

DYING to BE GREEN

*Swing low sweet chariot,
Coming for to carry me home ...*

By Ann Payne

Soothing lyrics promise an angel-driven chariot coming for you as your life draws to an end. But beware. The cost to the climate after that chariot drops off your earthly body for a traditional burial can add up (250+ pounds carbon). And monetary costs may top \$10,000.

Practiced since the Civil War, a traditional burial involves draining a body's blood and gases, then rehydrating it in a preservative soup of formaldehyde, methanol, and benzene.

The body is dressed for presentation ("So lifelike!") in a wooden (pine, cherry, tropical mahogany) or metal coffin (steel, copper, bronze). The coffin is sealed in a cement vault and deeply buried (6' or more).

Not mandated in Maryland, many cemeteries insist on vaults. Sites are perpetually maintained as lawn. **PHYS.org** reports that each year, we bury 800,000 gallons of formaldehyde-based embalming fluid, 115 million tons of steel, 2.3 billion tons of concrete and enough wood to build 4.6 million single-family homes.

Happily, and understandably, alternative burial practices are fast growing in popularity.

Ashes to Ashes

Cremation, rising in popularity last year to 56% over traditional burial (36%), omits pricey pre-post burial care. Reducing a body to bone ash at 1900° (using fossil fuels) costs the

environment from 283 to 535 lbs. of carbon. The coffin might be recycled cardboard (\$20+). Clothing is optional. Total prices range between \$2k-\$10k. By 2040, cremations are predicted to outpace traditional burials by 78% to 14%.



In aquamation, a body, dressed or not, is reduced to ashes by submerging it in water and lye, and heating it under pressure to 320 F for +two hours (alkaline hydrolysis). There are no mercury emissions from

melted fillings, and some medical equipment from the body can be rescued/reused. Liquifying a cadaver keeps carbon out of the atmosphere, but high pH wastewater is potentially problematic in sewer systems. Legal in Maryland, aquamation costs are +/- \$1695.

Saving land, ashes are typically kept in an urn or scattered to the winds. Want exotic? Ashes can be converted into a diamond, mixed into an artificial reef, and more.

Dust to Dust

Nearly 60% of Americans are now open to exploring natural burial options. In old-fashioned Natural Burials, a body decomposes beneath 3.5' of microbe and insect lively earth. The Green Burial Council claims an earth burial doesn't add but actually sequesters 25 pounds of carbon. A body may be dressed or not. Some get creative - a biodegradable fabric wrap, a DIY or custom shroud (organic cotton, silk, or hand-decorated canvas).

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Shrouds with sewn handles eliminate global trend with their DIY coffin-making and decorating tea parties. The handy build, then use, their simple coffins as a coffee table or book shelf. Just remove the shelves and crawl in. Or you might choose a biodegradable tree pod or a mushroom suit.

There are three kinds of natural burial cemeteries: Hybrid Cemeteries accept natural burials alongside traditional ones, allowing a variety of containers, including shrouds. Natural



Cemeteries accept only natural burials; a body can be placed directly into the earth in a biodegradable wooden/ cardboard box and the site kept as a meadow or woodland; and Conservation Burial Grounds boast a long-term stewardship deed or an officially recognized conservation easement.

Although dying is not an option at this time, choosing a green final rest is. (And don't even think about taxidermy. It's illegal).

The End

JAPANESE STILTGRASS

An Invasive That's Out of Control

Japanese Stiltgrass (*Microstegium vimineum*), an invasive plant imported accidentally from China decades ago, continues to spread unabated throughout much of the eastern United States. It is particularly prevalent locally in gardens, along highways and in our woodlands. It is not unattractive, but it outcompetes other vegetation and is a headache in gardening and landscaping.

This link provides a description and detailed information about this plant: <https://content.ces.ncsu.edu/japanese-stiltgrass-identification-and-management>.

The point of this article is to raise your awareness of the stiltgrass problem in the local area and not to provide detailed horticultural information.

Japanese Stiltgrass carpets rural by-ways, watersides, large forested areas, parklands, and the perimeters of other recreation areas in Frederick County. It grows densely and prevents the growth of wildflowers and other desirable vegetation. It can change the soil chemistry making the growth of other plants even more problematic. Stiltgrass grows about 2 1/2 – 3 feet

tall, and readily spreads in a wide range of light and moisture conditions. A single plant can produce 100-1000 seeds, which remain viable in the soil up to 3 years. With this threat to our environment, alongside the overpopulation of deer, the natural ecosystem has been badly compromised in many areas.

Surprisingly, there does not seem to be as much concern about this problem as compared to other invasives. Much is written about controlling the tree of heaven, multiflora rose, kudzu, burning bush, butterfly bush and many other invasives, but not so much, it seems, about Japanese Stiltgrass.

Just recently, for example, there was an article in the local newspaper about controlling barberry, an undesirable shrub, but not nearly as widespread as Stiltgrass. Likewise, crabgrass gets frequent attention by lawn care specialists, while honeysuckle is an often-derided non-native species. In a Google search of invasives, Japanese Stiltgrass did not even make the list of 36 top invaders in the Potomac River Watershed.



