

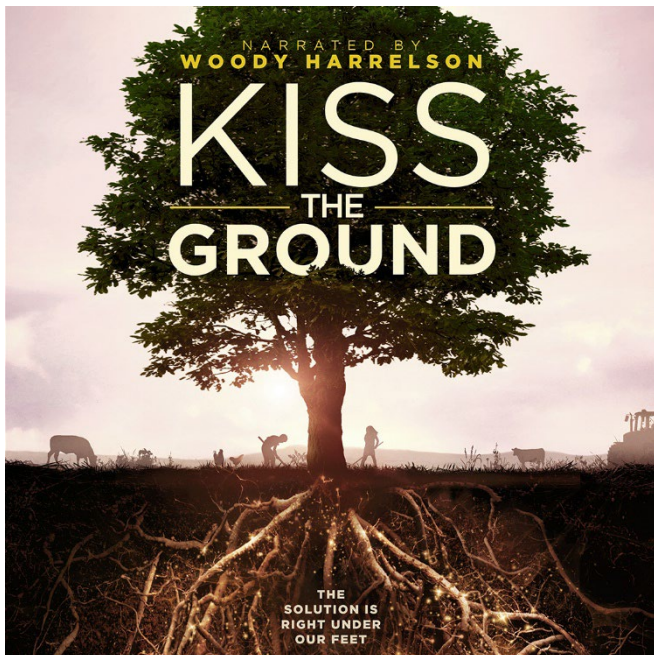
THE RECYCLER

Newsletter of Recycle Rutherford, Murfreesboro, Tenn.

Summer 2023

Join Us to View *Kiss the Ground* on June 15

Documentary Showing:
Thursday, June 15, 2023, 6 p.m.
Technology Engagement Center (TEC)
306 Minerva Drive, Murfreesboro



Join us to watch this informative and award-winning documentary as a follow-up to our April program on Saving the Soil. “Narrated by and featuring Woody Harrelson, *Kiss the Ground* is an inspiring and ground-breaking film that reveals the first viable solution to our climate crisis,” says the website of the educational production.

The Technology Engagement Center (TEC) is a branch of the Rutherford County Library System and is located adjacent to Hobgood School. The movie is free, and this is an opportunity to meet with other interested community members.

For more information, go to the official website for the award-winning film at <https://kissthegroundmovie.com/>

Program on Healthy Soil Tells Us What We Can Do

The soil covering the Earth and that we depend on for food is dying, says Dr. Shelley Thomas, a member of the outreach team of Save Soil and the speaker at our Spring meeting. Save Soil is the largest global non-profit organization seeking to prevent our planet’s rapidly advancing soil extinction. Save Soil programs were noted in the Guinness Book of World records in 2006, adopted by the Prime Minister of India in 2017, and presented at the recent 2022 COP 15 annual U.N. meeting on biodiversity and global prevention of desertification.

Thomas pointed out that **the U.N. reports that 52 percent of farmable soil is degraded to the point of being unproductive.** Many factors have led to this, including open tilling used by industrial farming, deforestation, use of poisonous chemicals in fertilizers, and the lack of organic materials in soil. When there is that lack, soil turns to sand, making it more likely to be swept away by winds and stormy weather.

Just adding 3 to 6 percent of organic material, such as manure and dead leaves or animals, will keep the soil alive and productive.

There are six global issues resulting from the degradation of the earth’s soil:

- Food crises—in 20 years, it is anticipated that the amount of nutritious food produced will decrease by 40 percent.
- Water scarcity—depleted soil cannot hold water, leading to drought and floods. Organic materials can hold up to 90 percent of their weight in water.
- Loss of biodiversity—27,000 different species become extinct every year, disrupting the soil habitat and preventing soil regeneration.
- Climate change—carbon storage in soil is three times that of living plants, two times that of the atmosphere.
- Loss of livelihood—soil degradation causes thousands of farmer suicides and affects 74 percent of the poor annually, soil extinction costs the world \$10.6 trillion.

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Composting Offers Many Benefits; Doesn't Have to Be Complicated

The importance and value of composting can be summarized simply: composting keeps organic waste out of the landfill while producing material that improves the soil. (See soil article starting on page 1.)

Food is the single largest component in U.S. landfills, but only 3 percent is composted. Producing food just for our country takes 10 percent of our total energy budget, uses 50 percent of our land, and accounts for 80 percent of freshwater consumption. Worldwide, food loss and waste account for an estimated 8-10 percent of greenhouse gas emissions, according to the U.N. Composting can prevent a significant portion of those emissions.

Using compost improves soil structure, increases water holding capacity, modifies and stabilizes pH, provides needed nutrients, suppresses plant diseases, and degrades contaminants.

