

Conservation Burial & Our Commitment to the Earth



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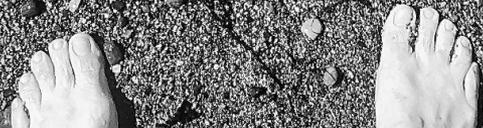
Death Happens...to all of us



Approaching Death with Intention

Is a life affirming act of love...

...a gift.



We Have a Choice

where death is



destroys open space forever

where life goes on



preserves natural ecosystem while supporting recreation, research, education, agriculture, forestry

Photo courtesy of Ramsey Creek Preserve, Westminster, SC



Conventional Burials in the US annually use:
20 million board feet of hardwoods,
1.6 million tons of concrete,
17K tons of copper & bronze, & 64.5K tons of steel.
Assuming a 50 year life cycle of a burial plot and
associated maintenance, a modern burial produces
250 pounds of carbon.



In addition, caskets and vaults leach iron, copper, lead, zinc, and cobalt into the ground. Also, in the US, approximately 4.3 million gallons of **embalming** fluid is used annually. This fluid is extremely toxic to the environment. It also exposes embalmers to significant health risks (Green Burial Council, 2020).

Flame-based Cremation: A single **flame-based cremation** uses 24,304 gallons of natural gas to maintain a temperature of 1900 degrees Fahrenheit for several hours in order to fully reduce the body to bone fragments. This process releases mercury, nitrogen oxides, and dioxins into the environment (Green Burial Council, 2020).



Alkaline Hydrolysis / Water-based cremation / Green Cremation / Aquamation

Every person who [chooses **aquamation**] instead of [flame-based cremation] would keep about 180 kilograms of carbon dioxide out of the atmosphere, according to the TNO report. That's about as much as the typical U.S. citizen is responsible for emitting in just a few days. - [Scientific American, 2017](#)



Natural Organic Reduction, AKA: Human Composting or Terramation: a tale of two NOR facilities



When your only son dies
and you carry out his wish
to be composted all the way
to the end...



NOR: The research showed that between .84 and 1.4 metric tons of carbon dioxide will be saved each time someone chooses **human composting**. - [Recompose FAQ](#)

ESSENTIAL STEPS OF NATURAL ORGANIC REDUCTION



LAYING-IN

The body of a deceased person is placed into a container and combined with organic materials such as straw or wood chips in a process often called a laying-in.



REDUCTION PROCESS

A steady supply of air is piped into the closed vessel for four to six weeks. Microorganisms break down organic compounds of the body. The vessel may be rotated at various points to make sure all elements are evenly dispersed.

PROCESSING

The bones are separated from the soil, pulverized, and then returned to the soil, which is usually sent through a grinder to bring it to a uniform size.



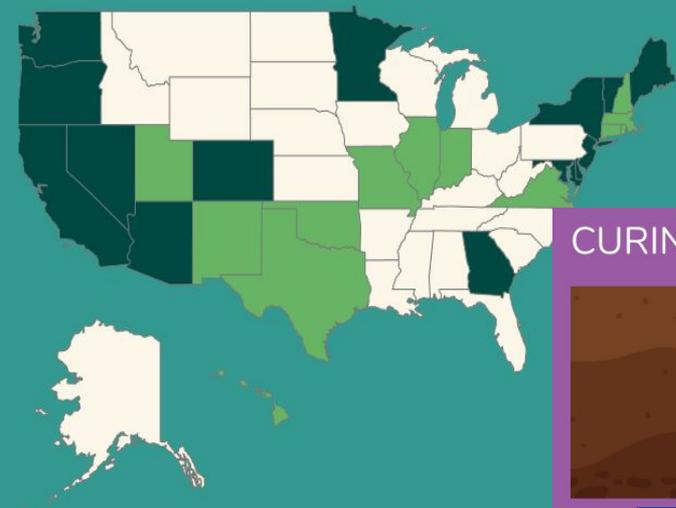
CURING

The bone fragments and soil are recombined and placed into a curing vessel (or back in the original vessel) for two to four weeks. During this time any remaining breakdown of materials happens and bone fragments become unrecognizable.



