores land?

Green burial protects the land in a number of ways. On a legal level, the land is deeded as a cemetery, which offers certain protections. Deed restrictions and conservation easements provide additional assurance that the land will stay a nature preserve into perpetuity. Moreover, socially, there is an understanding of greater respect around the sacredness of a burial ground.

Additionally, some of these sites have the mission of adding on more land to grow their conservation area. Some are adjacent to other protected areas like national and state parks, creating important buffer-zones and biological corridors. And the work of natural burial grounds extends beyond just legally protecting the land. Restoring it to a fully functioning ecological space is part of the mission of many sites.

Furthermore, the nutrients and organic material returning to the earth do indeed nourish the environment, creating a richer ecosystem.

Every site has a unique situation, and therefore unique conservation stories. For example, Foxfield Preserve in Ohio is reforesting their woodland and at the same time restoring the adjacent prairie whose soil was depleted from years of over-farming before the land became a natural cemetery. They are situated along the migratory route of one of the planet's most spectacular migrations – the continent-wide journey of the monarch butterfly. The species is suffering from rapidly disappearing milkweed, which they need to lay their eggs on and also feed off of as caterpillars. Foxfield is removing invasive species and planting native ones, including milkweed, to help the butterflies on their impressive journey.

12. Why isn't a lawn considered "green"?

A typical lawn cemetery often involves mowing, chemical fertilizers, pesticides, herbicides, and supplemental watering. While the grass can indeed function as something of a carbon sink (absorbing carbon out of the atmosphere), the carbon emissions associated with lawn care far outweigh that benefit. (It's also worth noting that concrete vaults and caskets made of precious wood or metal add even more embodied energy and create a larger carbon footprint.)

The care of a natural cemetery can be characterized as using a "lighter hand on the land." There is minimal or no mowing and watering, and no chemical fertilizers, pesticides, or herbicides are used. Machinery may be used for digging a grave (especially in winter) or for creating trails, and some extra watering or care may be called for during restoration efforts, but the idea is that a functioning natural area will mostly take care of itself with less need for intervention.

A natural landscape's capacity as a carbon sink varies greatly depending on the specific ecosystem – a forest will absorb much more carbon than a desert, for example. But the ecological benefits go beyond issues of carbon. Whereas a lawn has very limited ecological function, an intact or restored ecosystem provides valuable resources like food, shelter, and migratory corridors for animals. It protects the quality and quantity of potable water, enriches the soil, and filters the air.

Also, not all cemeteries are prepared to go completely green. The Green Burial Council has partnered with The Audubon Society to create guidelines on how conventional cemeteries can still "green up" their land by minimizing mowing, watering, pesticides, etc.

Lastly, it is also worth mentioning that many naturally occurring grassland and prairie ecosystems are of tremendous ecological value, and should not be confused with a conventional lawn.

13. What is a vault?

Many people do not realize that in a conventional cemetery the casket is placed into what is known as a vault, a large container typically made of concrete, but also sometimes bronze, steel, or plastic. This keeps the ground from sinking, allowing for mowers to be used atop graves.

According to Green Burial Council standards, a green cemetery cannot use vaults. The production of the materials used is energy-intensive and polluting, and the vault's presence impedes the process of decomposition and regeneration.

Though the issue of sinking is less of a concern in green cemeteries, due to the lack of mowing and the use of lower profile caskets and shrouds, it is attended to through a practice known as mounding. Mounding is a natural way to deal with the situation where, as the casket or shroud and the body decompose, the ground sinks. A mound of earth is placed atop the grave, often adorned with flowers, pine boughs, or other natural elements, and settles over time.

14. Why isn't cremation considered "green" if it isn't wasting land?

Cremation can be a meaningful ritual for some. However, it is often opted for because someone thought it was the most environmentally friendly option or that they simply didn't respond to typical, conventional practices. The truth is that cremation requires quite a lot of fossil fuel to achieve the high heat and long burn durations required. Beyond that, the process creates particulate pollution and releases CO2, mercury, and other toxic chemicals into the atmosphere.

