

## Ecology of the Inner Landscape: **Green Burial**

*Walking up the steep grade* to the ‘jumping off place’ reminds me... breathe. The air is crisp. I draw in deeply filling my lungs and continue up, up, up to where the masters rest. The Oak Tree is our graveyard, home to what remains of 27 members of our family and friends, now mere dust. From here I can see the Earth’s curve, an embrace that summons the wanderer a jillion miles out across the sea to fall off the Earth’s edge or to fall into eternity.

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My work with the Wo/Men’s Alliance for Medical Marijuana (WAMM) has provided an extraordinary opportunity. WAMM is the longest running medical marijuana collective in the nation, offering medicine to seriously ill patients on a donation basis. It is the strand that has led me to care for people who are facing death. 201 WAMM members have died since our inception in 1993. That is more than one each month. I have been at the deathbed of a majority, most of whom wanted to die at home; hence, the genesis of our new sister non-profit organization, Raha Kudo, the Design for Dying Project, our volunteer group of caregivers who assist dying people as they design their own path. Every aspect is considered, from in-home care during the dying process, the death, the wake, the funeral and the final resting place.

Every step we take, every joy, every hardship is part of this preparation. This is the training ground for the becoming of the master. As we long to be touched by love in every part of our human experience, it is no less so in death. When the body lies in state it is also true that we may enter into a profound interconnectedness with our loved ones. Here I have the great fortune to serve the ailing temple body when sick and the opportunity to anoint the empty temple body after death.

Our community is a teaching ground... at times, a playground. A place to attend to the work inside, then to participate in a break loose gambol, weaving the difficulties of dealing with illness into the gratefulness that comes when suffering is eased. We help each other. We improvise. We lean into every utterance and we listen deeply to the silence. And so we are instructed in the ways that are unknown to those of us who are not yet “dying.” We are being trained so that we are better able to serve and so that we may do well when we actually must face our own death.

And when our service to the living body is complete we must consider what to do with what remains. It begins with quiet and tranquility. It includes the gentlest movement of the body, its alignment, tending to the eyes, the mouth, to the fluids, all of this to achieve a natural state of peace. I bathe, anoint and dress our friends. On occasion I am left instructions that include the most intimate details. Then the room is arranged. I may hang cloth on the walls; curtain the windows, making adjustments to the space, always with minimal disturbance to the environment. The body is framed with a halo of flowers complemented by incense and candles. Music is carefully chosen and may be what was playing at the time of death. It includes every genre; Gregorian

chants, Zen meditations, jazz, metal, Klezmer, gospel, classical, an Irish jig, R & B, ruds, punk, funk, world fusion, flamenco, there is no limit to the range of composition. This setting inspires a communion of emotion from the depths of loss that is often filled with both tears and laughter. When prayers and the poetry have been uttered, when relations have said goodbye, after each visitor has shared stories and asked for forgiveness, when ceremony and smudging have ended, interment takes place. Each of us unique and remarkable, leaves behind some measure of our existence when we die.

With baby boomers launching the back-to-the-land movement a sort of extended version has emerged in the form of green burial. Not everyone may find this appealing. Yet, the modern practice of embalming, encasing and interring is a relatively new practice. When we think of green burials we are really talking about embracing age-old practices in what may be considered as expanding our ecological role, returning to Earth that we once walked on. But even the most environmentally astute person may be unaware of the impact that a dead body has on the environment. What ever you may perceive as the “beginning of the human race,” presently around 6.75 billion of us are scurrying over the surface of our planet right now. It will take a lot of space and a quick turn around in decomposition to make room for all of us. But most of us will end up beneath it eventually. What ever you might believe happens after death, rest assured that a body, in some way or other, must be disposed of.

Each year \$11 billion is spent in the funeral industry and green burial makes up just a fraction of that market. To maintain a cemetery requires continued reli-



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Photo by David Jay Brown

ance on heavy equipment and the fuel to run it; the backhoes, the lawn mowers, tree trimmers, hedgers and the weed eaters. Add to that the use of fertilizers and herbicides and you have a very personal donation to the creation of toxic waste. Each year Americans bury 827,060 gallons of embalming fluid, including formaldehyde, 30-plus million board feet of hardwoods, 209 million pounds of steel for

caskets and vaults, 3.3 billion pounds of reinforced concrete in those vaults and 5.4 million pounds of copper, lead and bronze to reinforce and decorate the caskets. It may take up to sixty years for an embalmed body in a coffin to decompose. Investigators at the National Cancer Institute have found that embalmers and anatomists who are exposed daily to formaldehyde are at increased risk for leukemia and brain cancer. It is listed by the International Agency for Research on Cancer as a known human carcinogen. The EPA lists formaldehyde as a suspected carcinogen and the Occupational Health and Safety Administration has established a permissible exposure limit averaged over an 8-hour shift of 0.75 parts per million.

In the United States cremation is a cost-efficient alternative and often thought to be “green.” But is it really? Of the 1,000 crematoria here in the U.S., collectively 500,000 cremations are conducted each year. But compared to the average funeral ranging from \$5,000 to \$10,000 the investment of \$500 is an attraction often motivated by finances. Harmful chemicals including hydrocarbons and mercury vapor are released into the atmosphere from the coffins and dental fillings when a body is ignited--including hydrocarbons and mercury vapor. The average burning time in a crematorium is 5 hours at 1600 degrees Fahrenheit. A study conducted by the San Francisco

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Public Works Department in 1999 noted in their area crematoria is the third highest contributor of mercury. There are no health codes that necessitate embalming and the law never routinely requires it. In addition, there is no law that obliges the use of a casket. Still, any decision must be weighed against an individual's personal or religious beliefs.

