Natural Burial

The Ultimate Back-to-the-land Movement

Natural burial is a concept that we introduced to our readers in the previous edition of the Solar Living Sourcebook. The chapter was written by Cynthia Beal of The Natural Burial Company, a pioneer in this endeavor in North America. We’ve asked Cynthia to provide an update for this new edition. You can find natural funeral planning tools, products, and other guidance on the Natural Burial Company’s website at naturalburialcompany.com, and a list of cemeteries and funeral service providers who’ve signed the Natural End Pledge can be found on the Natural End Map, at naturalendmap.com.

If you’re unfamiliar with the idea of natural burial, you might think the subject is macabre or depressing. To the contrary, we think you’ll find this information about home funerals and natural burial to be inspiring and uplifting. After all, you’re probably “dying to do the right thing” during your time here on Earth, whether it’s taking good care of your family, seeking right livelihood, reducing your carbon footprint, working for social justice, or doing what you can to live by the precepts of sustainability. But you may not have realized that you can also act on these values when and after you die, for the greater good of your friends and family and the planet around you. Each year, new and improved products, policies, and practices make sustainable inroads that map to the acts of our daily lives and express our values in the process. It’s not too soon to start planning ahead, and we invite you to join the “ultimate back-to-the-land movement”! Check the Real Goods website for links to even more product information (realgoods.com).

Dying to Do the Right Thing

First begun by pioneers in the United Kingdom, and now with almost three decades under its belt, a compelling consumer-driven natural funeral movement that lets you “put your stuff back” continues to gain momentum, and North America is getting on board. Natural burial areas—sections of cemetery property where people are buried in biodegradable containers, without preservatives (embalming) or synthetics, and returned to the Earth to compost into soil nutrients—have appeared in hundreds of cemeteries throughout the UK, and the US, Canada, Australia, and others are following suit. Want to “be a tree”? A woodland, orchard, or wilderness burial might be perfect for you. Would you rather “push up daisies” and feed butterflies and bees? Try a meadow burial and decompose under a field of wildflowers. Still want to be in the “Family Plot,” next to great-great-granddad? Then ask for a vault-free natural burial in your favorite historic, church, or county-run cemetery and see if the management is now ready to agree. (You might be surprised at how many say “yes” these days.)

Burying ourselves naturally, directly into the soil, wrapped (or not) in biodegradable packaging, without embalming preservatives, is not rocket science. In fact, it’s likely that “Any Cemetery Can” improve habitat, reduce resource use, and minimize potential contamination of soil and groundwater by utilizing techniques from sustainability practitioners in the landscaping, groundwater management, and horticultural disciplines. Luckily for the future, the value of our precious natural resources, and of land...
Home funeral facilitators focus on returning control over the death and dying process to individuals and families, encouraging and teaching them to take charge of their own end-of-life affairs in a proactive manner that engages family and friends, returning dignity and meaning to what has become, for many, a sterile and uncomfortable commercial process.

stewardship in general, is becoming both quantifiable and doable, thanks to public research into ecosystem services and their importance to the quality of life on Earth. Advances in understanding suggest that it’s cheaper to conserve our environment than it is to consume it, and cemeteries around the world offer a unique opportunity for conservation by establishing perpetual reserves of habitat and repositories of cultural history. Increasingly, taxpayer-funded counties, municipalities, and organizations that run cemeteries without profit (and even those that do) recognize that environmentally friendly options for human disposition must be found if we’re to have sustainable processes at the ends of our lives as well as during them. Similar to the organic farm movement, sustainable cemetery management—with its focus on creating and diversifying habitat, supporting soil health, and reducing resource use and contamination potential while preserving our cultural history—offers a way forward, and natural burial is the key.

Driving the Change: Home Funeral Services and Biodegradable Grave Goods

Concerns about pollution; appropriate use of resources, land, and energy; and the depersonalization of the dying process, as well as a fat Baby Boom demographic (with a death rate that puts 80 million Americans “over the edge” in the next couple of decades), are driving the natural burial trend. Two distinct groups stand at the forefront of this sea change: the natural burial product and cemetery proponents themselves, making the grave goods and operating the cemeteries, and a vocal citizen counterpart found in the provocative yet practical DIY home funeral movement. Home funeral advocacy is spurred on by educational and nonprofit consumer organizations educating the public on natural end-of-life options, championed by groups like the Natural Death Centre in London, the USA’s Funeral Consumer Alliance, and the National Home Funeral Alliance based in Boulder, Colorado. The adoption of natural products by the funeral industry is also spreading, as consumer demand helps operators see—and seize—the opportunity to connect with their communities around burial again, while simultaneously waking up to their role as perpetual land stewards in the cemeteries they’re required to tend—forever.

The Home Funeral Movement: Genesis of Natural Burial

For those who really want to do it yourself, a DIY home funeral may be the ideal “way to go.” Home funeral facilitators focus on returning control over the death and dying process to individuals and families, encouraging and teaching them to take charge of their own end-of-life affairs in a proactive manner that engages family and friends, returning dignity and meaning to what has become, for many, a sterile and uncomfortable commercial process. And for increasing numbers of people, in addition to hands-on participation, that means a natural burial, too.

In the early 1990s, more than 90% of people in the UK died in a hospital rather than the home, providing some of the original impetus behind the founding of the Natural Death Centre in London. It began as the project of three psychotherapists, spearheaded by Nicholas Albery, with the mission of enabling a person to die a more natural death in personal surroundings, tended by loved ones, receiving treatments that they—rather than the hospital system—desired. The Natural Death Centre quickly became, and remains, an indispensable source of inspiration and information for self-reliance in death, primarily through its coordinating website, naturaldeathcentre.org.uk, and the new edition of its popular guide, The Natural Death Handbook. The work has been picked up and expanded over the last decade by home funeral advocates such as Beth Knox, founder of the Crossings network, and Jerri Lyons, who began the Natural Death Care Project. (Both women now train home funeral guides in the...
Considerable stimulus for the US movement was fueled by Lisa Carlson's book, *Caring for the Dead: Your Final Act of Love*, an excellent reference still sold through the FCA site, funerals.org

Until recently, most funeral directors were reluctant to let the family get involved. However, as home funeral activists teach DIY techniques, and as competing funeral service providers make themselves available to serve more individualized and nontraditional needs, the “dismal trade” is finally getting on board. Alternative services are offered by progressive funeral directors and clergy; celebrants advertise a new profession; and memorials emphasizing the individual’s secular values are becoming common. Much of the inspiration for this shift in funeral practices has come through the UK, where funeral directing does not require a license, and where the hospice movement—as a result of the conscious decision to die at home—has actively reconnected families with issues of disposition and death.

This home funeral renaissance, with its desire to return the funeral back to the purview of the family and reinstate affordable simplicity, led smoothly into public calls for natural burial: no embalming, the “plain pine box,” the shroud, memorialization with a tree, or even anonymity—products, services, and rituals that express a respect for both the person and the planet. This call, in turn, has helped engender the modern natural burial movement, the “gateway drug” to cemetery sustainability; and once a cemetery starts on the path of improving habitat, reducing resource use, and minimizing future pollution, it’s very unlikely to go back!

**Natural Grave Goods: Filling Real Needs with Style**

Side by side with the home funeral front are an equally dynamic group of sustainability-oriented business entrepreneurs and artisan manufacturers with a focus on planet and people, as well as profit. Some are producing unique biodegradable burial vessels made from natural and recycled materials, while other forward-thinking land stewards are pioneering back-to-the-earth burials in existing cemeteries or starting new conservation burial grounds as the demographics permit. These companies and individuals are doing for the industrialized funeral sector what organic farmers and food producers have done for the agricultural one: anticipating and then serving an unmet but very real consumer demand and, in the process, changing the practices of a multibillion dollar end-of-life industry that will have a detrimental environmental impact on future generations unless it’s turned around. These green grave goods are stimulating a renaissance in the once-thriving burial arts. Handcrafted woven items are making a comeback in the form of willow, bamboo, and seagrass burial boxes, while fabric artists fashion imaginative shrouds of organic cotton, wool, and hemp. Unique new burial containers like the Ecopod recycled paper coffin (ecopod.co.uk), traditionally woven bamboo and willow caskets, and the ARKA Acorn ash burial urn appeal to environmentally minded folks who want to depart from life as naturally as they’ve lived it.

Products aren’t the only things that are changing—the way cemeteries are run is changing, too. And not surprisingly, much of what a cemetery has to do to improve its sustainability mirrors what we choose to do in our daily lives to improve our own environmental footprints. Like all other businesses that create impacts and consume resources, the cemetery needs to manage its own ecological economics and bring its maintenance needs into balance. There are a number of tools, many of them mentioned throughout this book, that can help cemeteries tackle the various sectors calling for their attention. Energy and resource conservation; making power from sunlight; preserving clean water and habitat for future generations—the techniques and tools for cemetery transition are plentiful, and the Natural Burial Company and Real Goods are pleased to be at the forefront of this education and distribution network, bringing our customers the information and products you need to make even your final act a positive and self-reliant one.
When It’s Time, Will You “Leave No Trace”?

Leaving life is poignant. It can be frightening. But it doesn’t mean you have to leave a mess. A popular outdoor ethics campaign, the Leave No Trace program (Int.org), took backcountry garbage from hikers to heart in the 1970s and ’80s, thoughtfully outlining objectives for individual waste management and behavior when visiting natural and wilderness areas: plan ahead, dispose of waste properly, minimize impact, respect wildlife. That ethos could be usefully applied to the ends of our lives, as well—many folks think that we’re “just visiting” here on Earth, and that when it’s your time to go, “Leave No Trace” doesn’t seem like such a bad idea. If you’re one of the first to blaze the trail in your community, however, be prepared for a little bit of activism in order to get what you want!

For decades, the end of a human life in American society has been managed by a cadre of professionals who can package our experience of death just as rigidly as others have packaged our living. Prior to the modern era, death was the exclusive province of the family. Burials were done according to custom and tradition. Respect was a matter of course, for strangers were not in charge, and dignity was conferred in the sincere acts of caring for and carrying our dead. Today, however, life moves rather mechanically—and for a hefty fee—out of the raft of boxes above ground and into more boxes below, buried on high-priced real estate that commands upwards of 1 million dollars or more an acre for its owners. (1,000–2,000 bodies per acre at a minimum of $1,000 each for the plot is standard, sometimes stacked two or more high.) For lots of people, that double-box process looks like litter, and upon closer examination, it’s not the dignified and simple close to a grateful life that most of us wish to have. Increasingly, people concerned about the impacts of the conventional funeral process are beginning to question the wisdom of leaving toxic burial chemicals and synthetic substances in the ground and atmosphere for future generations to clean up. If pressed, many of these same folks would prefer their bodies to “Leave No Trace” as well.

