

wood and particle board (chipboard) coffins with hardwood veneers account for 10–15% of sales, and fiberglass and alternative materials such as woven fiber make up the rest. In Australia 85–90% of coffins are solid wood and particle board.

Most traditional caskets in the UK are made from chipboard covered in a thin veneer. Handles are usually plastic designed to look like brass. Chipboard requires glue to stick the wood particles together. Some glues that are used, such as those that contain formaldehyde, are feared to cause pollution when they are burned during cremation or when degrading in the ground. However, not all engineered wood products are produced using formaldehyde glues.

Caskets and coffins are often manufactured using exotic and even endangered species of wood, and are designed to prevent decomposition. While there are generally no restrictions on the type of coffin used, most sites encourage the use of environmentally friendly coffins made from materials like cane, bamboo, wicker or fiberboard.^{[6][7][8][9][10]} A weight bearing shroud is another option.^[11]

4 Memorialization

Natural burial grounds employ a variety of methods of memorialization. Families that bury their loved ones in nature preserves can record the GPS coordinates of the location where they are buried, without using physical markers.^[7] Some natural burial sites use flat wooden plaques, or a name written on a natural rock. Many families plant trees, or other native plants near the grave to provide a living memorial.

5 Environmental issues with conventional burial

Each year, 22,500 cemeteries across the United States bury approximately:^[11]

- 30 million board feet (70,000 m³) of hardwood caskets
- 90,272 tons of steel caskets
- 14,000 tons of steel vaults
- 2,700 tons of copper and bronze caskets
- 1,636,000 tons of reinforced concrete vaults
- 827,060 US gallons (3,130 m³) of embalming fluid, which usually includes formaldehyde.^[12]

When formaldehyde is used for embalming, it breaks down, and the chemicals released into the ground after

burial and ensuing decomposition are inert. The problems with the use of formaldehyde and its constituent components in natural burial are the exposure of mortuary workers to it^[13] and the destruction of the decomposer microbes necessary for breakdown of the body in the soil.^[14]

6 History

Natural burial has been practiced for thousands of years, but has been interrupted in modern times by new methods such as vaults, liners, embalming, and mausoleums that mitigate the decomposition process. In the late 19th century Sir Francis Seymour Hayden proposed “earth to earth burial” in a pamphlet of the same name, as an alternative to both cremation and the slow putrefaction of encased corpses.

6.1 United Kingdom

The Association of Natural Burial Grounds (ANBG) was established by The Natural Death Centre charity in 1994. It aims to help people to establish sites, to provide guidance to natural burial ground operators, to represent its members, and to provide a Code of Conduct for members. The NDC also publishes *The Natural Death Handbook*.^[15]

The first woodland burial ground in the UK was created in 1993 at Carlisle Cemetery and is called *The Woodland Burial*.^[16] Nearly 300 dedicated natural burial grounds have been created in the UK.

6.2 Canada

The Natural Burial Co-operative provides a Directory of Natural Burial Grounds in Canada^[17]

The Natural Burial Association (NBA) is an independent, non-profit organization established in 2005 to promote natural burial in Canada and to encourage the establishment of natural burial sites there.^[18]

6.3 New Zealand

New Zealand’s Natural Burial organisation was started in 1999 by Mark Blackham.^[19] It is a not-for-profit organization that advocates for natural cemeteries, promotes the concept to the public, and certifies cemeteries, funeral directors and caskets for use in participating cemeteries.^[20]

The first natural cemetery in New Zealand was established in 2008 in the capital, Wellington,^[21] as a partnership between the Wellington City Council and Natural Burials. It is the nation’s biggest natural cemetery, covering approx 2 hectares, and home to 120 burials (April

2015).

More natural cemeteries have since been set up by between Natural Burials and the council authorities in [New Plymouth](#) in 2011,^[22] [Otaki](#) in 2012,^[23] and [Marlborough](#) in 2014.^[24]

Other councils have set up small natural burial zones: [Marsden Valley](#) in 2011, [Motueka](#) in 2012,^[25] and [Hamilton](#) in 2014.^[26] Although these have all based on the approach used by Natural Burials, they have not been certified by the organisation.

6.4 United States

Billy Campbell, a rural doctor and a pioneer of the green burial movement in the USA, opened the first modern “green cemetery” in [North America](#) at the [Ramsey Creek Preserve](#) in [South Carolina](#) in 1998.

The Green Burial Council (GBC) is an independent, tax-exempt, nonprofit organization that aims to encourage sustainability in the interment industry and to use burial as a means of ecological restoration and landscape conservation. Founded in 2005, the GBC has been stewarded by individuals representing the environmental/conservation community, consumer organizations, academia, the deathcare industry, and such organizations and institutions as [The Nature Conservancy](#), [The Trust for Public Land](#), [AARP](#), and the [University of Colorado](#). The organization established the nation’s first certifiable standards for cemeteries, funeral providers, burial product manufacturers, and cremation facilities. As of 2013, there are a total of 37 burial grounds certified by the Green Burial Council in 23 states and [British Columbia](#). A cemetery becomes certified by demonstrating compliance with stringent established standards for a given category. The aforementioned [Ramsey Creek Preserve](#) is certified by the GBC. Conventional funeral providers in thirty-nine states now offer the burial package approved by the Green Burial Council.