RESULT

At the end of the human composting process, approximately one cubic yard of safe and environmentally beneficial soil has been created.



■ Legal

■ Legislation Introduced

CANA

© CREMATION ASSOCIATION OF NORTH AMERICA



Now that you've been reduced: How to be a tree?

CAUTION: Your reduced remains - whether flame-based, water-based, or terra-based - will harm plant life if you don't amend.



Now that you are a tree, where would you want to grow?

BETTER PLACE  FORESTS

MASSACHUSETTS

Berkshires

Explore >

CONNECTICUT

Litchfield Hills

Explore >

ILLINOIS

Rock River

Explore >

MINNESOTA

St. Croix Valley

Explore >

ARIZONA

Flagstaff

Explore >

CALIFORNIA

Lake Arrowhead

Explore >

CALIFORNIA

Yosemite Gateway

Explore >

CALIFORNIA

Santa Cruz

Explore >

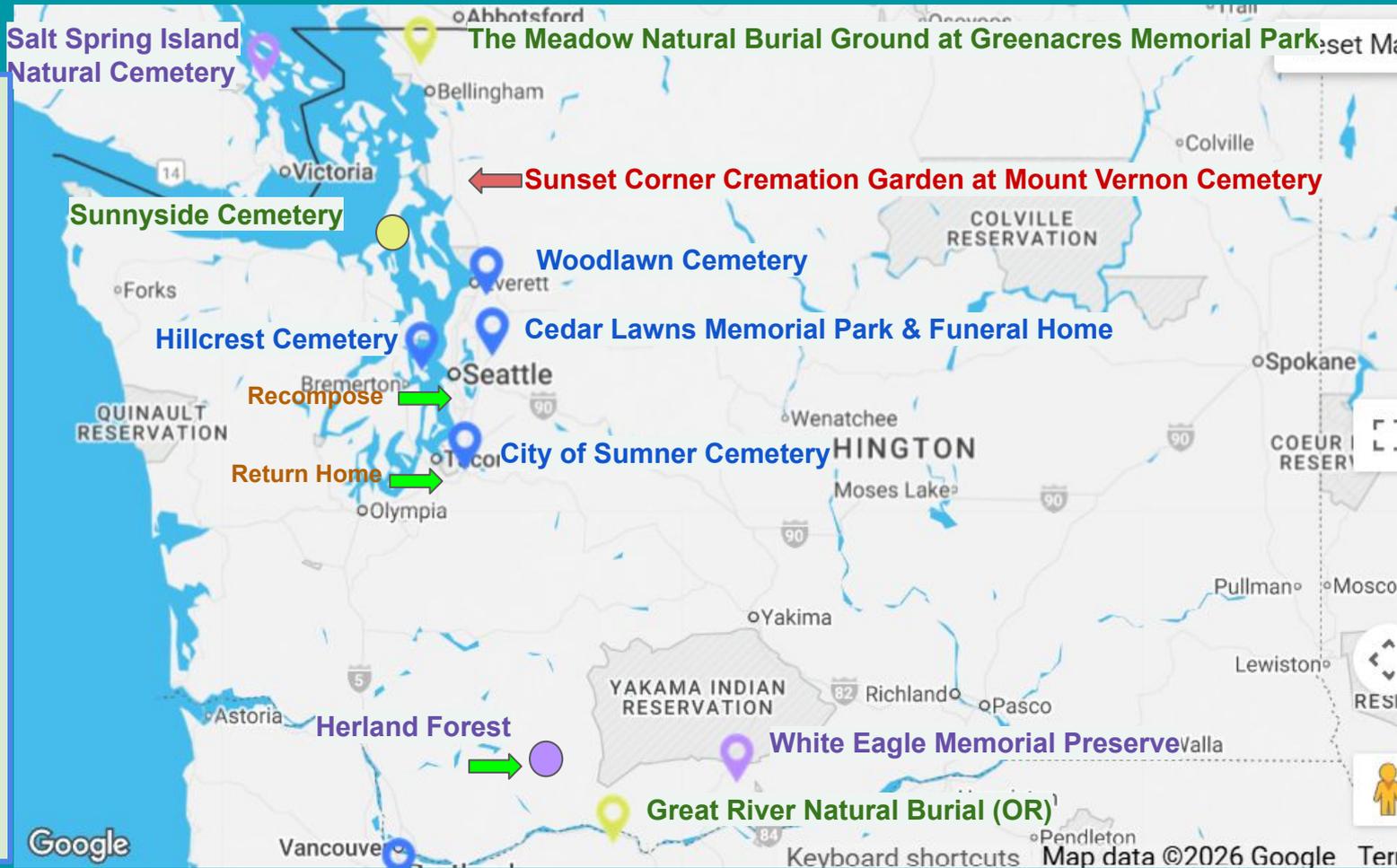
CALIFORNIA

Point Arena

Explore >

How important is the “where”?

- Hybrid Cemeteries ●
- Cremation Garden ➔
- N.O.R Facilities ➔
- Natural or Green Burial ●
- Conservation Burial ●