Preserve, Disappear, or Return to the Soil? Choose Your Disposition

Once you’re done with your body, only one thing happens to it next: It goes away. Well, it never “goes away”; in the words of anthropologist and garbage guru William Rathje, “there is no away.” So you do go somewhere, and something is done with you first. What’s done with you immediately after the funeral is called the “Final Disposition”—that moment society agrees you’re definitely finished being you—and how this is done is still largely up to you. So ask yourself what you want for a final disposition. Are you going to be buried or burned? Will you be embalmed or not? Will you manage your physical remains for preservation, disappearance, or return? In other words, will you be hanging around for as long as the chemistry lets you (preserving); using machinery to get rid of you rapidly by burning or dissolving (disappearing); or will you be buried, returning to soil and becoming earth?

Modern science now recognizes that our body’s living system depends upon a complex network that coordinates independent cells so they function together as skin, organs, blood, bones, nerves, and other parts all working as a team—i.e., You—to repel the invasion of external bacteria and fungi that would otherwise colonize and consume weaker individual elements trying to make it on their own, without You. “Life” is a constant struggle to resist turning into something else’s dinner, and as long as you’re breathing, your side is still winning.

As soon as you check out, nature’s disposition begins: The system of You collapses, and your cells, that formerly clever and fun-loving collective transforming food made from soil and sunlight into ATP (biochemical energy) and...
then turning that ATP into gardens, solar arrays, and microbrew festivals, bid each other a fond farewell and take their turn as food. In the natural world, a whole host of creatures—animals, insects, fungi, and microbes—then get their spot in the sun, so to speak, and take on the very necessary work of breaking you down into smaller component parts, putting you back into the system that you built yourself from in the first place. Our food comes from soil, and we can return to the soil as food. It’s an amazing cycle—or it can be, if we’d just leave it alone.

But no, WE have IDEAS.

Preservation: It’s Not All It’s Cracked Up to Be

The ancient Egyptians were masters of the Slow, learning to pickle and preserve human remains for reasons that are still somewhat obscure. Modern embalming came back into fashion in the mid-1800s in the United States, with arsenic, mercury, and lead-based formulas marketed by the emerging military and chemical supply industry to Union and Confederate armies, and used to preserve the bodies of dead soldiers for positive identification and burial during and after the Civil War. Although arsenic was banned in 1910, perhaps as many as half the bodies from those decades were treated with as much as several pounds each, posing potential groundwater and soil contamination challenges for the future; the contamination potential remains unexplored even today. The reasons given for embalming today remain the same as those used 150 years ago: restoring the body visually after a disfiguring death; delaying the disposition until family can arrive from long distances; or permitting the body to be transported or stored above ground in a mausoleum crypt, rather than being cremated or interred.

While formalin-free solutions are now available, most modern embalming fluid still contains toxic chemicals, including methanol, ethanol, and formalin (from formaldehyde), the latter a suspected carcinogen. Used by a large number of funeral homes to slow the body’s decomposition by eradicating natural decomposers, formalin arrests the breakdown processes by “fixing” cellular proteins. It stiffens the body’s tissues and, with the help of added colorants, is used to make a corpse more attractive and lifelike.

The European Union began the process of banning embalming fluid in 2006, and in 2012, its use as an approved biocide was discontinued. In 2011, the US Centers for Disease Control officially declared formaldehyde a carcinogen that’s harmful to mortuary workers. It’s not approved to kill dangerous human pathogens, however, and one of its biggest dangers, outside of the toxicity of its primary ingredients, is the myth—often promoted by embalmers—that it does. Its core danger, however, is as a workplace toxin, since exposure to formaldehyde poses significant health risks to funeral industry workers. Nasal and lung cancers have been indicated in scientific studies, and while some industrial research still disputes these claims, the Occupational Safety and Health Administration (OSHA) has joined the CDC in tightening up controls related to its occupational use. (For the CDC evidence of carcinogenicity in formaldehyde, see cdc.gov/niosh/docs/81-111/.)

The impact of formaldehyde on the environment when buried is still unknown, and little research has been done. However, it’s said to break down rapidly in soil instead of bio-accumulating, and the primary concerns remain the effect on worker health, the interference with the body’s own decomposition process post-burial, and the expense of a procedure that’s rarely required for the protection of human health. Another related issue is that, because embalming fluid is used to replace the blood and organs of a body, that blood has to go somewhere. You guessed it; those 1.5 million embalming procedures performed in the US each year produce 2½–3 gallons of blood and excess embalming fluid per body. That fluid, along with the organs and internal parts suctioned out of the corpse during the process, goes down the drain and into the water supply. Not a pretty picture, and with little science to verify that public water systems are up to the task of processing the bacterial and viral load, people who question the public health impacts of natural
burial might well start questioning the conventional process instead!

Embalming is rarely required by law

Today embalming is a common practice in the US, not because most people want it, but because it has been considered so customary and beyond question that many have assumed it’s required by law. No state in the US requires embalming except in special circumstances, such as death from a reportable and communicable disease. Adding to the confusion, states differ on this, with some requiring and others prohibiting the practice. The Funeral Consumers’ Alliance states that a number of funeral homes still regularly imply to their customers (and to legislators) that embalming is “necessary” for public health and safety even though the federal Funeral Rule explicitly prohibits implying that such a law exists. Contrary to industry opinions (still prevalent in mortuary education today), embalming is not necessary to prevent decomposition in the first few days after death; chilling the body sufficiently does the job. Embalming does not prevent the spread of disease. Its use as a sanitizer is overrated (precisely because it does not disinfect, a stricter standard than sanitation that formalin itself cannot attain), and according to the CDC, embalming serves little appreciable sanitizing or public health purpose that couldn’t be handled effectively with more natural techniques.

But should we be burying THIS stuff?
What’s in the box besides you

We think it’s appropriate to ask hard questions about toxic burial chemicals or by-products and promote research and development of alternatives. Under most state and federal regulations, any company would be hard-pressed to get permits to bury almost 2–3 million gallons of embalming fluid in the soil annually, and yet that’s exactly what happens with most of the 1.5 million bodies that are embalmed and buried in US cemeteries every year. Guess what else is buried along with these embalmed bodies every year? Even with a cremation rate approaching 45%, it’s estimated that over 100 million pounds of steel, bronze, copper, and brass; 30 million board-feet of hardwood timber; uncounted tons of plastic, vinyl, fiberglass, adhesives, paints, finishes, and synthetic fabrics; and 1.5 million tons of concrete annually accompany Americans to their under-ground afterlife—an unattainable disposal permit indeed, unless you’re burying the conventional American casket suite one grave at a time!

The American Casket Manufacturer’s Association estimates that almost two-thirds of American caskets are stamped steel, with veneered chipboard and fiberglass making up most of the rest. These caskets are designed to resist—or at least appear to resist—decomposition. Holding the soil or water out of the grave for even a little while is a comforting thought for some, and product makers use that as a selling point, with the most durable caskets and vaults bringing in the highest prices. Caskets touted for their resistance to breaking down may also be sold with an optional rubber or plastic seal installed between the bottom and the lid, designed to prevent mold and rot—our friendly decomposing fungi and bacteria at work. In reality, however, this seal fosters an anaerobic environment and causes the body to putrefy rather than decompose, a possible challenge for future generations who may have to deal with this someday.

A box for the box

After the packaging is complete, the conventional casket isn’t lowered directly into the ground but is instead placed inside a concrete, steel, or fiberglass vault, or “grave box.” American cemeteries often require grave liners, primarily to keep the casket from deteriorating and then collapsing under the weight of heavy excavating equipment. Grave liners delay what’s known in cemetery landscape maintenance parlance as “subsidence,” the slight sinking of the earth after decomposition that creates bumpy ground if not manually filled
in once or twice post-burial, and can detract from
the golf course-smooth surfaces sought by some
lawn-style cemeteries. But gaskets break down
eventually; seals fail, concrete cracks, and eventu-
ally the liners, and their graves, will collapse.
Practices like vaulting keep the funeral home’s
revenue up, and they help ensure that the col-
lapse is down the road, in someone else’s future,
at some future cemetery owner’s expense.

Given America’s obsession with packaging,
preservatives, and increasing shelf life over the
last one hundred years, it’s not surprising that
habits of plastic and preservation would have
made their way into our last products, as well.
The innovations did solve problems of the time:
The funeral director shared his home for funerals
when people didn’t have one; he sold caskets, and
then vaults and markers, when people lacked the
tools and skills to make their own; he preserved
the body until family members could come long
distances for the funeral. When these options
were introduced, they were improvements. But
once the well-meaning professional joined up
with the marketing plans and sales pitches of the
funeral industry consolidators, the chemical-
intensive double-box casket-and-liner system
became a highly profitable enterprise, its slick
uniformities smoothing out and sanitizing the
uncomfortable and (very human) experience that
accompanies death, while ignoring the flaws of
excess expense, wasted resources, and deferred
maintenance. It’s an unintended error; an orig-
inally compassionate but increasingly commer-
cialized effort to ease our emotional pain, where
things are double- and triple-wrapped, awkward
sights and smells are whisked away, and the vac-
uum filled with smooth and shiny services that
temporarily mask the reality of death. The box is
pretty, the lawns are neat, and nature can’t get a
word in edgewise.

Disappear: To Burn or Not to Burn

Until recently, the environmentalist’s response to
this industry machinery and product-intensive
process has been to opt for cremation. However,
as Baby Boomers age and the actual experience
of managing our deaths (and those of our parents
and friends) comes to each of us, we’ve learned
that cremation—now complicated by legitimate
questions around energy use, mercury vapor and
carbon emissions, the lack enforceable environ-
mental standards, uneven or nonexistent filtra-
tion requirements, and aging industrial crema-
toria— is not necessarily the “no-muss, no-fuss”
disposition option it first appeared to be, once its
environmental footprint is considered.