Many crematories do have filters of varying effectiveness. To further mitigate the impact, some people recommend contributions to carbon-offset funds. These things certainly do help, but in the end, cremation still creates pollution and uses significant amounts of energy. What many people find comforting about green burial is that it is a non-invasive process, that the body's nutrients are recycled and not destroyed, and that no energy is being added to a self-contained system of regeneration.

While cremation can arguably be considered greener than the perpetual lawn care of conventional cemeteries (with the mowing, pesticides, fertilizers, copious watering, etc.), the beauty of a green cemetery is that you aren't wasting land at all – you're saving it! The

idea is that you are helping create an ecologically and socially thriving place, which can clean the air and water, provide habitat and food for animals, and also be a space for people to enjoy.

15. What does it mean if a cemetery is Green Burial Council certified?

The GBC's certification program for burial grounds offers three levels of standards, and clearly distinguishes between them, so consumers can see the environmental goals and benefits of each site. According to the GBC, it also requires cemetery operators to commit to a certain degree of transparency, accountability and third party oversight. And it prevents future owners from going back on whatever ecological or aesthetic promises have been made -- from limitations on burial density that protect a local ecosystem to prohibitions against the use of monuments that would negatively impact a viewshed.

The Green Burial Council certifies three categories of cemeteries: Hybrid Burial Grounds, Natural Burial Grounds, and Conservation Burial Grounds.

Hybrid Burial Grounds are conventional cemeteries offering the option for burial without the use of a vault or outer burial container of any type (partial, inverted or otherwise). Hybrid Burial Grounds must allow for any kind of burial containers including shrouds (including reinforced).

Natural Burial Grounds require the adoption of practices/protocols that are energy-conserving, minimize waste, and do not require the use of toxic chemicals. A Natural Burial Ground achieves GBC certification by prohibiting the use of vaults (partial, inverted or otherwise), vault lids, concrete boxes, slabs or partitioned liners, and by prohibiting the burial of decedents embalmed with toxic chemicals, as well as by banning burial containers not made from natural/plant derived materials. It must have in place a program of Integrated Pest Management (IPM) and be designed, operated and maintained to produce a naturalistic appearance, based on use of plants and materials native to the region, and patterns of landscape derived from and compatible with regional ecosystems.

Conservation Burial Grounds, in addition to meeting all the requirements for a Natural Burial Ground, must further legitimate land conservation. It must protect in perpetuity an area of land specifically and exclusively designated for conservation. A Conservation Burial Ground must involve an established conservation organization that holds a conservation easement or has in place a deed restriction guaranteeing long-term stewardship.

16. How much does a green burial cost?

2.4 million Americans die every year, currently amounting to an annual US funeral industry gross of \$15-20 billion. The average American funeral costs between \$7,500 and \$10,000. Green burials tend to be less costly, given their relative simplicity. There is no vault or

monument to buy, nor embalming to pay for, and the coffins or shrouds used are generally more affordable than coffins used in conventional burials. The price of a grave at a green cemetery, including a marker (but not a casket, shroud, or any service outside of the cemetery), ranges from \$800 to \$3,500, with some of that cost generally going toward conservation and restoration.

17. How do gravestones or grave markers work in a natural cemetery?

In a natural cemetery, conventional, upright markers of marble, granite, or concrete are not used. Beyond that stipulation, the details are often decided upon by the particular cemetery. A natural stone, sourced from the local environment if possible, is often used and placed flat on the ground. Alternatively, some meadow cemeteries will have a large memorial boulder with the names of those buried inscribed collectively. Some sites are even using GPS markers, which can be detected with a mobile device.

Whether or not a stone with a name, dates, or epitaph is used to mark the sacred space, many find meaning in special memorial plantings on the grave – and comfort in the knowledge that the land they are helping to protect is also their memorial.

18. What is the typical depth of a green burial?

Three to four feet is the typical depth of graves in a natural cemetery. This keeps the majority of a body's nutrients within the root zone of the plants growing there, as well as within the area allowing for aerobic activity. This means oxygen is available to the microbes present, resulting in decomposition that is healthier for the environment. Furthermore, the ritual of including flowers, boughs, and other natural elements in the grave assists this processes by creating channels that allow for greater circulation.

