Greening the funeral business

Natural burials claim to offer cheaper and more environmentally friendly end-of-life choices. This article discusses the main options for green burials and looks at some of the livelihoods created from this strand of the funeral business.

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Benjamin Franklin said "In this world nothing can be said to be certain except death and taxes". It is a sentiment that has the sorry ring of truth for most of us, although for the more entrepreneurially-minded it would suggest that a business in funeral services represents a steady earner. The statistics bear this out, with the average cost of a funeral in the UK having risen by around 71 per cent in recent years to over £3,200, and that is before flowers, food and even a gravestone. The numbers vary widely across the country too with the average funeral bill in London standing at over £6,000.[1] But is it possible to be an ethical, environmentally focused funeral business and remain viable? Managers of a growing number of ethical coffin manufacturers and natural burial sites would say the answer is an emphatic 'yes'. With spiralling costs and an increasing disconnection with the rites and rituals of a conventional funeral, many people are turning to 'woodland' or 'green' burials, which claim to offer cheaper, more environmentally friendly end-of-life choices in an increasingly individualised marketplace.

Do we need 'green' funeral options?

"Ashes to ashes, dust to dust"… surely being laid to rest and returned to the earth is one of the most natural processes we participate in during (and beyond) our lifetime? Some in the industry like to preserve this myth but from the minute the funeral machine gets underway, decisions with environmental and ecological implications are being made, knowingly or unknowingly, by the family.

Starting with treatment of the body after death, human bodies will remain in a reasonable condition for around 24 hours, and up to 2 and 3 weeks with good refrigeration depending on the environment around the remains. Bodies will often need to be preserved beyond this length of time in order for families and friends to view the deceased, or for an open casket at the funeral. Families are often advised that embalming is necessary in order to maintain a body for a period of viewing or for an open casket funeral, but refrigeration can do the job just as well and in a much less invasive way. Embalming has become more common in the UK and involves draining the body of blood and several organs, before pumping the body with a toxic cocktail of preservatives. It has been reported that formaldehyde has been measured in high concentrations in seepage water around graves[2] in the UK although a report commissioned by the Environment Agency reviewed existing

A family led funeral at the South Downs Natural Burial Site, at the Sustainability Centre, East Meon.
Photo: Al Blake

literature on the subject and concluded that there was little risk from burial leachate into both soil and groundwater.[3] However it appears that there is a lack of research in this area and this may be more a case of *'no evidence of risk'*, rather than *'evidence of no risk'*.

Collating statistics is difficult and does not appear to have happened in the UK, but for the US it has been estimated that each year, 22,500 cemeteries across the country bury approximately:

- 827,060 gallons of embalming fluid
- 90,272 tons of steel (for caskets)
- 2,700 tons of copper and bronze (for caskets)
- 30-plus million board feet of hardwoods (for caskets)
- 1,636,000 tons of reinforced concrete (for vaults)
- 4,000 tons of steel (for vaults)[4]

As well as bodies, a host of other substances enter the ground during burial – clothes which may be natural fibres or synthetics, and coffins which could be made from threatened tree species, although are more likely to be a veneered chipboard made from wood and glues. Coffin handles are often made from plastic and electroplated to give a brass or metal effect finish. As a result, heavy metals can leach into the soil and plastics or synthetic materials can remain in the soil for hundreds or thousands of years.

Similarly, cremation will use the same products and processes to preserve and display the body, all of which will then be burned rather than buried, and released into the atmosphere. In fact, mercury from dental fillings which are vaporised in crematoria have been blamed for up to 16% of UK airborne mercury emissions, and many UK crematoria are currently fitting filters in order to meet government targets of a 50% reduction in emissions. As well as this, there is the obvious energy use required for the process. A cremation furnace will be heated to at least 750 degrees C and a body can take from 90 minutes to three hours to cremate, depending on the size of the person.

A greener way to go

Green burials, also called woodland or natural burials, have gained popularity in recent years and offer an alternative to the conventional cemetery burial or cremation. They can be marketed as more environmentally friendly, giving more choice to the families of the deceased and as a cheaper, no-fuss alternative.