It’s not certain which tradition is older, burn-
ing or burial. Archaeological evidence exists for
both scenarios, and each has a longer history than
preservation. The oldest arts we know of are the
burial arts, and the practice of cremation is thou-
sands of years old. In times of disease and mass
death, cremation has often been the method of
choice, especially in landscapes where the soil was
not suitable for rapid breakdown. But cremation
takes fuel—wood, gas, or electricity today—and
these days, fuel is something we don’t spend quite
as casually as we may have done before.

The choice to burn or not to burn may be
made for spiritual reasons. Some religions teach
about the impermanence of life and back that up
with a ritualized display of public burning, prov-
ing to the community that the person cannot
come back—once they’re burned to ash, they’re
truly “gone.” Other groups consider burning the
hardest of punishments, depriving the soul of
a body to either return to or use in an afterlife,
and thus reserved for criminals and heretics. In
either case, the goal of cremation is to make the
body quickly disappear, and for various reasons,
this can seem the logical choice. The illusion of
“disappearance” has led many who are disen-
chanted with modern industrial burial to opt
for cremation, almost as if the elimination of the
body could somehow remove the negative human
impacts that so disturb us. But it’s not that easy.

Cremation impacts

Whether it’s cremation through incineration
(conventional cremation) or dissolution (alkaline
hydrolysis), mechanically driven accelerated dis-
position has its own array of issues and impacts.
Chief among them are the energy used for com-
plete combustion or reduction; the emissions or
waste products that result from burning or other-
wise disposing of synthetic materials and body
implants; and, in the case of cremation especially,
the volatilization of mercury fillings. Emissions
from crematoria contains a varying degree of pol-
lutants such as particulate matter, volatile organic
compounds, carbon monoxide, nitrogen oxides,
sulfur dioxides, hydrogen chloride, heavy metals
(cadmium, mercury, and lead), and dioxins and
furans. It’s been estimated that vaporized dental
amalgam accounts for up to 16% of the airborne
mercury pollution in the UK,7 in the US, with
over 1,900 crematoria across the country and a
steeply rising cremation rate, “a mercury flow
worksheet developed for EPA’s Chicago office ..." estimated that in the United States in 2005, al-
most 3,000 kilograms (6,613 lbs.) of mercury were
released to the environment from crematoria.
Good empirical data on the magnitude of mercury emissions from crematoria, however, are lacking. At this time, no federal or state regulations restrict mercury emissions from crematoria. American cremation industry reports state that there are no significant emissions.

Whether it’s cremation through incineration (conventional cremation) or dissolution (alkaline hydrolysis), mechanically driven accelerated disposition has its own array of issues and impacts. Chief among them are the energy used for complete combustion or reduction; the emissions or waste products that result from burning or otherwise disposing of synthetic materials and body implants; and, in the case of cremation especially, the volatilization of mercury fillings. Emissions from crematoria contain a varying degree of pollutants.

**Disagreements over standards**
Agreements on emissions standards (and research results) are difficult to achieve, especially given that a large number of the older polluting crematoria facilities remain in operation. The US isn’t the only slacker when it comes to crematoria, and the lack of crematoria standards worldwide, the carbon footprint that accompanies cremation and accelerated disposition, and increasing population all suggest that a cremation rethink is in order. Crematorium makers are quick to tout their progress: Increasingly efficient filtration systems capture more emissions than they once did; multiple burners combust more emissions; and energy-efficient designs are increasingly available. However, those comprehensive filters are very expensive, not yet required in the US, and the trapped pollutants must still be disposed of once the filters are full. In fact, according to sources in Europe, the contaminants found in used crematory filters are so hazardous they need to be stored like nuclear waste. So, until clean air standards also apply to crematoria, be burned with care.

**Shortchanging the funeral process**
One reason many funeral directors don’t care for cremation is that people tend to forego the funeral, and professionals in the field believe that the lack of a funeral, a ritual of closure with the body present, has an impact on the psyche, so that cremation makes it possible to put off or perhaps never experience emotional closure around a death. This may be true; cremation doesn’t force one to complete the letting-go process around death the way a body burial does, and many people never get around to scattering, or even claiming, the remains. In fact, estimates suggest that perhaps as much as a quarter to a third of all cremated remains are still on the shelf somewhere, perhaps still in the original "temporary" box or bag. Whether this is a psychological requirement or not is up to the experts, but circumstantial evidence suggests that something is being avoided!

Unlike cremation, when a person chooses burial for the final disposition, the ritual of closure is tangible and complete; the body is literally “laid to rest,” and funeral directors report that family and friends have a deeper emotional connection with the event. Additionally, buried bodies in cemeteries tend to be memorialized, or at least buried in an accessible place designed for remembrance, a physical place that can be visited and provides a link between generations of a family. For cremated remains that end up on a shelf in the pantry, or up in the attic, the future—and the link with future generations they could speak to—is much less certain.

**You only die once: Making cremation a gentler alternative**
Even so, cremation is still a viable alternative. You can offset the carbon and remove your mercury (along with other ways to gentle the environmental impact of your death) before burning, so don’t let anyone talk you out of it if that’s what you prefer. The trend worldwide is toward cremation, and there’s little ground for argument if inputs and emissions are managed properly and the only other available method is the resource-intensive conventional industrial model of burial. Creative options that support underwater habitat (Eternal Reefs) or forest preserves (Eco-Eternity Forests) are opening up; universities and public institutions are adding alumni columbaria, providing niches for cremated remains while funding the creation of campus parks and green-space; cemeteries are offering memorial habitat hedgerows and wildflower meadow gardens. Today, those who wish to be cremated can support the same sustainability principles as those who opt for burial. And for many people—especially those whose deaths involve complex organ donation, serious infectious disease, limited funds...
that preclude supporting a forestland, or dying far away from your chosen place of burial without the funds to fly there—cremation may be the best option. Clean cremation wins over an embalmed body and nondegradable casket system any day.

**Scattering or burying cremated remains**

When a modern crematorium (busy, filtered, and energy-efficient) can be located and cremation is still your method of choice, cremated remains offer a chance for multiple survivors to honor a loved one after they’re gone, with the remains divvied up among family and friends. Many people are surprised at the amount of ash, and even bone, that remains after a cremation, and scattering it around can feel awkward for some people. (The rule of thumb is about 1 cubic inch of remains for every pound of lean body weight, since fat burns.) Cremated remains are pulverized bone, converted by high temperatures to a form of calcium phosphate that’s more difficult to assimilate, with a nutritional value to the soil decomposer ecosystem much less than that of a full body burial. (SOILWEB TIP: instead of scattering the bulk of the remains, consider burying them, mixed in with about 4 or 5 parts healthy soil, to make the calcium more bio-available and less like a pile of rock; the plant roots will love you for it.)

With the rise in cremation rates, scattering ashes in wilderness venues has become so popular in some national parks that special use permits to perform the scattering are usually required, and visitors have to be reminded to spread the alkaline ash out of sight, and disperse it widely to avoid harming the plants or disturbing other park goers with visible remains. While a little bit of calcium phosphate “ash” is fine for any landscape, too much dust can eventually clog the pores of plant leaves or over-alkalinize the soil—so scatter with care. To address this issue, as well as create a place for family visitation and permanent memorialization, many cemeteries now offer burial areas for cremated remains, and the more progressive ones are using the burials to sponsor areas of habitat within the cemetery that would otherwise go unfunded. Biodegradable burial urns, or ocean release urns, make personalized forest or sea burials of the ash an earth-centered and ceremonial option, so the loss of the ritual isn’t a given. In fact, if you still have an aunt or two “on the shelf,” consider taking them down to your favorite local cemetery on some special day, and propose using the ash burials to create habitat in honor of your family members.

**Accelerated Disposition: Raising the Environmental Footprint Questions**

Spurred on by arguments against conventional cremation, new disposition technologies that claim to be more environmentally benign and make the body disappear are coming into view. One proposed method that’s caught the public’s imagination is called “Promession,” envisioned by Swedish soil scientist (and former organic gardener) Susanne Wiigh-Mäsa. Now independently marketed by Promessa Organic AB company (promessa.se/en/), this method proposes a cryogenic process that freeze-dries the body immediately after death. Frozen solid, the intent is to vibrate the frozen body apart using ultrasound, reducing it to a moist powder. Theoretically, the moisture—70% of a body’s mass—is evaporated off, and the various metals and nondegradables sifted out. What remains afterward, according to the inventor, will be a dry, silt-like, and nutrient-dense substance suitable for burial and use as a fertilizer.

In another process that’s gradually becoming legal state by state, machines that combine high-temperature water and chemical treatments to dissolve bodies with potassium hydroxide (lye) are being developed to break the body down through a process called Alkaline Hydrolysis (AH). This chemical action relies on water, heat, and the alkaline lye to remove flesh from bone. Other techniques then remove the liquid to create a dry biological residue that’s returned to the family like other remains, much as the Promession group proposes.

Contrary to claims that the AH process was developed by this or that company or inventor, the technology has been in use for centuries, with much of its origin in soap-making with animal fat. An early patent spelling out the use of an alkaline solution under pressure to remove gelatin from bones and create a fertilizer out of an alkaline solution was issued to Amos Hobson in England in 1888. Later, when intensive factory farming and meat-processing facilities generated massive quantities of carcasses that required disposition, alkaline hydrolysis was used to render them down into disposable forms that included usable by-products. Now extended to humans, patented variations of this process are marketed under trade names like “Resomation,” “Eco-Green Cremation System,” “Bio-Response Alkaline Hydrolysis system,” “Bio-Liquidator,” and “Bio-Cremation.”

The jury is still out on the environmental friendliness of either process, cryogenic or alkali-based. So far, the most prominent groups claim...
Plant in a forest and becoming dinner for the regenerating planetary system, we can remain fully present, albeit transformed, nourish the soil, enlarge the habitat, and rekindle the life of meadows and forests, feeding and becoming plants, animals, and trees.

The AH process is environmentally superior to cremation by incineration, with leading cremation companies buying up patent rights and lobbying for legal exceptions and rulings. The numbers should still be taken with a grain of salt: The full emissions and embodied energy footprints may not be calculated properly yet, and emerging technology claims are usually subject to change, so it will take time for independent third-party analysts to get truly objective assessments. That said, alkaline hydrolysis is a process with a solid technological basis and few variables, and it can be evaluated on its own merits as it evolves. The cryogenics technologies likely have their place, too. Dense urban areas without suitable cemetery soils and medically difficult dispositions that don’t lend themselves to burial come to mind. Expect more scientists to get involved as the technology advances, clarifying language in the process. And although their earliest claims may be a bit off base, it’s likely that at least some of the new systems will be able to address environmental concerns related to current disposition methods.