19. How do you bury in the forest or other natural spaces without disturbing the roots of trees and other plants?

A properly managed natural cemetery is cared for with this very much in mind. Strategies for mitigating this concern include limiting the number of burials per square foot, which is typically considerably lower in a natural cemetery than in a conventional one; considering the timing of burials in any given root zone, so that no one area receives more disturbance than it can recover from in a given period; and giving extra care to plants whose roots have been disturbed, in the form of compost, mulch, and perhaps supplemental watering. For smaller plants, it is sometimes possible to put the plant aside with the roots intact, and replace the intact root ball and plant once burial has occurred.

20. Will natural burials attract animals that could dig up the bodies?

According to Ramsey Creek Preserve, the first conservation burial site in the US: "Burial is a very ancient and very successful 'low tech' solution for the concern that animals would be attracted to bodies. Pioneer cemeteries located in wild areas that contained animals such as grizzly bears were not disturbed. In the last decade at Ramsey Creek, we have seen absolutely no evidence whatsoever that animals are attracted to natural burial sites, despite the presence of dogs, coyotes, and the occasional black bear. Anyone who has ever dug or filled in a grave would be doubtful about such worries. Even relatively shallow natural burials where no casket is used are safe from animal interference."

Most animals that might be present in the diverse habitats where green burial occurs lack a sense of smell that goes beyond about 18 inches or so in the ground. This consideration would also be part of the required ecological survey. And given green burials occur at about 3-4 feet, it's highly unlikely any animal would be able to detect the buried remains.

21. Will burying people without vaults and without embalming hurt water quality?

According to Ramsey Creek Preserve, the first conservation burial site in the US: "Actually, we expect that creating memorial landscapes will protect or improve existing water quality. The main threats to water quality relate to intensive agriculture and urbanization, with the associated water use, erosion, chemical and petroleum product run off and animal waste. Conventional cemeteries also use a great deal of water for irrigation, and are heavy users of fertilizers and chemicals. They also bury thousands of gallons of chemicals used for embalming-some of which can leak out over the years (although it is doubtful that the amounts will be harmful to people).

While the human body contains bacteria and viruses at death, many of these die (or become inert) within hours or days; almost all are inert within 5 years. Before any surface water is contaminated, germs must percolate through many feet of soil and rock, and then exit via a spring, a process that can take many years. Studies in Great Britain suggest that the risk of any viable germs making it from a cemetery to surface water is very slim indeed. If large numbers of bodies are buried immediately above the water table during a short period of time, it is possible that some of the germs could reach ground water, but the scientific studies suggest that even then, the only warning is not to drink untreated well water under or within 75 feet of that area.

"In our memorial landscapes, we do not bury immediately adjacent to streams, and the density of burials is much less than for conventional cemeteries. By returning the areas to natural vegetation, we expect an improvement of adjacent waterways-and greater biological diversity over time."

22. Why do we embalm and why does the funeral industry consider it necessary?

The funeral industry has created a perception that embalming is a public health issue when this is not necessarily the case. There is little to no public health hazard, as long as the body is kept at low temperatures, with the help of ice packs, dry ice, or refrigeration, or buried within 48 hours of the time of death.

It can be argued that chemical based embalming does have its practical purposes, such as transport, storage, and sanitation of the body, which are convenient in the management of a funeral home. Funeral directors often admire the ability of formaldehyde, and the other active chemical preservatives, for their ability to make the dead body feel firm and return a lifelike hue to the deceased, making them appear as though they were just sleeping. The "memory picture" is an industry term for the last image the family will see of their loved one when they are displayed in the casket. They maintain that it is very comforting for families to have this final memory. This can be true, though many also find comfort and closure witnessing the reality of the situation, as well. And you do not need to use chemicals and embalming in order to have a viewing.