The first natural burial ground opened in Cumbria in 1993 as an extension to an existing Victorian cemetery and the number of sites has since grown rapidly, now with over 300 across the country. The majority of these are extensions to established local authority cemeteries but there are also a significant and growing number of privately managed natural burial grounds, run by individuals, businesses and charities. Sites can be existing woodland or wildflower meadows, converted farmland or other private land which will be managed for wildlife in some way, and typically require burials to be in biodegradable coffins with un-embalmed bodies. In place of a gravestone, sites may allow a small ground marker of wood or stone, or planting of a memorial tree either on or near the grave. Conventional chipboard coffins will often not be accepted at natural burial grounds, in favour of ostensibly greener alternatives such as cardboard, bamboo or woven willow, which will not introduce the same pollutants into the soil.

Natural burial is one of the fastest growing areas of green commerce and this has naturally encouraged some businesses with little interest in genuine environmental ethics but who see an opportunity for profit. Rosie Inman-Cook of the Natural Death Centre and Association of Natural Burial Grounds says that many of the original green burial sites were set up by people who wanted to do something better for the bereaved, but lately big corporations and players from other, existing sectors of the funeral industry who don't care what they put in the ground are getting in on what they see as a cash cow. As Rosie also points out though, there are plenty of good natural burial sites which do not have environmental concerns as their main priority, and don't claim to. Natural burial can be many things to many people, and is not necessarily synonymous with an overriding commitment to minimising environmental impact. They may be chosen because the venue feels more pleasant and peaceful than a traditional cemetery, and their goal may simply be to offer a joyful and personalised celebration of a loved one's life. If environmental ethics is a high priority, it is important to be clear about this from the start and, Rosie believes, it will quickly become apparent if the venue is not up to muster.

A willow coffin and coffin-sidecar as available from WinterWillow funeral service.

Photo: www.winterwillow.org.uk

Coffin criteria

It is a similar story with coffins – not all eco coffins are created equal, but for some consumers that just doesn't matter. They like the look of willow or the affordability of cardboard, and anything else is a bonus. Again, the key is separating the providers with a genuine passion for offering an environmentally conscious option from those seeing the 'green' label as an opportunity to advertise a premium product with a price tag to match. In a 2010 edition of *The Funeral Director* magazine, the Environmental Consultant of the National Association of Funeral Directors reported that cardboard coffins can be more environmentally costly than the common chipboard/wood veneer alternative as a result of the toxic soup in which wood chips are processed in to cardboard: "the recycled content of the veneered chipboard that is made into coffins means they use fewer chemicals, glues, energy and water than cardboard coffins".[5] This sort of comment throws up a perfect example of the need to dig deeper. Whilst a cynical person may question the motives behind the NAFD statement against cardboard coffins, perhaps cardboard coffin manufacturers are not all working to the same standards. But identifying those for whom their environmental impact is a significant driver behind their business should not be too hard. Greenfield Creations have been producing cardboard coffins since 1990 and is an example of a business pursuing the so-called triple bottom line: people, planet and profit. Will Hunneybel, Managing Director of Greenfield Creations responded to the NAFD piece with a detailed account of the manufacturing process of his own product.[6] These coffins are produced from a minimum of 70% post consumer waste all sourced from local mills and new fibres only from forest certified sources, the cardboard is manufactured less than 80 miles away from their Essex base, minimising transportation impacts (unlike chipboard which can be imported from across the world) and uses only cornstarch glues in the construction process.

Similarly, willow coffins can come from a variety of sources and manufacturing methods. Completed coffins can be imported from eastern Europe or as far away as

China, and will often be made using a simple weave which allows them to be produced rapidly and by relatively low skilled workers. There are some UK-based willow coffin producers and we at WinterWillow manufacture all of our coffins locally. We are a social enterprise based in Cambridge, UK which employs and trains people with a history of homelessness to hand-weave willow coffins. We teach a coffin design which is more intricate and, we think, more attractive as well as providing more rigidity in the finished product. Learning to weave one of our coffins to a saleable standard takes about 6 months so the people involved have to show a commitment to the project. Our weavers also run regular basket weaving sessions for anyone using the homelessness services at our centre. A small project such as weaving a basket which keeps people busy and takes their minds off other things can often be the start of the longer process towards breaking away from destructive habits, acquiring skills and self confidence, and getting back to regular employment. The process can also be therapeutic for bereaved families, as they can see that their choices are having an immediate and positive impact on people's lives. Some families have come down to our workshop to meet the weavers and weave part of the coffin for themselves. It's not for everyone but it can be a wonderful way to say goodbye to a loved one.