So, yes, a case can be made for cremation, and other forms of accelerated disposition. The environmental footprints can be addressed, and even offset. But the least talked about and perhaps most compelling argument against cremation may be that, in disappearing completely—in using machines to rapidly evaporate, oxidize, or dissolve our earthly forms away—we deprive the landscape of our bodies, including the wide range of decomposers who take their turns at our table, and a rapid dissolution closes off our last chance to continue participating in this physical life in such a useful way, as food. As cremated ash, it’s true that we can be scattered to the winds or on the waters, or remain cherished and elemental in an art piece on the mantle, a comforting tangible presence in our descendants’ lives. But planted in a forest and becoming dinner for the regenerating planetary system, we can still do one last thing with our bodies that may be much more significant than a disappearing act: We can remain fully present, albeit transformed, nourish the soil, enlarge the habitat, and rekindle the life of meadows and forests, feeding and becoming plants, animals, and trees. For many, it seems right to someday “be a tree.”

“In the meantime, I dream of the cemetery of the future, full of fruit and nut trees and ornamental plantings, some of which yield food, too, or holiday decorations like pinecones and bittersweet. At the entrance there would be a farmers’ market to sell the surplus of food from the cemetery grounds. There might be wood for fuel or for carpentry from the trees that in time grow old and need to be replaced. I imagine a family picking up hickory nuts from Grandmother’s gravesite, remembering the pies she made from them.”

—Gene Logsdon

Natural Burial:
The Traditional Alternative

A number of methods are available to us for reintegration with Earth’s biological systems in natural ways. Some of them, such as the Tibetan “Sky Burial,” the Beaker People’s “barrow burial,” or the more familiar “burial at sea” (as long as the body is in a weighted shroud and not a nondegradable casket!), are older than our recorded histories. Others, like the accelerated dispositions now being developed, are attempts to address problems created by the old ways that often generate new impacts in their wake. Burial is the oldest known form of intentional disposition, and still one of the most common. Burial in soil breaks the body down via biological, geological, and chemical processes in the environment, producing the elemental reactions, the weathering, and the natural succession of large and small creatures that eventually consume the body. Full skeletonization is the goal; average soil can achieve that in 5–10 years, and active soil can do the job in as little as 18 months, once the soil has direct contact with the body. It’s a natural.
Soil Disposition: Making the Case for a Biological Return

On the continuum of processes, a direct earth burial that makes one’s body available as a full-spectrum nutrient source for the soil web does more for the planet’s biological system than cremation. According to Dorian Sagan, author of Into the Cool and student/teacher of the thermodynamics of living systems, the longer our biological web can keep life forms “in play,” transferring energy from one creature to another in the Great Chain of Being, the more resilient our planetary system can remain. The complex and self-organizing, self-regulating biological and geophysical systems that help to balance temperature, moisture, and atmospheric gases and support life as we know it on Earth are created and maintained by the continuous recycling of the organic and inorganic matter that are the elemental building blocks of all animate beings. Sterilization (from embalming) and the combustion of cremation destroy the integrity of fundamental molecules, enzymes, and microbes present in your body, and the former may even affect the soil it’s buried in, depending upon the chemicals present in the embalming solution. In contrast to the chemical-intensive practice of preservation or the energy-intensive process of combustion, returning bodies to the Earth’s natural system makes a strategic use of our parts for the greatest number of beings, over the longest period of time.

Soil Quality: Building the Living Web

Burial in a biodegradable container presumes and encourages decomposition. Decomposition requires active (that is, “alive”) soil, and according to soil scientists, the same conditions that are necessary for proper decomposition—nutrients cycling at the right rates for complete breakdown to occur—are required for healthy plant systems, too. Organic carbon is the key to these processes, as it is constantly recycled from organism to organism, including trees and other plants that absorb it out of the air. And so it’s not enough to just plant the tree. The soil web has to be healthy enough to grow the tree well.

The US Department of Agriculture’s Natural Resources Conservation Service provides a tremendous amount of free online information related to building and maintaining soil quality, with in-depth sections on soil health, soil assessments, and maintaining the “soil food web,” a term coined by soil scientist Dr. Elaine Ingham, now at the Rodale Institute (nrcs.usda.gov/wps/portal/nrcs/main/soils/health/). The NRCS defines soil health as “the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans. This definition speaks to the importance of managing soils so they are sustainable for future generations…. Only living things can have health, so viewing soil as a living ecosystem reflects a fundamental shift in the way we care for our nation’s soils.”

Ideally, cemetery disposition should support and sustain the cycle of life, not compromise it. Modern biology is only now beginning to deeply connect with other scientific disciplines—geology, climatology, physiology, and thermodynamics—to quantify the energy transfer that interdependent living systems generate and manage in the complex soup of life. Is it really such a big leap to imagine that your own death can be a doorway back into that natural and elemental world? For those of us who’ve been frustrated by the difficulty of living an integral life in this forest of synthetic industrial marvels, a natural death may be the easiest lifestyle choice we’ll ever make. In the end, all we leave is energy. Good, useful energy still available in the form of complex molecules—fat, bone, and blood—there to be wrestled apart and turned into good little worms and beetles (who eventually also take their turn in feeding the small). Or as one organic gardener insisted he wanted on his headstone—“WORM PARTY!”

Cemetery Stewardship’s Triple Bottom Line

Experts from all quarters have said that the key to getting through the next several decades—when population, energy requirements, and the level of resource consumption to meet our needs must become sustainable, or drastic changes to our lifestyles and cultures will take place—lies in achieving sustainability throughout all levels of human life. Sustainability is the 21st century’s watchword, and it needs to be a part of cemetery management, too. As a forward-thinking version of the Golden Rule says, “Do unto future generations as you would have them do unto you.”

Sustainability has three primary components: social, environmental, and fiscal. The collective evaluation of costs and benefits based on financial, social, and environmental factors is known as the “triple bottom line.” This conceptualization helps the operators of businesses and organizations address all three areas of activity simultaneously, identifying critical elements in each...
with the goal of balancing all three in the course of operation. Each of these categories affects the other two when a “full-cost accounting” is done, and the overall sustainability of an endeavor—i.e., its likelihood of success—is best served when all three are in balance and no one aspect damages the other two. For example, selling products and services below cost may create short-term social benefit (popularity and service to the disadvantaged) but financial calamity in the long run, ending the social benefit altogether (and perhaps the company). Polluting the environment may help the immediate financial picture, but costs in environmental fines and social “badwill” can exceed the gain or jeopardize an entire industry, exposing it to nationalization, regulation, or excessive consolidation. In sustainability parlance, “stewardship” is paying attention to all three aspects of the triple bottom line (TBL).

Finding the Cemetery’s Triple Bottom Line

The Financial TBL
Like all businesses, a cemetery must make a profit, or receive donations and subsidies in excess of its costs, to survive. The financial TBL is probably the most familiar, and the easiest to calculate; it’s what’s left—the “bottom line” at the end of the balance sheet—after all the costs are subtracted from revenues. No social or environmental benefit is worth very much if the lack of profit kills the operation, and so the social and environmental factors, while important, can’t be so excessive that the operation dies financially. Because many social and environmental actions have a financial cost, and because a cemetery’s financial obligations are ongoing forever, the balance between the three is always carefully managed, requiring that many of the social and environmental elements return at least some income for their support. Calculating the financial value of ecosystem services may help that prospect immensely, and could help a cemetery qualify for grants and other assistance. However, nothing is more important financially to a cemetery than to have a properly sized endowment care fund.

The Social TBL
The social aspects of the TBL are sometimes the most difficult to see. They include issues of ethnic diversity, worker fairness, responsiveness to the local demographic (cultural, ethnic, age), and cultural or historic stewardship. Answering questions like the ones that follow can help you understand where the cemetery you’re interested in stands with respect to social TBL criteria, and also show how a cemetery can gain financially (i.e., attract socially responsible customers) by supporting its social TBL:

Does the cemetery meet the needs of the community without discrimination? For example, the Muslim community has burial practices that are out of step with conventional Christian ones. They require a direct earth burial; they use a shroud; they perform the handling of their dead themselves; they bury North/South instead of East/West.

• Fiscal benefit: more customers; good customer relations; less/different kind of work to do a Muslim burial.
• Environmental benefit: maintaining natural burials is easier on the future and the cemetery’s soil.

Are its workers fairly treated? The US and the UK have minimum wage and worker protection laws that also apply to cemetery workers. Workers may, however, be denied union opportunities; they may be part-time employees without benefits; and long-term employees may not receive pensions. In cases where the cemetery ownership is large and wealthy while its employees are many and poor, this aspect of social justice may be important to a customer, and advertising employee treatment can be useful to serve this preference.

• Fiscal benefit: Fair treatment = employee retention = more income; happy workers = lower medical bills.
• Environmental benefit: When people are healthy and stable, they impact shared resources less; well-treated employees make fewer mistakes and waste less.

Does the cemetery fulfill its obligation as the historic custodian? Cemeteries are eventually historic sites. Most are sitting on treasure troves of community culture. Is the cemetery connected to its historic society? Does it provide information to the public about who’s buried there? Does it care for any historic documents appropriately, to take care of its environment as well.

• Fiscal benefit: Reconstructing lost historic records is expensive; cemeteries that connect with the public on the basis of local history have higher sales and donations.
• Environmental benefit: When people value the history of a cemetery, they’re more likely to take care of its environment as well.
**The Environmental TBL**

Difficult to measure financially, the environmental aspect of the TBL is represented by those activities that help to renew, regenerate, rebuild, and conserve ecosystem services that are of value to living things. Sometimes leaving an area alone is of tremendous value to the local ecosystem, and the act of NOT impacting an area should be counted when accounting for the cemetery’s environmental TBL. Common elements of sustainability programs that can be implemented in the cemetery, clearly connecting to recognized ecosystem services (and thus counting as assets and positives in the financial TBL) include:

- Soil and water conservation
- Fish and wildlife habitat
- Public health and environmental safety
- Animal health and welfare
- Energy intensity, frequency of use, and renewability

**People, Planet, and Profit**

When viewed through sustainability’s TBL lens, a cemetery needs to consider all three categories of Planet (Environmental), People (Social), and Profit (Financial) in order to make sound and well-balanced decisions that don’t seriously compromise one stewardship role in favor of another. Eventually, cemeteries of the future will need to have good answers for most, if not all, of these questions:

**Financial Stewardship**

- Does the cemetery have an Endowment Care Fund?
- Can the cemetery pay its bills, conduct maintenance, and fulfill its contracts?
- Will the cemetery become a future burden on taxpayers?
- Does the cemetery have a multi-generational financial plan?
- Is the cemetery facing future liability or risk from degradation?