<https://www.greenburialcouncil.org/cemetery-provider-map/>

Natural or “Green” Burial at “the Meadow” at Green Acres in Ferndale, WA.



Anatomy of a Green Burial Grave

A GREENER WAY TO GO

From preparing bodies to burying them in natural settings, the green burial movement is attempting to make death more environmentally friendly and, in some ways, closer to the way it was in the past. A comparison:

STANDARD BURIAL

Burials use formaldehyde embalming and long-lasting caskets. They can easily cost \$10,000.

A standard grave site, often landscaped and well-maintained, features a large headstone made of granite or flat bronze. Fertilizer and pesticides are used on the grass.

Below ground, a casket made of steel, finished wood and copper rests inside a concrete vault capped by a thick concrete lid.

Source: Nathan Butler

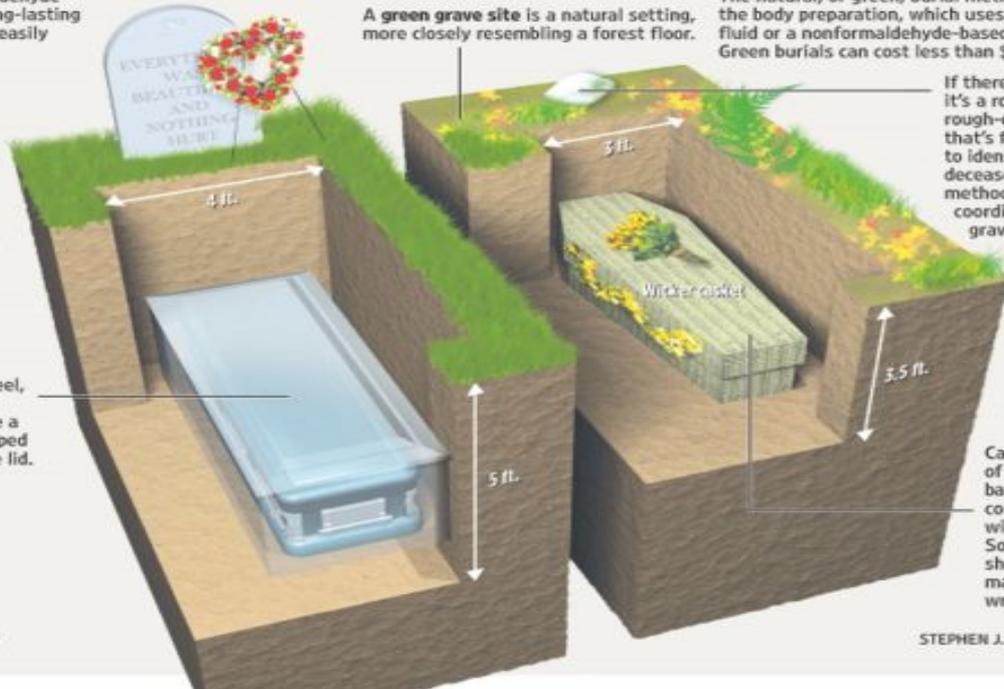
NATURAL BURIAL

The natural, or green, burial method starts with the body preparation, which uses no embalming fluid or a nonformaldehyde-based formula. Green burials can cost less than \$2,000.