Most of the 32-acre (130,000 m²) [Fernwood Burial Ground](#), adjacent to the [Golden Gate National Recreation Area](#) in [Mill Valley](#), [California](#), is set aside for natural burial, with no tombstones or caskets.

The [Trust for Natural Legacies \(TSL\)](#)^[27] is a 501(c)3 non-profit organization. It is both a traditional land trust working to establish cemetery nature preserves and is also establishing itself as an umbrella organization for natural burial cemeteries, enabling them to network directly with each other, share best practices and engage in continuing professional education. This is similar to what the [Land Trust Alliance](#) offers to nature preserves and the [International Cemetery, Cremation & Funeral Association](#) offers to cemeteries. TNL is based in [Minneapolis, MN](#) and operates in the midwestern states of [Minnesota](#), [Wisconsin](#), [Illinois](#), [Iowa](#), and [Michigan](#).

[Foxfield Preserve](#), adjacent to [The Wilderness Center’s](#)

headquarters near [Wilmot, Ohio](#), was the first nature preserve cemetery in the US to be operated by a nonprofit conservation organization. Naturalists from [The Wilderness Center](#) have restored this formerly agricultural land to native prairie grasses and wildflowers. A section has also been reforested in native hardwood trees.^[28]

[Circle Cemetery](#), located at [Circle Sanctuary Nature Preserve](#) in southwestern [Wisconsin](#), has offered burial of cremated remains and non-embalmed bodies since 1995. It is operated by [Circle Sanctuary](#), a Wiccan church.^[29]

[Cedar Brook Burial Ground](#) in [Limington, Maine](#), the first green cemetery in [Maine](#) is located on a 150 acre tree farm thirty miles due west of [Portland](#). Within its borders sits the rock wall-enclosed [Joshua Small Cemetery](#), a tiny, historic graveyard whose dozen burials date back to the early 1800s.^[30]

[River View Cemetery](#),^[31] located in [Portland, Oregon](#) is registered with the [Green Burial Council](#) as a “hybrid” natural burial cemetery. Rather than restricting natural burials to just one specific section, [River View](#) permits natural burial in nearly every area of the cemetery, allowing those who wish to be interred in existing family plots without an outer burial container, without embalming, or even without a casket if they choose to do so.

[Steelmantown Cemetery](#) is the only cemetery in the State of [New Jersey](#) certified and approved by the [Green Burial Council](#) as a [Level 3 Natural Burial Ground](#).

7 Religion

Jewish law forbids embalming for traditional burials, which it considers to be desecration of the body. The body is ritually washed by select members of the Jewish community, wrapped in a muslin sheet, and placed in an all-wood casket. The casket must not have any metal in it, and it often has holes in the bottom to ensure that it and the cadaver rapidly decompose and return to the earth. Burial vaults are not used unless required by the cemetery. In [Israel](#), Jews are buried without a casket, in just the shroud.

Islamic law instructs that the deceased be washed and buried with only a wrapping of white cloth to preserve dignity. The cloth is sometimes perfumed, but as in natural burial, no chemical preservatives or embalming fluid are used, nor is there a burial vault, coffin or casket. Coffins are used, however, in countries such as the [UK](#), where the law requires it.

8 See also

- [Sky burial](#)
- [Promession](#)

- Jewish burial
- Islamic burial
- Hindu burial

9 References

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- [11] (Compiled from statistics by Casket and Funeral Association of America, Cremation Association of North America, Doric Inc., The Rainforest Action Network, and Mary Woodsen, Pre-Posthumous Society)
- [12] Embalming fluid chemically changes in the act of preserving the body and is not largely present as a fluid. This figure refers to embalming fluid before it is introduced to the body.
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10 External links

- The Natural Death Centre Charity, UK, Association of Natural Burial Grounds Registered Charity No: 1091396 @ndccharity an educational charity which sees death as a natural part of life. Founded in 1991, it is committed to supporting cultural change and is working towards a situation where all people are empowered in the process of dying, and organising a funeral.
- The Green Burial Council, an independent, non-profit organization operating in the US, Canada, and Australia
- The Centre for Natural Burial, resources for USA, Canada, UK and Europe
- *Grave Matters: A Journey Through the Modern Funeral Industry to a Natural Way of Burial*, a book on green burial

- *A Will for the Woods*, a documentary on green burials
- *CINDEA -- Canadian Integrative Network for Death Education and Alternatives*, a Canadian website on the pan-death movement and death midwifery, including resources in Canada, the US, and elsewhere

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