**Social Stewardship**

- Does the cemetery meet the needs of the community without discrimination?
- Are its workers fairly treated?
- Does the cemetery fulfill its obligation as the historic custodian?

**Environmental Stewardship**

- Does the cemetery manage its landscape to rebuild soil and support habitat and wildlife?
- Does the cemetery reduce its resource use whenever possible?

No matter what their ownership, mission, business organization, or marketing budget, cemeteries that meet the above benchmarks are making a difference, and are in the process of transitioning to sustainability. Encouraging cemeteries to take these steps—by purchasing grave or cremated remains space there—will go a long way to supporting this shift.

**Grave Reuse: A Practical Solution for Urbanizing Areas**

One significant environmental cost that’s almost never calculated is the cost of perpetually occupying the grave space. On top of the issues created by thousands of containers-in-containers holding non-decomposed bodies, the caskets and headstones are placed in cemeteries or churchyards “in perpetuity” and require ongoing maintenance, ostensibly forever. Grave reuse, common in Europe, has yet to take hold in North America—but it’s probably on the way. Ken West, telling the story of the UK’s natural burial movement in *A Guide to Natural Burial*, cites a technique for reusing abandoned grave space now being tested in the UK called “Lift and Deepen.” The technique involves opening the grave, reburying any skeletal remains below the floor of the grave (or returning...
them to the family), and then performing the new burial in the vacated soil cell. (It’s important to note that this is a reuse of the space—meaning a burial has already taken place there—and not simply a reselling of rights that have been abandoned without originally using the grave.)

In 2012, the ICCM (The UK’s Institute for Cemetery and Crematory Management) issued a letter encouraging the minister of justice to look into the possibilities of changing UK law to allow for grave reuse. This is significant coming from the leading cemetery industry trade association that represents municipal as well as for-profit cemetery companies. Their position is based on the association’s firm grasp of cemetery economics and its understanding that the easy availability of perpetual grave space has come to an end. We would do well to heed these considerations:

“If these practices were instituted—and especially…[grave reuse]—the need for cemeteries to expand onto new land would be dramatically curtailed. Since there’s no proven health and safety reason why this practice can’t be engaged in, and since it’s questionable whether or not arable land will continue to find market as a cemetery, operators are wise to keep this possibility open as a ‘game changer’ with respect to the cemetery of the future.”

At this time, long-term maintenance costs, the resources consumed, and the true environmental and taxpayer costs of aging cemeteries have not yet been factored into many cost-benefit equations, even though they can be easily calculated with budget planning software available today. City planners, corporate cemetery stockholders, and their insurers are only now beginning to appreciate the expense accruing as they run out of space and are faced with tighter regulatory controls on the burial and discharge of potential pollutants and nondegradable into the

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The Natural End Play in Three Acts

The Natural End Play offers a discussion framework that separates the various EOL (end of life) activities into meaningful segments by focusing on who does what, and where and when they do it, to help us think about and discuss them more clearly. Grouping tasks in this way helps professionals, policymakers, friends, and families talk about the tasks one by one and plan them in sequence, a step at a time.

The Natural End Play

Act I: The Body, the Family, and the Funeral
Act II: The Final Disposition
Act III: Everything Else and After…

- **Act I** is about the Body, the Family, and the Funeral—managing the deceased’s body naturally, gathering friends, religious community, and family, and the other activities that take place before the final disposition.
- **Act II** centers on the Final Disposition itself, a legally defined method of body disposal, usually spelled out in government statute, with the place and type of disposition entered into public record.
- **Act III** is everything that happens post-disposition, after the burial or cremation takes place. Act III involves the burial of either the body or its cremated remains, and the perpetual care of the landscape that the burials take place in.

Using this framework, it is possible to identify who is responsible for (and who is in control of) the various parts of the process when someone dies, especially when there’s a need to purchase unfamiliar items and services like funerals, coffins, dispositions, and burial plots. Dividing the tasks into Act I, Act II, and Act III elements makes it easier to think about and shop for products and services at fair prices and, in general, provide what most people seem to want: meaningful, affordable, and, in an increasing number of cases, environmentally responsible funerals and celebrations of life that reflect the values and personality of the deceased as well as the family.

This three-act framework also makes it easier to focus on the most important things to each individual. Some folks care a lot about the funeral, but not so much about what happens after. For others, the only thing that matters is returning to earth and “being a tree.”

Creating Accountability

For those who do want to “do death” differently than the current industrial paradigm has dictated, once we separate these activities from one another, it’s simpler to decide upon the changes that are desired, what things could easily be changed, and what things must stay the same. Knowing who is legally responsible helps. For example, to change how we manage the body at death—perhaps no embalming, perhaps a different sort of funeral, or using a homemade coffin—it doesn’t do much good to talk to the cemetery manager, since that
environment. While the UK ministry has not yet issued a final decision as of this writing, Australia is in the process of approving the practice. Given the clear TBL advantages of the practice—with social, ecosystem, and financial benefits that happen immediately—any cemetery-using society with urbanizing areas and doubling populations can’t be that far behind.

Crafting the Fond Farewell: It Takes a Plan

When a loved one dies, multiple issues—the body, the family, the casket, the disposition, the cemetery, the money—need to be managed properly and quickly, and that takes planning. Funeral businesses tell us that all the time, and they’re not kidding. Most of us don’t have a lot of experience with death; the language is unfamiliar, and we work to avoid it for as long as we can. But, as experience eventually teaches us, while planning for death may be uncomfortable, not planning can be miserable, especially for the family and friends that have to sort it out when we neglect to do so in advance. This is where funeral directors and home funeral guides can come in handy—especially since it costs nothing to plan. (The Natural End Play breaks these activities out into sections: Act I, Act II and Act III. See the accompanying sidebar.)

Funeral consumer activism over the last several decades has led to the formation of a number of organizations and services that can assist with the planning job, making it much less difficult than it once was. In addition to the home funeral advocates mentioned earlier, the Funeral person handles the body after it’s been buried. Likewise, if we’re concerned about how the cemetery is going to be cared for in the long term or what sort of tree we’d like on our grave, the funeral director or the crematory operator is not the resource to consult. Sequencing the End-of-Life activities in this way lets us know who to talk to and helps to keep these last things straight.

Natural Packaging

Body packaging and preservation choices made during Act I can exert their greatest environmental impacts during Act II, when whatever items were used during that first act are consumed in the burial, cremation, or other disposition method chosen. It’s at this point that natural coffin and casket materials show their true value, with their qualities of renewability, biodegradability, and minimal impact on the environment, whether buried or burned, lightening death’s last footprint. The conventional funeral industry has little experience in natural materials, and it’s up to natural products consumers to request and insist upon products and services that meet their needs. Companies like the Natural Burial Company sell natural grave goods both retail and wholesale, ensuring that anyone who wants a biodegradable coffin for a more natural disposition can have one.

Act III: The Sustainably Managed Cemetery

In Act III, everything that comes after the final disposition—from the decomposition of the corpse and the coffin, to the growing of trees and the placing of stones—can now take place, and does so over decades and centuries, from this point on. Cemeteries are generally considered permanent sites for disposition and memorialization, and for many, the cemetery provides a focal point of remembrance—a physical place to go, to memorialize for a time the life of someone they’ve loved.

Placement of the body in the cemetery marks the beginning of a much slower process than the first two acts, and includes bereavement and grieving on the one hand, and the functional storage of the remains and the memorial, coupled with the long-term maintenance of the cemetery site, on the other. Whether or not grave reuse becomes as common in the US and the UK as it currently is in Europe, a cemetery is clearly an important community space, and most are likely to endure for a couple of centuries, at least. Even if the practice of burial is abandoned, most of the cemeteries that exist now won’t be dug up and moved or destroyed. Act III—ongoing and “forever” as far as the cemetery is concerned—is here to stay. Consequently, to the extent that a cemetery’s practices are redirected so that it minimizes its resource use and future maintenance costs, refrains from contributing to pollution, and turns its landscapes into habitat-worthy micro-ecologies that benefit the area it’s located in—and to the extent that it connects with the history of the community it’s a part of—it will likely sustain and pay its way.
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Writing out what you want and leaving it somewhere that it can be found easily will make someone praise your name when the time comes. Finally, don’t forget the other aspects of bureaucratic closure: a living will, a personal will, and an advance directive, at minimum, along with a comprehensive listing of all the bits someone needs to know if they’re going to have to dig through your files and piece together what you were supposed to be paying for next week but couldn’t. Yes, it’s a big job, but someone has to do it, and it ought to be you.16

Tell your family and friends
Aside from the paperwork, the most demanding part of your death (provided you’ve arranged for everything else in advance) is the preparation of your body, since you’re no longer very good at it. In addition to your instructions on embalming, services, containers and disposition choice, you’ll also want to think about what’s currently inside you. Modern bodies tend to go out with more than they came in with. Teeth are often filled with mercury amalgam—stable when cool and in the ground, but not so good if you’ve chosen cremation. Silicone and artificial joint implants are increasingly common, and bodies may have pacemakers (they explode in crematoriums, and silicone pools in the kiln). Unless you leave instructions that you know are workable, it’s unlikely these items will be handled responsibly after your death. This is generally one of the least pleasant tasks left to be managed and should, if at all possible, be arranged in advance, by you.

If you’re planning on a home funeral, put together a group of committed friends and loved ones who are willing to handle you properly when the time comes and support your wishes, and make this group known to your biological family. Church groups and extended family units are great for helping out here. This is also where the help of an experienced consultant can come in handy—someone trained as a home funeral guide, or a sympathetic funeral director—since your personal group will need to understand how to bathe, chill, and dress you, how to carry you and when to move you, where and how to place you, and, in general, to be there to help others feel okay about being there with you when the time comes. People have been doing it for millennia, but the cultural chains have been broken, and it helps to have the guidance of those who’ve been through it before.