If there's a headstone, it's a rock or a piece of rough-cut limestone that's flat on one side to identify the deceased. Some methods use GPS coordinates to spot a grave's location.

Caskets are made of wood, plywood, bamboo, cardboard, cornstarch or wicker. Sometimes a shroud or quilt may be used to wrap the body.

STEPHEN J. BEARD / The Star



Conservation Burial Ground

<https://www.conservationburialalliance.org/>

CBGs operate as **licensed cemeteries** on portions of protected lands that ensures double **protection in perpetuity**

Full-body burials that **use biodegradable caskets and shrouds** and that eliminate extraneous processes **sequester carbon** and contribute to **climate resiliency**

Public events, recreational activities, educational opportunities, life cycle celebrations all **strengthen community ties**

Active **restoration and management** of CBGs follow conservation **best practices** and strict conservation burial **standards**



Conserving Land for People: Sharing the Mission

In the end, conservation is all about **relationships**, and burial in a CBG strengthens relationships between **families, community members, donors, and land trusts**

Conservation burial grounds (CBGs) offer a **sound and sustainable strategy for protecting land** that can **deepen relationships between people and land trusts**



A wide-angle landscape photograph showing a river valley. In the foreground, a hillside with dry, yellowish-brown vegetation slopes down from the left. The middle ground features a river with several meanders and oxbow-like curves, flowing through a valley. The background consists of multiple layers of blue-toned mountains under a clear blue sky with some light clouds. The text "Why not here?" is overlaid in the center of the image.

Why not here?

METHOD	NET CARBON FOOTPRINT	FUEL EXPENDITURE	AMOUNT OF LEFT-OVER PRODUCT FOR DISPOSAL	LAND ACREAGE PROTECTED	ENVIRO COSTS OR BENEFITS
Conservation Burial	+Sequesters 25 lbs. CO ₂ per burial, 10 tons per acre.	—Transportation to the cemetery.	-0-	+Unlimited. +Strategic component of a complete land conservation plan.	+Land protection. +Nutrient contributions to soil communities.
Human Composting	—Indeterminate greenhouse emissions	—Sowing, watering, harvesting, processing, transporting of alfalfa, wood chips, bulking agents to facility; storage. —Construction, heating, cooling, maintenance of facility and its operating units. —Transporting of finished material.	—1+ cubic yard of leftover material 10 - 15 lbs. pulverized bone (<i>calcium phosphate and sodium, 11.8 pH, 200 - 2000 x what plants can tolerate</i>).	-0-	—Materials acquisition. —Facility maintenance. —Trucking of leftover materials. —Smothered plant and soil communities in surface disposal. +Restoration of depleted soil if intentionally tilled or incorporated.
Alkaline Hydrolysis	—150 to 200 lbs. CO ₂ per person. —Most AH waste will be turned into carbon and nitrogenous GHG by public wastewater treatment facilities.	—Electricity or propane to heat 100 gallons of water under pressure 3-12 hrs. —Processing and transportation of potassium hydroxide (lye).	—100 - 300 gallons of effluent. 10 - 15 lbs. pulverized bone (<i>calcium phosphate and sodium, 11.8 pH, 200 - 2000 x what plants can tolerate</i>).	-0-	—Potential algae bloom from phosphorus run-off due to scattering. —Tree ringing (<i>girdling</i>) from burial close to tree roots. —Disposal of effluent (no state EPA has permitting).
Flame Cremation	— 250 to 536 lbs. CO ₂ emissions per person. —Mercury, particulate emissions into air and waterways.	—Up to 500 gallons of fuel, usually natural gas, to burn @ 1700 to 2000* for 3-4 hours.	—7-10 lbs. pulverized bone (<i>calcium phosphate and sodium, 11.8 pH, 200 - 2000 x what plants can tolerate</i>).	-0-	—Potential algae bloom from phosphorus run-off. —Tree ringing from burial close to tree roots. —Mercury poisoning of air and water.

Questions?