Before opting for embalming, it should be known that it is incredibly invasive. (We would like to warn you that the following description is graphic.) According to the book "Grave Matters," there are two stages to embalming. The first, known as arterial injection, involves draining the blood and replacing it with a liquid preservative, the main active ingredient of which is formaldehyde, but which also contains methanol, phenol (a preservative), and a pinkish dye formulated to stain body tissue to a lifelike tint. The second stage aims to disinfect the abdominal cavity by removing all the organs and flushing the system with disinfectant. Modern embalmers have invented an efficient tool for this procedure, called the trocar. This is a long, hollow needle, which connects to plastic tubing and an aspirator. The device is inserted through a hole in the abdomen and vacuums up the lungs, heart, stomach, colon, intestines, liver, and bladder, as well as any accumulated fluids, and purged into the home's septic tank or straight into the sewerage system. The body cavity is then pumped full of formaldehyde and phenol and finally stopped up with a cotton plug or trocar button. Then the embalmer completes the more exterior procedures, which include the sewing shut of the jaw and eyes, hair washing, makeup, dressing, and lowering the body into the casket.

Mark Harris, author of "Grave Matters," asserts that no federal laws, nor rarely any states' laws, require a body to be embalmed, except sometimes during transportation. The few studies that examine the public health benefit to embalming show mixed results; and, in some circumstances, embalming may actually increase the risk of spreading communicable diseases. A British report on the topic suggests that, "Opening cadavers

infected with tuberculosis is dangerous." Hawaii and Ontario, Canada, even prohibit the embalming of bodies infected with half a dozen communicable diseases.

All of this does not even take into account the fact that many municipalities allow funeral directors to release their embalming effluent into the sewerage system, often untreated, according to "Grave Matters" as well as the Funeral Consumers Alliance. In other areas, though, this practice is regulated by the Environmental Protection Agency.

It is also worth noting that there is one GBC certified non-toxic embalming fluid, though the invasive process remains the same.

A funeral director's stated mission is almost always to provide for the needs of the family, and most have learned through their industry that embalming is undeniably what a customer would want. It's up to each individual to make a decision for themselves about what suits them or their loved one. It is good to know all the facts and to let your wishes be known.

23. What is toxic or cancer causing in the embalming fluids?

The most toxic ingredient in embalming fluid is formaldehyde, which is a known carcinogen, according to The Occupation Safety and Health Administration (OSHA). A study by the National Cancer Institute released in late 2009 revealed that funeral directors have a much higher incidence of myeloid leukemia. And many other numerous studies found that embalmers and funeral directors exhibit a higher incidence of leukemia and cancers of the brain and colon, as well as severe skin irritations known as "embalmer's eczema."

The issue of embalming toxicity is largely one of workplace safety, as it mainly affects funeral directors themselves, but environmental concerns have also been raised. An embalmed body, once it starts to decompose, may leak formaldehyde and other toxic chemical ingredients into the cemetery's groundwater, which could then run into the community's drinking water. But there have been no large-scale conclusive studies on formaldehyde contamination yet. However, according to "Grave Matters," a number of university lead studies have found arsenic, a primary ingredient in embalming fluid dating back to the American Civil War era, in the groundwater of historical cemeteries of that period.

The production and distribution of these chemicals also has a negative environmental impact. It should also be emphasized that the sanitation and preservation of a body can almost always take place without the use of chemicals, and is actually practised this way in most of the rest of the world.

24. Why are dental filings and implants a problem with cremation but not so much with burial?

Dental fillings often contain mercury, particularly for the baby boomer generation and older, and implants are made of synthetic and/or non-biodegradable materials. During a cremation, when these are burned at extremely high temperatures (up to 1270°F or 690°C), they convert into noxious gas and toxins, and are emitted through the crematorium's chimney, which pollutes the atmosphere. It is not ideal to bury these materials either, as they will not break down and return to the earth; however, it is preferable to burning them, because the material will remain relatively inert (depending on the material used in the implant), staying put with minimal leaching rather than being turned into liquid or gas, which will eventually contaminate the surrounding environment.

25. What is the history of conventional, "American-style" funeral practices?

To some extent, many of us have lost the ability to care for our dead, though we used to do it all the time. During the American Civil War, when large numbers of people were dying far from home, the preserving effect of arsenic was exploited to allow for soldiers' bodies to make the voyage home to their families. The practice of embalming was further popularized when Lincoln himself was embalmed and brought around the US on tour for the whole nation to pay their respects. Around that time, the first mortuary schools (today still commonly owned by chemical companies) were founded, and an industry was born. Since then, the industrialization of funeral service began to grow.