Neutral groups like hospice can be helpful, but they tend to shy away from advocacy of businesses or services used after a death, especially when those needs deviate from traditional death management practices and utilize alternative pro-
What You Need for a Natural Burial

You don’t have to be buried in a dedicated natural burial ground to make your last moments more natural. By planning ahead, by choosing your process and your container in advance, and spelling out your wishes clearly, you’ll go a long way toward improving what might otherwise be quite the opposite of what you’d wish, if someone could ask you after the fact. The key elements of a natural burial are:

- A preservative-free body
- A biodegradable container, or none at all
- A cemetery that accepts a vault-free burial
- People to put you there
- Laws to support your right to be there
- A community to tend the habitat as you’re decomposing

The Last Stuff

Whether you’re buried in a coffin or wrapped in a shroud, the main thing to insist on is the use of biodegradable materials in everything that accompanies you “out the door” or into the earth, no matter where you end up. Just by using a natural container, you’ll minimize your impact on the environment because of all the conventional casket materials you won’t be buying or burying, and you avoid the polluting or energy-inefficient processes used to make them. Your container is a great place to start. Even if you (or your parents) are buried in a conventional cemetery, in a vault, or in a mausoleum, you’ll still lessen the ecological footprint of burial boxes simply by choosing the natural ones—and it just gets cleaner from there.

As of 2014, we’re just beginning to accept natural coffins in the USA, and natural coffins don’t yet register with American casket company trade associations. But if successful competitors are any guarantee of markets shifting and options emerging, help is on the way. The templates for the “cleanest” natural coffins we’ve seen this century—rapidly biodegradable, cleanly combustible, made from natural and renewable materials, produced by local makers—found their first fertile soil in the UK. (A densely packed island with predictable death rates and a lot of bird lovers is a great place to birth a natural burial movement.) For the past several decades, UK-based coffin makers, designers, and weavers have produced high-quality willow, wool, and recycled testimonial: “I know the discussions of funerals may sound a bit morbid to many out there. However, you cannot believe the change in my father’s attitude once my mom, dad, and I sat down and discussed some of this stuff. Suddenly, he was able to discuss everything regarding his cancer more easily, which eventually led him to realizing that his chances for survival are very good.” Catie Jay Bee, 2002, Online Organic Gardening Forum.

Tools to help the planning:
- Download a natural funeral planner for free at (naturalburialcompany.com)
- Play “My Gift of Grace,” a conversation game for living and dying well (mygiftofgrace.com)
- Read Final Rights: Reclaiming the American Way of Death (upperaccess.com)
- Ponder a bit on how to “Be a Tree”
newspaper coffins, their success due in no small part to alternative funeral home operators like the Green Funeral Company in Devon and ARKA Original Funerals in Brighton. Firms like these promote environmental friendly techniques and products, write passionate blogs, put coffins in their shop windows, and encourage natural home funerals for the family. Today, with over 50,000 “green” funerals conducted in the UK annually,18 consumers are well past the tipping point, and the trend shows no sign of abating.

With hopes of recreating the UK success, the Natural Burial Company in 2006 hosted some of the first successful UK makers into the US, introducing woven coffins of willow, cane, bamboo, and seagrass, handmade paper urns and pet coffins, and Ecopods. Shortly thereafter, Passages International, a seasoned US supplier, and E-Coffins, a UK-based company, started supplying low-priced wicker coffins from Asia. Dozens more producers have come along since, and today’s range of biodegradable and low-impact burial containers and wrappings offers more variety in design, production techniques, and materials than the funeral sector has seen in some time. Shrouds of silk, linen, hemp, and cotton; urns of earth, paper, and sand; coffins of wool and weave; artful wooden and traditional pine boxes. Even the Kraft-wrap alternative container threatens to become trendy, thanks to the fact that everyone knows that cardboard biodegrades.

Since almost anything can be ordered online today, once someone knows about the natural possibilities it’s hard to imagine not getting what you want. And while biodegradability is important, it’s not everything. Although the debate continues to evolve as to what will and won’t biodegrade in the presence of healthy soil microbes, hungry trees, or introduced fungi, guidelines from the natural products world like those above readily appeal to our common sense, and they work for burial goods, too. Consumer advocates and natural product companies collaborate on public educational events like the Green Festivals (greenfestivals.org) and other product shows. These trade shows provide a lot of information about the environmental and social impacts and benefits of various materials, products, and processes, and much of what they know translates over to the world of natural funerals. At the rate these ideas and products are spreading, don’t be surprised if your local natural foods co-op, garden center, or favorite online eco-retailer begins to offer a selection of “final furnishings” in your own not-too-distant future. Supply is no longer an impediment to change.

**Saving Your Money, Supporting Your Values**

The “freedom to shop”—to choose from a range of products and services that best reflect one’s values and don’t waste money—is one that Americans have a tendency to take for granted. Even so, getting access to alternatives isn’t always easy, especially in an industry with a lot of regulations, more than a few of which seem to protect the businesses rather than the public the rules are designed to defend. Fortunately, the right of US consumers to supply their own burial containers rather than those purchased through the funeral home is protected by the Federal Trade Commission’s Funeral Rule19 and can’t be countermanded by states. Even so, the price of a funeral continues to climb, suggesting to economist David Harrington20 that the casket manufacturer isn’t the culprit. In 1959, according to *Time* magazine, $1.5 billion was spent on burial annually, at an average of about $900 per death. As of 2013, the average funeral in America, including embalming and a metal casket, priced out at around $6,600 (not counting cemetery costs), with cremation at about half of that amount. Conventional cemetery services are, on average, an additional $2,000–$10,000 or more, depending upon whether or not the grave is vault-free, the coffin is biodegradable, the type of monument, and how much the cemetery charges for the rights to use burial and memorial space. Harrington and others contend that improper regulation of the end-
of-life industry by narrowing consumer choice and limiting business activity while minimizing public oversight results in artificially high prices. He suggests that once the public has access to a greater variety of funeral products, competition in other services will also emerge, and he claims that the Internet is the key to this expanded competition.

And while natural funerals don’t have to be inexpensive (what’s the price of a great party these days?), they can be. Home funerals make the costs of gathering more controllable, whereas renting the services of a funeral home for body management and gatherings, with rush services and non-essential but attractive extras, ups the price accordingly. Burial in a cemetery always involves the cost of the grave space and basic fees, but maintenance of a natural burial plot is much less intensive than a conventional one over the long run, so expect direct costs to eventually be lower, especially once the municipal and public cemeteries get involved. Some cemeteries (and even some states) still require the graveside presence of a paid and certified professional during burial, but if the requirement is a law, expect it to be challenged in the future by the growing funeral consumer movement as an unjustifiable cost, and if the requirement is a business practice, expect the free market and competition to change it.

Natural funeral products don’t have to be expensive either. The most popular coffin style in the UK, for natural burial or cremation, is the biodegradable cardboard box (now available with custom photo finishing!), usually costing several hundred pounds, and a real bargain when contrasted with the metal and hardwood veneered caskets typically sold in the US that can retail for multiple thousands of dollars. But you get what you pay for, and don’t let that cardboard coffin get too wet in the rain! Woven wicker has a price range that depends upon a lot of variables: Did the coffin come from Asia (made with lower-wage skilled labor), or was it woven in the UK or Europe, made by equally skilled people where the costs of production and the wages are much higher? Is the quality just passing, or is the workmanship to higher standards? Woven coffins, no matter where they’re made, are more expensive than cardboard or plywood. However, unlike cardboard, willow and other wicker fibers are produced without the use of industrial papermaking facilities. Woven coffins degrade much faster than solid wood, and the materials are nontoxic to produce and renewable. Their production keeps an important suite of artisan skills alive—production-quality journeyman weaving is a skill that’s been lost in the US; perhaps the spread of these coffins will bring it back again.

Considerations like these affect the price, just as they would anything else, but they’re also discretionary, and the market has room for them all. Supporting artists, traditional handicrafts, and a natural cemetery environment takes money, and many people think those are causes worth spending money on, dead or alive. The basics of a funeral should be as affordable as possible, however, with services or products required by law only if they preserve public health, safety, or critical areas of the environment. With freedom to choose, you can put your money where your values are, and with the money you save, someone might be able to throw a darned good party in your honor!

**Do You Have to Have a Box?**

Shroud burial, where the body is wrapped in fabric of some kind, is a perfectly acceptable form of natural burial that is still common in much of the world. The Jewish community traditionally buries their dead ritually wrapped in an unhemmed shroud, in the classic plain pine box that is, per orthodox rule, “unadorned.” Many Muslims do the same, and may or may not use a box. Buddhists, Baha'i, Pagans, and plain ole Grandmas may all prefer to go box-free. Hemmed shrouds in creative designs, made of organic hemp, cotton, wool, and other natural fibers are available. But there are practical considerations with shrouding, especially when it comes to handling and moving a body, so plan ahead. Rigor mortis fades after 24 hours, the body softens again, and lowering a shrouded person gracefully into even a shallow grave takes some skill and forethought—or a Shrouding Board(TM).

Whether you’re required by law to be buried in a container varies from state to state in the US, although this decision is usually left up to the...
cemetery, and a cemetery is free to have a policy that requires one. Because sustainable landscape management has yet to catch on, many cemeteries still have long-standing rules favoring the double-box casket-and-liner package and haven't even thought about changing. If in doubt about when caskets are required by law, consult the Funeral Consumers' Alliance website, funerals.org; they have chapters in every state and can point you to sources of local information. Or call the state's cemetery board to get the statute or administrative rule.

**Beyond Decomposition**

Decomposition is important, but for many it's only the start. Keeping in mind the TBL of the products your death and funeral will consume, we suggest you begin with synthetic-free items, focusing first on products made of natural materials so that decomposition is assured. From there, go "up the ladder" of what's important to you, choosing from qualities like enhanced biodegradability, recycled and non-virgin materials, and sustainable production characterized by local handicrafting, family businesses, fair trade, and economic justice. Some possibilities include:

- Avoid synthetic and non-natural materials in your container and clothing
- Choose products designed to break down in the soil web
- Favor items from recycled and waste material instead of virgin resources
- Support sustainably produced burial goods with organic, fair trade, and eco-certifications as they begin to appear in the marketplace if you're not making your own

Any additional requirements can be spelled out in your final instructions and should include asking the family to leave your favorite gadget at home (or better, give it away!) and not burying you in synthetic clothing. The natural products section at the end of this chapter lists a number of natural grave goods and information on how to use them.