Many types of containers are available for purchase ranging from open bottomed covered cans to cylinders that rotate to easily mix the contents to multiple “shelves” that allow composted material to move toward the bottom where it can be removed and used. Or you can build a wooden frame or a wire mesh cylinder to contain the material. Or you can use a black garbage bag with some air holes cut in it. You can even pile the material in a pit or just on the ground. However, a covered container will attract fewer rodents and such pests, and it will be easier to regulate the amount of moisture.

If possible, put the bin or pile where it gets sunshine, ideally at least five hours a day. Material will compost in full shade, but it takes much longer.

Many guides are available for composting, some rather complex with information on the ideal pH and temperature range while others are quite straightforward. A recent article in *The Tennessean* urges would-be composters to “avoid overthinking it.” The author, Danielle Dreilinger, stresses that composting is a natural process in which nature breaks down your trash. The way you assist in the process determines how long it takes and what the result is.

I especially felt encouraged when I read her explanation that **whether you end up putting the finished product on a garden or not, you have succeeded in keeping food waste out of the landfill—thus landfill success.** Since we face the prospect of Middle Point closing in the next few years, everything we can do to reduce the waste hauled and dumped there is important.

Dreilinger shared a simple five-step process taken from a Metro Nashville booklet called *Dirt on Composting*:

1. Throw in food scraps such as rotted celery, flat half cans of beer, stale muffins, coffee grounds and filters, spices that smell like cardboard, an apple slice or gummy bear that broke the five-second rule, moldy bread, eggshells—you get the idea.
2. Throw in dried leaves, yard waste, wood chips, sticks, paper—more of this than the veggie scraps—even dryer lint, pet hair . . .
3. Repeat as needed.
4. Occasionally douse with water or leave the lid off during a rainstorm.
5. Occasionally use a rake, shovel, or pitchfork to stir up the pile.

Let time and organisms do the rest.

My composting experience over the years has been mixed. I had relative success in a large cylinder container that could rotate. It was in a sunny area of the backyard garden. I had less success with a bin that I needed to manually stir and turn because I did not do it often enough. Also, the bin was in shade much of the day. It did produce usable compost, but it took a very long time. I have had no success in my latest location with a small bin, in the sun, that rotates because I cannot find the right balance between “green” and “brown” (or wet and dry) material. The mix stays too wet. My next step is to clean it out and start over and be more careful with the ratio of green and brown—1:4 is suggested.

When I started composting, I avoided all cooked food, meat scraps, dairy, and fats. Some recent approaches are more relaxed and allow “plate scrapings” but not large bones or grease. The reasoning is that these items, especially in small quantities, will break down. If there is an odor which attracts rodents or other creatures, that can be remedied by covering thoroughly. I will continue to avoid meat scraps and fats but try adding cooked vegetables in small amounts and used paper towels. Avoid adding diseased plants or any that have been treated with chemicals.

You can use finished compost as mulch around plants in pots or in a garden. If you want to use it as part of your planting mix, it's better to sift out the big chunks.

Both the Tennessee Environmental Council and the Tennessee Department of Environment and Conservation have excellent information on their websites: <https://www.tectn.org/>

<https://www.tn.gov/environment/program-areas/sw-mm-organics/sw-mm-residential-composting.html>

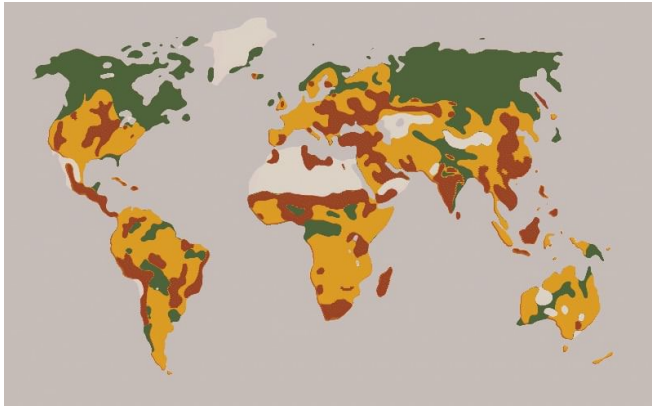
---Suma Clark

April Program on Healthy Soil Tells Us What We Can Do

(continued from page 1)

- Conflict and migration—food and water scarcity and population growth will cause up to a billion to migrate by 2050.

According to the U.N. report, the problem of dying soil has advanced to the point that isolated individual actions are no longer sufficient, Thomas said. This is a moment in time like the 70s when the growing ozone hole threatened the destruction of the planet. The United Nations has issued a statement urging a full global commitment to getting 3-6 percent organic back into the soil. It takes 100 years to regain just one inch of topsoil; so, the call is urgent.