26. What is the history of natural cemeteries in the US?

During the mid-1800s, the US saw the creation of the first "garden cemeteries" or "rural cemeteries," such as Mount Auburn Cemetery in Cambridge, MA and Green-Wood Cemetery in Brooklyn, NY. These now-historic cemeteries predate public green spaces like Central Park, and are credited as the inspiration for urban parks in the US. These and others like them remain spectacular, treasured sites, yet they vary in groundskeeping practices are in the extent to which they practice natural burial.

The contemporary conception of a natural cemetery began to take shape in the US in the 1990s, with Kimberley and Dr. Billy Campbell creating the nation's first conservation burial ground, in South Carolina. Billy remarks in *A Will for the Woods*, "The best examples of tallgrass prairie left in places like Iowa were old cemeteries. And so that was part of the inspiration. If by accident a cemetery can save significant biodiversity elements, why couldn't you do it by design?"

27. I'm curious about the similarities between green burial and some ancient religious burial traditions. Can you talk a bit about that?

Muslim and Jewish traditions do not allow for embalming, and the body is usually laid to rest as immediately as possible for Muslim burial and within 24 hour for Jewish burial. Muslim burial traditionally uses only a shroud, while Jewish burial allows for a shroud or a plain, simple casket. Ancient Christian burials as well were mostly shroud based, as Jesus was buried in one. In Jewish and Muslim burial, the body has to be touching the earth so vaults are rarely used. Nowadays, it has started to become a practice of using inverted vaults in Jewish cemeteries where the bottom of the vault is removed so the body is still touching the earth. This use of inverted vaults is a modern practice and not at all tied to any Jewish tradition. In some ways, green burial is a simple return to ancient traditions and true "ashes to ashes, dust to dust, earth to earth" burial.

28. Are there funeral traditions or practices other than green burial that are environmentally friendly?

There are. Tibetan sky burial is a religious and spiritual funeral ritual where the deceased is returned to cycle of life not through burial, but through a recognition of the important role scavengers play in the food chain. Monks oversee the process of bringing the deceased's body to high ground on a mountain, where it is exposed to vultures and other animals.

Burial at sea is another tradition common to various cultures. The extent of the ecological benefits are not very certain, but it would seem to fall under the category of returning naturally to the earth. Experts conducting this practice must have a clear understanding of tidal flats and all forces at play so that the body will be brought out to sea and not back to shore. It is also worth noting that unlike a green burial, which can help conserve the land of the burial ground, there are currently no models to our knowledge for using burial at sea to offer legal protections to marine areas.

29. Are there any other disposition methods?

You may have heard of modern techniques such as "resomation," "cryomation," or "promession," which use either organic or non-organic solvents to dissolve or freezedry a body, effectively functioning like cremation, but with less energy use. However, this process still consumes energy, and many green burial experts feel the lack of true ecological benefits means they can't really be considered "green".

30. Is the natural or green burial movement happening in other parts of the world?

The movement to promote a return to more simple home funerals, as a reaction to the industrialization of the modern funeral industry, was initiated in the UK in 1992. Nicholas Aubrey founded the organization The Natural Death Centre there in order to build an

educational resource around this issue. In 1994, The Centre established the Association of Natural Burial Grounds (ANBG), which helps individuals establish new natural burial grounds and provides guidance to existing ones. It also requires members to comply with their code of conduct. According to ANBG, the UK now boasts over 270 natural burial sites. Even though most of these sites are small (less than 5 acres), which can limit conservation value, it is exciting to see such a robust interest for this option in the UK.

Aubrey's work was a part of the inspiration for Dr. Billy Campbell to open Ramsey Creek Preserve, the first conservation burial ground in the world, in 1998. The idea of a conservation burial ground is America's addition to this concept. (See definition for a conservation burial ground in question 15.)

The movement has also spread to Australia where the founder of the Green Burial Council (GBC), Joe Sehee, now resides, as well as Canada where there are at least five natural burial sites. In an attempt to initiate global environmental standards, the Green Burial Council is working on establishing a GBC International.

(Please see the resources section if you are looking for more info on the movement in these countries.)