Planning to meet the responsibility that is required when death comes may be challenging and often families are unprepared. There are institutions designed to provide direction in such cases. An inquiry into a memorial society in your area will give literature and information regarding what they offer and their membership fees.

Once we decide that we want to be buried green we unearth a tangle of choices. A Green Burial is a way to ensure the preservation of open space. While there are over 200 green cemeteries in Great Britain, in the United States there are 6,000 cemeteries, but only 6 are registered as green. Still, in America there is a burgeoning movement to deinstitutionalize death, encouraging families to become involved. Where it is allowed, loved ones are decorating the caskets and digging the graves themselves. Should they choose not to embalm, the body might be wrapped in a simple, natural fiber shroud made of linen, silk or ethnic textiles. Then placed in a biodegradable coffin made from pine, wicker, cardboard, reeds or bamboo and then decorated with bumper stickers, painted handprints, artwork, poetry, and photos. Often bits of memorabilia are included inside the coffin to accompany on the journey; one that reflects a modern version of the tombs of ancient Egypt.

Since green burial eliminates embalming, caskets and tombs, it is often presented as an inexpensive alternative to conventional burial. As the green burial movement progresses so does a range of options. A Swedish environmental biologist recommends freeze-drying. The process takes a few steps: freeze, followed by an immersion in liquid nitrogen, dry, crumble into an odorless powder, and place into a biodegradable coffin and voila! up to 65 pounds of pure organic matter is produced in just a few months. In the drollest sense, crematoria may

someday be replaced with "compostoria" where dead bodies are turned into organic mulch and buried in economical green coffins that quickly degrade.

Memorial preserves may be in open land or in underwater artificial reefs. The reef sites are made from concrete into which the cremated ashes are mixed. Hopefully concrete is sealed so as not to leak toxins into the ocean. Such areas are marked so that divers who wish can visit the gravesite. They can cost between \$900 and \$3,000 before the cost of cremation is included. Making these choices help to keep land undeveloped. Such areas include forests, grasslands, meadowlands, prairies and other natural areas. Many of these area locales have no gravesite markers and rely on GPS coordinates as the only means of guiding loved ones to graves.

Three types of cemeteries accommodate green burials: Conservation burial grounds are established as a conservation partner, with an easement on the property. These are operated, according to the principles of restoration ecology. Natural burial ground must engage in both land stewardship and restoration planning. While this type of cemetery does not have a conservation easement, it does have deed restrictions or a covenant that ensures its operation as a green cemetery. Hybrid burial grounds accommodate both conventional and green burial. They incorporate a natural burial ground with sustainable landscape design and have the option to simply allow for vaultless burial.

Should one choose to handle death privately there are precautions that must be taken. Observing all state and local regulations is necessary and while they are not complex, a failure to comply could be troublesome. There are only six states that limit the right of families to control the process; they are, Indiana, Louisiana, Nebraska, New York, Connecticut, and Michigan. While Michigan has a law that allows such participation on the part of families or loved ones, the department of health is uncooperative and blocks access.

There are necessary considerations that must be followed in any death. The following suggests what you should know if you do not hire a funeral director or

don't defer to a memorial society. A death certificate states the cause of death. It must be signed by a doctor and is filed in the county or district where death occurs. In no state is it required to embalm. Dry ice or refrigeration can be used in lieu of embalming. Under special circumstances, however it may be necessary to embalm according to state law, especially if a body lay undiscovered for a time. A burial permit may be required when a burial takes place outside the county or city where death occurs. And additional permits are required to inter a body or ashes. If no decision is made as to the final resting place of ashes no permit is required. The top of a coffin must be at least 3 feet below the soil surface. The site chosen to bury must always be 150 feet or more from a water supply and never near electrical or power sources or lines. Before you move a body be certain that you possess a permit or have some form of medical permission. The local coroner or medical examiner can provide a permit-to-cremate if it is needed and usually only a modest fee is charged. It is legal to keep a body lying in state at home for up to approximately three days. Heat and light are contributing factors to the length of time for an in-home wake. Under extremely hot conditions dry ice may be used beneath the body to delay decomposition.

These days many people are planning their own funerals. They include their favorite music, the readings they would like and some even write their own eulogies. One evening at a WAMM meeting I asked members if they were interested in attempting to write theirs. Most had no interest, but about 15 people chose to do so. What came from these narratives was amazing and informative. Some patients became deeply involved in the process. Some shunned the notion of the grim reaper; engaging instead in a courtship with death, embracing her as lover. In the poetry of perspective they designed their passing. Through such awareness we may become acquainted with the unknown... as all of us shall someday enter into this realm of becoming masters.

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 An embrace that summons the wanderer  
 a jillion miles out across the sea  
 to fall off the earth's edge or to fall into eternity.  
 I can hear the rumble of the ocean's break upon the shore,  
 I can hear a roaring inside  
 That echoes the surf at the Landing where the waves  
 never forget their way back  
 And I can hear the words of the masters...  
 They tell me to be quiet...to listen  
 To the ecology of an inner landscape  
 The exploration of the fabric of the space  
 between nations,  
 between atoms and quarks, between us,  
 It is unexplored,  
 It is the unknown  
 The jumping off place  
 Its immensity should silence me, but I can't stop wondering  
 What is it that I do not know  
 Everything, they say, nothing

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 be replaced with compostoria where  
 dead bodies are turned into organic mulch  
 and buried in economical green coffins  
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References for this article are available on  
 the MAPS Web site: [www.maps.org](http://www.maps.org)