**A Place to Go**

Once you've decided upon your method of disposition and your container of choice, finding the right place to plant you, and folks who will do it, is next on the list. Since 2005, when we first began documenting this trend, hundreds of sites offering some form of natural burial—vault-free at minimum—have emerged in the UK, Australia, New Zealand, the US, and Canada, with other countries coming on fast. In the UK, and within just two decades of the first municipal cemetery advertising woodland burial, over two hundred dedicated natural burial sites are listed by the ANBG; the ICCM lists hundreds of cemetery members offering natural burial, both municipal and private; and most of the cemeteries throughout the UK serve its 65 million citizens with vault-free, no-embalming funeral and burial services. A large number of these grounds are owned and run by city councils with public funds, and the natural funeral movement has provided the perfect impetus to bring rapid change to taxpayer-owned cemeteries across the country. The US, Canada, Australia, and others seem poised to follow.

Citizen-driven movements in support of natural burial can now be found in Europe, China, Japan, Germany, and Africa. Some groups have started new burial grounds to fill the gap left by conventional cemeteries slow to recognize this new demand.

**The Living Churchyard Project and the UK Pioneers**

When Ken West, M.B.E., established the first "official" woodland burial site in the UK in 1993, it was designed to be an environmentally sound alternative to conventional burial that would be less expensive for the taxpayer to maintain and, ultimately, financially, environmentally, and culturally sustainable. West, then Bereavement Services Manager for the City of Carlisle Cemetery, proposed to city management that the most cost-
efficient solution to issues stacking up around the cemetery—monuments toppling, mausoleums crumbling, lack of space, and vandalism—was a natural burial program. He claimed that burying citizens simply, in grasslands and under trees, would restore habitat, reduce resource use, rekindle community support for burial, and enhance the performance of the cemetery. He was right, as his fast-selling natural sections soon proved that natural burial was less expensive to maintain and more sustainable for the taxpayer.

A number of cemeteries, public and private, followed suit, and the UK’s natural burial movement was born. West’s success didn’t arise out of a vacuum. National and international programs from the 1970s and 1980s calling for environmental and cultural responsibility helped set the stage for his successful appeal to his city council. The timing was good; by 1989, the cumulative disrepair in old Victorian churchyard cemeteries had communities in a quandary. The responsible governments, churches, nonprofit organizations, and other owners were under pressure to clean them up, but without funds to perform the maintenance there was little to be done. Threats to a closed cemetery don’t have a lot of weight, and the taxpayer eventually owns the abandoned cemetery, whether it cares to or not.

The national government knew it needed to do something, but it wasn’t quite sure what. In 1987, about 15 years prior to West’s first natural burial ground, the Arthur Rank Centre and leading conservation organizations launched the Church & Conservation Project, with an educational program called the “Living Churchyard” developed primarily to guide volunteer cemetery friends groups to arouse an “interest in the value of churchyards, chapel yards and cemeteries for nature conservation” in the general public. In the subsequent 25 years, multiple Living Churchyard programs and natural burial programs in both new and established cemeteries across the UK have become valuable outdoor classrooms and museums, educating neighbors and the community about the wildlife and the local human history. To date, more than 6,000 cemeteries have participated in some fashion, and thousands of additional cemeteries worldwide have access to the same information via workshops and the Internet. Their materials are accessible online and available for cemeteries to use, limited only by their manpower, funds, and creativity.

Seeking to replicate the success of the Living Churchyard project, West’s original public cemetery efforts, and the natural cemetery operators leading the trend, a growing number of facilities around the world are adding natural features that appeal to the environmentally conscious burial buyer. The UK still provides the largest number of models, however, including formal cemetery sections (for consecration and religious burials with natural traditions); community, family, individual, and pet-human plots; orchard burial, meadow sections, remembrance and scattering gardens; and ashes burial. Rules vary and flow with the market. Some cemeteries advocate choice while others restrict burial to non-embalmed bodies and biodegradable caskets. Most encourage families to be actively involved in the organization of the funeral, and follow the Charter for the Bereaved. Many of the cemeteries operate detailed websites that help others duplicate their work (and positive impact!).

“Any Cemetery Can”

Unlike their US counterparts, UK cemeteries (and many European ones, as well) comply with stringent environmental, cemetery-specific operational, and public health standards. They’re more directly influenced by taxpayers, and often subject to restrictive environmental regulations that US cemeteries have yet to be constrained by. To open or expand a cemetery in the UK and many other countries today often requires hydrogeological and habitat impact assessments, neighbor approval, and a population-based proof of need (although that’s likely to change in the US as cemetery impacts become better understood). Even
so, the clear success of 6,000 largely volunteer-run Living Churchyard projects in closed cemeteries, promoting their reinvigoration as places of ecology, history, and final disposition, suggest that a workable model is in hand, and it’s not hard to believe that “Any Cemetery Can.”

Although the means to create more sustainability—or at least lighten environmental impact—is easily within reach of most cemeteries, the bulk of them still remain archaic and out of touch with current consumer trends, afraid to alter the status quo even though a conventional burial, with its nondegradable caskets, concrete vaults, and lawned landscapes, is clearly losing its consumer appeal. This bureaucratic short-sightedness dooms these cemeteries to fewer and fewer customers and eventual closure, bankruptcy, and abandonment (or taxpayer bailout) unless they develop ecological appeal. Fortunately, as many champions in the natural end-of-life movement point out, consumer demand for environmentally friendly disposition is real, and once the cemeteries and other related businesses begin to serve the public’s desire by supplying the natural settings, products, and services that are wanted, many of their financial pressures will be relieved. By coupling Living Churchyard practices with sustainable cemetery management techniques that improve resource use, mitigate potential pollution issues, and minimize damage to soil health, cemeteries have a roadmap to improvement that can be pursued incrementally, with little risk, and with a strong likelihood of success. With hundreds of thousands of cemeteries in the US alone, and given the simplicity of the first transition steps, we should use the cemetery to create valuable living habitat, greenspace, and cultural connection for the community. We call this collection of characteristics the “Living Cemetery Style.”

Look for the “Living Cemetery Style”
The “Living Cemetery Style” can be identified by its practices, its techniques and tools, and its participants. Its practices will be focused on reducing environmental impacts, diversifying and enlarging habitat, and emphasizing comfort from nature, remembrance, culture, and community history where humans are concerned. Its tools and techniques will be the ones that make the improvements possible, many easy to spot just by walking through the cemetery (are there flowers? is the natural world respected? do you see a person with a shovel, or pushing a reel mower?). And its participants will be the humans and the wildlife that come to interact there over time, improving every decade as the landscape matures. Like a museum, the cemetery will take a multigenerational view, and evaluate its actions within a context that covers centuries, not just fiscal quarters or annual reports. It will have passionate staff and volunteers, and connect with the community in unique and engaging ways. That’s how you’ll know if you’re “home.”

As you can see, almost any cemetery probably already has or does—or is thinking about doing—at least some of the elements mentioned above. They’re the same techniques and practices we’re all becoming familiar with in our homes and city parks and schoolyards; the same techniques increasingly used on farms and golf courses; the same products used in our daily lives translated to the environmental requirements of the 21st century. Supporting these cemeteries—observing what they do, and buying plots from them—will prove the concepts, build the models, and produce the resources needed for making the shift. And when Living Cemetery elements are included in the business plan and offered to the community, as Ken West and his colleagues in the UK have been doing for over 25 years, many cemetery operators will find that the cemetery can take on a whole new “persona,” reinventing itself as a place of environmental and cultural significance and able to thrive over time. (The taxpayers and consumers will be happy, too.)

In-depth discussions of many of these topics—renewable energy, green building, permaculture, rainwater harvesting and greywater reuse, the importance of relocationalization—can be found in other chapters of this Sourcebook. The relevant
products sold by Real Goods are available at realgoods.com.

Tracking Down a More Natural End
As of 2014, several dedicated natural burial grounds have been announced in North America, and many more are in the planning stages. The number of cemeteries that operate on an exclusively natural basis is increasing slowly, but new start-up cemeteries aren’t your only option. Cities and counties own or manage a lot of cemeteries, and thanks to hundreds of outreach programs in conservation and natural resource management, cities around the country are embracing sustainable landscape management, lowering their pesticide use, and enhancing greenspace. And they’re starting to pay attention to concepts like ecosystem services and sustainability’s triple bottom line.

The smart cemetery shopper looks for cemeteries that: 1) offer natural burial alongside their conventional offerings (adding new and needed income), and 2) simultaneously steward plants and build habitat (improving customer appeal), while 3) conserving resources (saving money and the environment). If you’re in the market for a natural burial, you may even find yourself becoming a cemetery activist, lobbying for a natural burial option in your own local cemetery and volunteering to help with the transition. Any municipal cemetery can incorporate many Living Cemetery elements into their practices, and it’s a rare mayor or councilor who would disagree.

Jewish and Muslim burial customs are natural by tradition, and cemeteries that serve these populations will be familiar with Living Cemetery concepts. Most municipalities have at least one cemetery with a dedicated Jewish section. Historic pioneer cemeteries often have more lenient regulations than conventional ones. Many of these older cemeteries are managed by fraternal orders like the Oddfellows or small volunteer boards of directors, with policies that can be easily changed. However, while these may provide hopeful opportunities, most cemetery operators may not realize how far along the prospects of natural burial have come. Visiting them with a copy of this article might be just the impetus they need for considering a change.

Don’t assume that you know who’s offering natural burial and who isn’t; you need to do your homework. Just because you haven’t heard about it doesn’t mean they’re not doing it. The cemetery business is highly competitive—not everyone advertises what they’re going to do before they do it, nor do they brag about how well they’re doing with it, and historically cemeteries get their business by word of mouth. Fortunately, the cemetery business is also inherently local; as with your CSAs and your local natural food stores, the local cemetery may offer just what you’re looking for, and all you’ve got to do is ask.