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There are both post- and pre-emergent chemical herbicides that will effectively eliminate Japanese Stiltgrass, but none that are completely safe to the environment. Corn gluten meal has shown some promise as a safe preemergent herbicide and could provide help in its control. Ruminants will not eat Stiltgrass and it appears to have no notable natural controls. Stiltgrass seeds prolifically and is readily transported by wind, water, animals and humans.

Fortunately, it is an annual plant, so it can be controlled by preventing seeds from maturing, by close mowing from August through early October or by rooting out by hand at any stage. Stiltgrass has a shallow root system making the latter method tolerable, although

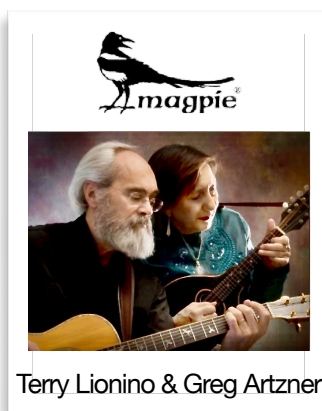


time consuming. The best practice is to be diligent in identifying and eliminating this grass in its early stages and not wait until it becomes widespread. See **Practical Remedies for Japanese Stiltgrass (psu.edu)** for additional control assistance.

It is believed that many residents, like my neighbors, large landowners and park managers are unaware or unconcerned about this problem. The Catoclin National Park, in particular, appears to make little or no effort in removing this invasive. As a result, readers are urged to help educate the public about Japanese Stiltgrass, eliminate it from their properties and encourage public officials to do more to control its spread throughout parks and other public areas of the county.

The **Sierra Club Catoclin Group** is sponsoring an outdoor concert featuring **Magpie** at the **Lucy School** campus, 9117 Frostown Road, Middletown
Saturday, October 16, 2:00 P.M.

The concert, is open to the public. Masks required on campus.
Suggested Donation — \$15 families, \$5 individuals



Terry and Greg are internationally known for their musical work in the environmental movement. They are considered to be among the very best in this field of music and their performances are in great demand by environmental action and education organizations. Locally, Magpie has performed at the Kennedy Center, Wolf Trap, and been interviewed on NPR. They received the Washington Area Music Associations "Wammie" award and have collaborated multiple times with folk icon Pete Seeger. However, their October 16th concert on the Lucy School campus will feature many songs that underscore environmental causes, singing out to young people about the importance of caring for the earth's natural resources, and that we all have a pivotal impact and role to play. Learn more about the important work by this fantastic duo at <https://www.magpiemusic.com/biography.html>.

This performance, sponsored by the local Sierra Club, Catoclin Group, is open to the public. It is part of a six-week arts integration project at Lucy School. Students will be exploring various aspects of the environment on campus and in the world. Additional components of this arts integration project include:

VISUAL ART Lucy School students will also be working with NYC visual artist Maria Torffield, who will share her art installation on animal extinction called To Be or Not to Be that was exhibited at the United Nations in New York. Additionally, there are two local art pieces that we will housed at the school. The first is a folding four-panel standing wooden display called "Shhhhh . . . Listen." Created by 23 artists, it illustrates quietly vanishing species from the Appalachian region. The other exhibit is The Tempestry, knitted by 26 volunteers from 8 different faith congregations in Frederick County. The Tempestry is a color-coded 8'x3.5' woolen climate graph based on NOAA annual temperature data for this area from 1900 through the present. This art will also be open to the public for viewing.

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D RAMA Many of our classes will be exploring aspects of caring for the environment through process drama. Fifth and Sixth grade students will be participating in a cross-grade project this fall that focuses primarily on the theme of endangered species. In addition to studying the theme of endangered species and the environment in their science class, they will be working on a play with the same theme in their humanities class. They will be presenting a 10-minute play called Whoosh! that is based on a story written by an 11-year-old student named Aditi Ganesh in Arizona and turned into a short play by playwright Suzan Zeder. Susan, who has worked with Lucy School students in the past, reached out to the school to produce this short play. Aditi's story was part of the national "I Have a Story" project pairing young writers (who wrote stories about their first year during COVID) with established playwrights. The plays will be part of an anthology that will be published by Dramatic Publishing Company. Lucy School students and teachers will be zooming with Aditi, Suzan and Maria during the project.

E NVIRONMENTAL STEWARDSHIP On October 15th, Lucy students will be participating in a campus wide Green and Clean day centered around our theme. They will participate in activities such as planting native milkweed seeds in our rain gardens, pulling invasive species to enable native wildflowers to grow, and learning about the important components of habitats for the variety of plants and animals at Lucy School.

Learn more about Lucy School's Commitment to the Environment: <https://www.lucyschool.org/deep-connection-to-the-environment>



Director: **Victoria Brown**, Victoria.brown@lucyschool.com, 301.293.1163

God is Speaking to Moses

God: I've got good and bad news.

Moses: Give me the good news first.

God: The good news is that you have been chosen to deliver my people from bondage. I will force the pharaoh to free the people by sending plagues of locusts, frogs, darkness, devastation, and more. The pharaoh's armies will chase you all the way to the Red Sea, but don't worry. I will help you part the waters to aid your escape.

Moses: So, what's the bad news?

God: You have to prepare the environmental impact statement.

Strand, Robert, *Readers Digest*, (Harlan, Iowa, April 2021)



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