Future alternatives?

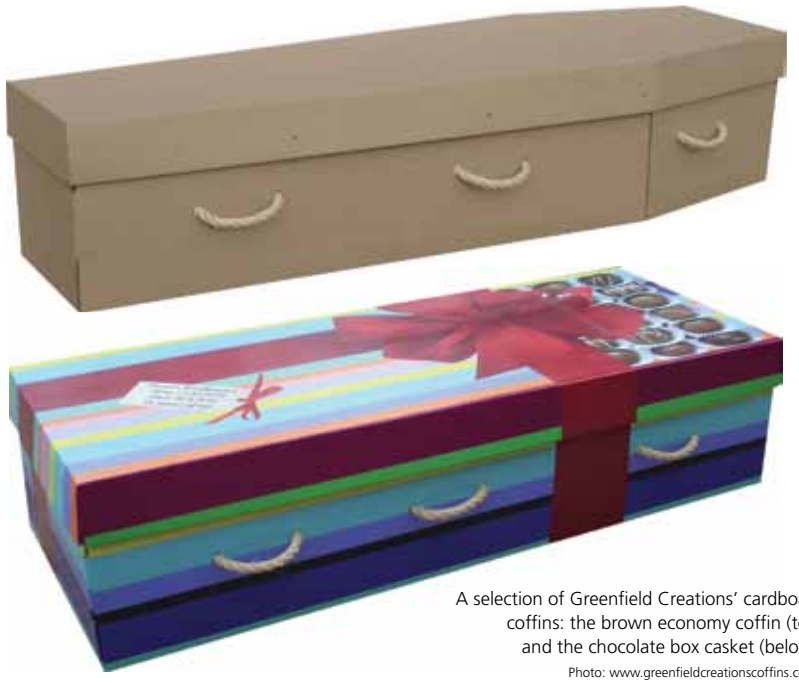
These methods of disposal are not currently licensed in the UK although they are in use in other parts of the world and may be coming soon.

Liquefaction - Scottish manufacturers, Resomation Ltd, have shipped to several countries around the world including the USA. They say that this technique produces a third less greenhouse gas than cremation, uses a seventh of the energy, and allows for the complete separation of dental amalgam for safe disposal of any mercury, although they did not respond to our request to provide supporting evidence for any of these claims. The process works by submerging the body in a heated solution of water and potassium hydroxide and pressurised for up to three hours. Body tissue is dissolved and the resulting liquid can be poured into the municipal water system. Any artificial joints or implants are removed and the bones are then processed in a "cremulator", the same machine that is used to crush bone fragments following cremation.

Promession: This is the brain child of Susanne Wiigh-Mäsak at Promessa Organic AB of Sweden and involves freezing a body with liquid nitrogen and then vibrating it until it fragments. The fragmented remains are then dried and further refined, before being passed through filters to remove metals such as dental fillings and any implants. The remains are then poured into a square biodegradable coffin for shallow burial. Susanne said: "It only takes two to three weeks before the kitchen and garden waste is soil so this is what inspired me to really see if not only the kitchen and garden waste but also everything organic, including us, could be treated this way to really become soil". Remains will have composted in 6–12 months.

Thinking ahead

So the good news is that first, there are people offering genuinely green funeral options, and second, there are associated livelihoods. It is important to do your



A selection of Greenfield Creations' cardboard coffins: the brown economy coffin (top) and the chocolate box casket (below).
Photo: www.greenfieldcreationscoffins.co.uk

homework and sort out these providers from those just looking to make a fast buck. All those involved in the industry agree, the most important thing is to think about your wishes in plenty of time, and share them with those people who need to know so that when the time comes, your loved ones can be confident that they are honouring your commitment to a truly green funeral.

More information on natural burials and a list of burial sites which have signed up to the Association of Natural Burial Grounds' Code of Conduct is at http://www.naturaldeath.org.uk/

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