Online resources for cemetery and funeral service providers are growing. Those who provide basic minimum services like a vault-free burial, a funeral service without embalming, and

Elements of the Living Cemetery Style (in no particular order)
- vault-free burial in biodegradable containers
- decreased mowed areas; cutting with reel mowers and scythes
- wildflower plantings
- living memorials on and off graves (plants and trees)
- low-input multi-species turfs and groundcovers
- proper water management, including conservation and contaminant mitigation
- native vegetation and xeriscaping
- rainwater harvesting and greywater reuse
- care for the soil web
- toxics use reduction (pesticides, herbicides, synthetic fertilizers)
- habitat support for flagship species (snags, thickets, year-round environments)
- interpretive signage describing the habitat
- advertised nature and bird walks
- composting of tributes and clippings
- Permaculture-aware master planning
- support of DIY funerals and family participation at graveside
- use of biodegradable containers for burial
- use of renewable energy in cemetery operations (solar, biofuel, hydro, wind)
- locally sourced monument stone, sculptors, and masons
- locally made burial goods
- cemetery hedgerow buffers
- employment of disadvantaged persons
- low-income/indigent burial services
- support of multicultural practices
- creating and caring for historic trees
- historic buildings that provide community history
- use of alternative building materials and techniques
- monuments of interest and/or unobtrusively marked graves
- use of volunteers for improving habitat health
- brochures and websites to explain the native flora and fauna of the cemetery
- conservation lands as part of the cemetery’s burial reserve
- secondary income sources from land-based products
- collaborative relationships with local churches, extension offices, government services, and conservation organizations
There are compelling reasons for us to return to the web of life in a literal, as well as a figurative, sense. Becoming a tree, if for no other reason than to offset our own lifetime CO₂ emissions and kickstart some habitat in a likely-to-be-forgotten cemetery, might just be the best “last thing you do.”

Information Sources:
Association of Natural Burial Grounds: naturaldeath.org.uk
The Natural End Map: naturalendmap.com
Funeral Consumers Alliance: funerals.org
Green Burial Council: greenburialcouncil.org
National Funeral Directors Association: nfda.org/green-funeral-practices-certificate.html
Institute for Cemetery and Crematory Management-UK: iccm-uk.com/naturalburial.php?type=nat

So You Want to Be a Tree
Once you find a cemetery that will accommodate your wishes, what happens to you and your tree (if you choose to plant yourself under one) should be governed by a contract signed between you and the burial ground proprietors when you purchase your plot—meaning that you both need to think this through. For example, the contract could allow for a tree to be planted at the grave to serve as a marker—but who cares for it, what kind is it, and what happens when it dies? In smaller grounds with tighter budgets, or large ones with different planting philosophies, one tree per grave isn’t always practical, but any diverse woodland consists of shrubs and meadow areas as well as trees, and some people really would enjoy just pushing up daisies!

Some burial grounds may have provisions for cutting the timber after a certain number of years, harvesting any produce, or rotating the plots as a means of paying for the land and services and maintaining the site. Others put the land into permanent trust and let your tree or sod grow undisturbed, in perpetuity. Small sites with no room for expansion, and conventional cemeteries with high-density plot schemes, may find it problematic to plant a tree for each individual; larger grounds with the goals of reforestation and habitat creation may be happy with a low-density plan and more likely to support your wish to be a tree. For some, being part of an orchard or a garden and turning into dinner makes perfect sense. For others, the thought of being harvested is an abomination. Only you can know what will work for you and your friends and relations, and it should all be spelled out in the contract when you purchase your plot. Alternatively, you can let those terms remain vague and be released to the needs of future generations.

Because everyone is fairly new at natural burial in the US, the details of these eco-cemetery contracts will probably vary widely, and many questions will arise. Some contract terms will be governed by federal, state, and local regulations. In certain cases, though—if the burial grounds are run by a recognized religious organization—the grounds may be exempt from such rules. To get an idea of what you should negotiate for and expect when choosing your site, consulting the websites and terms of UK cemeteries that offer natural burials provides a good overview of what’s successfully been done. Your desires should be spelled out in writing with the people you pay to manage your interment for the long haul. No matter how you word it—even if you plant yourself and then simply say “I don’t care; let the cemetery decide”—the fact remains that something like this won’t happen unless you take a direct hand in making it so. It could be well worth it. With the
human contributions to climate change looming large, our continually increasing understanding of the science of Gaia continues to generate compelling reasons for us to return to the web of life in a literal, as well as a figurative, sense. Becoming a tree, if for no other reason than to offset our own lifetime CO₂ emissions and kickstart some habitat in a likely-to-be-forgotten cemetery, might just be the best “last thing you do.”

The Ultimate Back-to-the-Land Movement

Probably the most compelling model for green-space and habitat advocates is the “conservation burial area,” a piece of land simultaneously dedicated to natural burial and legally committed to the act of environmental conservation. This cemetery is either part of an existing cemetery that already holds the land in legal dedication to cemetery purposes via a government’s cemetery statues, or it is newly zoned cemetery land with formal conservation easements attached.

The latter adds the impacts of burial and graveside services to a landscape in exchange for the income stream from cemetery revenue that will be used to deliver cemetery services and conserve the land. Favored by the mission-oriented ideals of natural burial advocates like Memorial Ecosystems’ founder Dr. Billy Campbell and Greensprings Natural Cemetery founder Mary Woodsen, the cemetery may include the partnership of a private (or public) landowner who holds title and puts the land into trust, perhaps even contracting with a conservation group for ecological management and/or oversight. This type of project is generally run by a board of directors and has a land management plan that includes written guidelines about who or what can be buried, when, where, and how. When the demographics support a new start-up, and when existing cemetery businesses are not harmed by the loss of business, positive uses for this scheme include urban brownfields rehabilitation, logged lands restoration, and the preservation of sensitive ecological areas that won’t be harmed by the increased human impact.

The former—the existing cemetery with a landscape to be transitioned to sustainability—is also in need of the income to survive, and conservation sections are an important part of the Living Cemetery style. Many existing cemeteries are in a position to create near-instant habitat, and they’ve already got the cemetery business and facility infrastructure to support it. Operating cemeteries often either have excess land (and once grave reuse is legal, they’ll have a lot more!), or they may have plans to expand into neighboring land. An existing cemetery can create a conservation burial area just like any other landowner, but with less legal hassle and with current contracts, personnel, and customer support infrastructure already in place. In either case, however, conserved land is conserved land—and the environment is often better off for it.

Making the Business Case—Why Not?
The commercial potential for operating a natural burial ground is becoming interesting to entrepreneurs who see a market opening, and this includes environmental groups looking for income streams to support their activities. Cemeteries, whether for public good or private gain, are still businesses with significant financial requirements, and starting from scratch may not be as sustainable as converting an existing cemetery, especially once all the other cemeteries nearby get into the act. The main difference between normal business operations and the end-of-life business is that in one of them you get repeat customers; in the other, you don’t. Nobody is going to like natural burial so much that they come back and do it again. Consequently, demographics—how many people live nearby, and how many of those are dying—are everything in the cemetery business, and newbies should proceed with caution.

A brand-new conservation start-up that’s surrounded on all sides by too many cemeteries is going to have a hard row to hoe; within 10–20 years, the competition will be doing “natural” too, and the newcomer will need a better business plan, unless the population growth and type supports it, or the marketing is very well done. Starting up a new cemetery will also bring new
The urgent creativity of the 21st century is rising to the challenges we face from overpopulation, peak oil, and climate change, and solutions for our bodies’ final end that support the values of greenspace preservation, carbon sequestration, habitat creation, nutrient cycling, and resource use reduction are becoming apparent.


Typically, about 2 million people die annually in the US. The post-World War II Baby Boom generation began to turn 60 in 2006, creating a bulge in the upcoming death demographic that will put over 20% of Americans over age 65 by 2030. That means that more of us will be hitting the end of the line for the next 15–30 years, which will cause our society to focus more intently on how we die, and what we do as we do it, than ever before.

Over $20 billion dollars a year is spent on death management in the US, much of it for industrial burial packaging products (caskets and liners), cemetery land purchase, and maintenance. Industry estimates place funeral sales at $11 billion annually, but this does not include cemetery fees and burial plot sales. The true environmental costs of aging cemeteries have not yet been factored into many equations, and city planners, corporate cemetery stockholders, and their insurers are only now beginning to appreciate the expense accruing as they run out of space and are faced with tighter regulatory controls on the burial and discharge of pollutants and non-degradables into the environment.

When we change our purchasing behavior, we send a signal to the industries we want to change. Asking that our caskets be free of toxins and pollutants, that our cemeteries get creative and end the use of liners and nonsustainable land management practices, or that our communities follow the lead of the UK and provide low-cost burial options as the public utility that the service rightfully could be, are not unreasonable requests.

The urgent creativity of the 21st century is rising to the challenges we face from overpopulation, peak oil, and climate change, and solutions
for our bodies’ final end that support the values of greenspace preservation, carbon sequestration, habitat creation, nutrient cycling, and resource use reduction are becoming apparent. Understanding the importance of forests and the usefulness of trees in the form of ecosystem services, along with the power of the soil to transform natural elements and return them to utility for the web of life itself, is becoming more widespread every year. The demand to “Leave No Trace” is increasing. On the heels of these developments, and the emergence of a consumer who is looking for “a clean death” to accompany a conscious, low-environmental-impact life, natural burial is an exciting possibility. It was once thought impossible, but now is considered by many in the industry as just a matter of time, bringing win-win scenarios for individuals, communities, and our wildlife friends at every turn.

Taking the Natural Step
This article has shown that natural burial is not a dream of the future but is happening here and now; natural burial grounds are possible today. The community of people who look ahead is increasingly putting its money where its mouth is, and now we’re putting our bodies there, too. It’s hard to do the daily things right, every day, all the time. No one can. But dying is a once-in-a-lifetime experience, and each of us can take the time to plan it out and do it right.

Planting forests is a lot of work, and every community needs at least one natural burial sanctuary, in our opinion. Check out your local arboretum; are they strapped for cash? Does your city...
have an urban growth boundary or brownfield areas that could use some healthy greenspace? Is there a pioneer cemetery nearby with room for a Bioneer or two? Is it possible that taking responsibility for our own deaths may make us more aware of the unintended deaths we bring to others throughout the webs of life? And could we, in managing our own ends properly and in advance, plan an exit that reduces, or even reverses, the toll our lives have taken on natural resource systems up to this point?

It’s an exciting thought. The emerging natural burial movement offers unexpected and overlooked opportunities to make choices that just might nudge our culture in another direction, if we make the time to do what no one else can do for us—plan ahead to exit stage left, and do it right.

All that’s left to make the leap is you.