Globally, 52% of agricultural land is already degraded. Brown indicates very degraded areas; gold indicates degraded; green stable; and white no vegetation.

Thomas outlined three steps that would assure a unified global effort is made to save the soil:

1. There must be a policy in place in every nation requiring 3-6 percent organic material in soil.

2. For policies to be adopted, it takes support by 60 percent of the voters to make leaders act.
3. For people to support a policy, they must understand and be aware of it; thus, providing information and raising awareness are essential. Read on for many ways to do that.

Thomas suggested going to the Save Soil website at <https://consciousplanet.org/> and downloading sample letters to send to the president and other leaders. The site has a wealth of information, some of which you can share with others in conversations or post on social media.

Thomas is available to speak to groups either live or via Zoom. Go to mtsu.edu/cala/savesoil.

Self-educate by watching award-winning documentaries such as *Kiss the Ground* or *Need to Grow*.

Join and/or support organizations such as MoreTreesBoro, the purpose of which is to stop or slow down the loss of trees in our community as well as replace those that have been lost.

Thomas said that it will take a combination of old wisdom, technology, and legislation to resolve the situation. **Here in the U.S., the Healthy Soils Healthy Climate Act (S1356) was introduced in 2021; the act has not moved out of committee.**

Farming First is promoting the use of sensors to enable farmers to monitor soil conditions, Thomas explained. The sensors allow farmers to test the soil in about ten minutes right on site so that they know how much they need to amend the soil.

She also told her listeners about Regenitech, a company whose slogan is “The Future Is Regeneration,” which was started by Michael Smith. He assists farmers by taking industrial waste and converting it to good, usable soil in a matter of hours instead of decades. Smith is attempting to answer the question of whether we can feed the world without destroying the Earth.

Thomas’s complete presentation is available on Recycle Rutherford’s Facebook page.

Recycle Rutherford Membership Form

I enclose my annual dues to support Recycle Rutherford and receive the newsletter.

- \$25.00 supporter \$15.00 student \$100.00 patron
- I am contributing \$_____ in addition to dues.
- I prefer the newsletter to be emailed and am providing my email address.

PLEASE PRINT:

name _____ amount enclosed _____ -

address _____

city, state, zip _____

telephone: day _____; evening _____

email _____; volunteer interest _____

Please make check payable and mail to Recycle Rutherford, P.O. Box 1804, Murfreesboro, TN 37133-1804

Story of More Discussion Planned for July

Recycle Rutherford Board is planning a meeting in July to discuss the book *The Story of More: How We Got to Climate Change and Where We Go from Here*, by Hope Jahren.

This informative book is widely available in both print and audio, new and used, and in an adaptation for young adults. The review on the Thrift Books site describes it as “the essential pocket primer on climate change that will leave an indelible impact on everyone who reads it.” Jahren asks the question of our time: how can we learn to live on a finite planet? The author is an award-winning scientist, a brilliant writer, a passionate teacher, and one of the seven billion people with whom we share this earth. In *The Story of More*, she illuminates the link between human habits and our imperiled planet. In concise, highly readable chapters, she takes us through the science behind the key inventions and how those valuable inventions that help us also release greenhouse gases into the atmosphere like never before. She explains the current and projected consequences of global warming--from superstorms to rising sea levels--and the actions that we all can take to fight back.

We invite you to read this important book and join us to discuss and exchange ideas about what we can do. See our Facebook page and/or website for more information closer to July.

Dates to Remember

Free Documentary Showing:

Thursday, June 15, 6:00 p.m.
Technology Engagement Center, 306 Minerva Dr.



P.O. Box 1804
Murfreesboro, TN 37133-1804

2022-24 Officers and Board

Recycle Rutherford holds elections each April at the annual meeting; in general, officers and part of the board are elected in even years for two-year terms, and approximately half the board is elected in uneven years, providing for staggered terms. Because of COVID interruptions, the schedule is somewhat off. There will be an election in 2024.

The officers are listed below with the board members, who are elected each April and serve staggered terms. The date indicates when the terms end. The board meets monthly on first Mondays at 6:15 p.m. via Zoom.

Rachel Cornett, president
Bonnie Black, vice president
Suma Clark, secretary
Rick Racker, treasurer

Board Members:

Linda Hardyman, 2024
Diane Parker 2024
Beth Spivey, 2024
Johnny Stewart

**Reminder: To renew your membership,
please see the form on page 3.
Dues are only \$25 per year.
We don't want to lose you!**

**For more information, go to
www.recyclerutherford.org**

Like us on Facebook!