

Harmony Elementary School Green Steps Schools Steps 2019-2020!

Annual Reuse/RETHINK contest/fashion show, a home project

Learn: Janice Allen reminded us of all 3 R's, plus compost and landfill as possibilities, and Ms. Jane taught us a new plarn craft: weaving!



We always look forward to Ms. Jane and Ms. Janice's visits—there's something new every year!

Do: Students from preschool to 5th grade use recycled/recyclable materials to fashion their fashions: Maya, 3rd grade, peeled google-eyes off her old preschool crafts and Bryce (3rd) was an egg crate Ninja. Parker's (3rd) handcuffs were fashioned from a soda can rim and used tinfoil, and Lily's (4th) eveningwear was made from the inside of a big chip bag and a pleated paper grocery bag! Parents were there to enjoy and learn!

We also gleaned our Mid-winter play materials from existing recycling (mostly from Forest Acres recycle area), and returned there what we didn't keep for (hopeful) future sharing of the play. Many of the students also entered this year's RETHINK contest concerning plastic in the oceans, which we called "Fish Out the Plastic".



Teach: The kids taught our extended school family about recycling in our Mid-Winter Festival Play, titled “We Will Recycle/Reuse/Reduce You.” It was a real hit! Ariel was grocery and other bags, Bryce was polystyrene foam, Natalee was clams and soda bottles, Oscar was cardboard, Margot was glass, and Craven was “Wishful”, or not-recyclables. The whole play is posted at the end of this report. Sam, Lillian, and Isla were sea creatures who would eat the plastic in the ocean: their costumes were a sea turtle made from green soda bottles, fish made from bubble wrap and hanging from a 25 year old umbrella, and a pelican made with an old baseball hat. The complete text of their lines is at the end of this document.



Create-a-fish!

Conserve: Recycle~~ markers and batteries, year 2

Learn: We learned from:

<https://www.greenmatters.com/family/2018/12/24/jWtPIGo/crayola-colorcycle-recycling-program> and <http://www.inspiredlearningproject.com/home/be-a-colorcyclor> a really cute, though hard to hear, video included!



Do: Recycling our markers is still a work in progress, but we're getting close to having to decide just what we're going to do: send them to Crayola, or make watercolors. This project will continue to next year, unless we have our Summer Program, in which case we'll make and use watercolors! To extend our study of recycling, we went to the Forest Acres recycle center, climbed into the plastic cage-trailer, and pulled out 5 large trashbags of non-recyclables. It was crazy! When we were finally asked to leave by presumably the boss of the crew, we were crestfallen, because there was still so much to extricate! But it did make us ever more determined to teach our school population about what can and cannot be there.



Teach: The students gathered their thoughts and made teaching about recycling the focus of our Mid-winter Festival. We had fun making the props and costumes with almost all materials scavenged from roadsides and recycle bins. See previous pictures.

The kids also taught the preschool Littles and staff about what can and cannot be recycled, then gave the 2 teachers their own classroom bins.



A fun lesson in addition to our classroom recycling:

Someone reported in Circle that in some states you have to pay an extra 10 cents for bottles of soda, but then you can get it back when you bring the bottle back. This led to a lesson on how a bill becomes a law, from the family level to school, to town, county, state, and country. That led to a visit from Representative Wendy Brawley, who gave us the rest of the details of writing a bill. This will be a multi-year project.



Harmony Bottle Bill

To our Representatives at the State House

We the students of Harmony School believe that a bottle deposit bill could make our state of South Carolina a more beautiful and welcoming state by helping to stop some of the ugly litter that is so noticeable to our citizens and our visitors. We have researched the states, provinces, and countries that have deposits for containers, and we have chosen some of the ones that we like all or part of. We have chosen a lot because there is a lot to like in how states chose to show that they care about their environment and people. We want to be involved and see you work on our idea, and look forward to sitting in the gallery when that happens.

Thank you for caring too.

Sincerely, the Elementary class at Harmony School **(Complete text at end of document, pg. 28-29)**

Green Gifts from our garden: Basil for cooking and seeds for growing, year 3

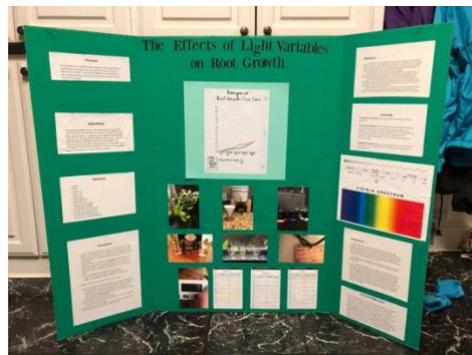
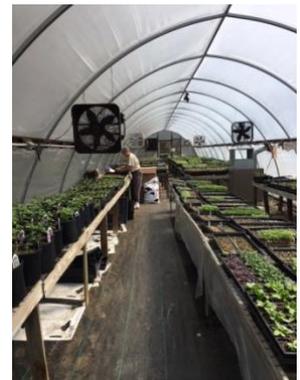
Learn and Do: The students planted new basil in our garden last summer, and basil also grew from all the fallen seeds from the year before. They harvested the basil in the fall, as well as sage and oregano, and hung the bunches in the classroom from the beams on the ceiling to dry. In the spring they made gifts for the chef in their house and the gardener to be given at our annual Valentine's Breakfast. They used recycled "oui" jars from Yoplait for their containers (donated by a very spoiled friend!), and "new" red heart fabric and ribbon (that we picked up from a heap on the side of the road during a field trip) for the tops, with cleaned yogurt foil tops between. The room smelled incredible that day! Oh—they also reused the stems of the herbs by saving them to put in our pet mice family's cage each time it's changed. I think they like it too!



Protect Indoor Air by Propagating Classroom Plants, year 3

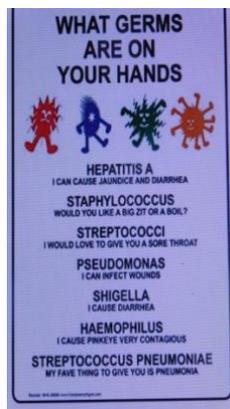
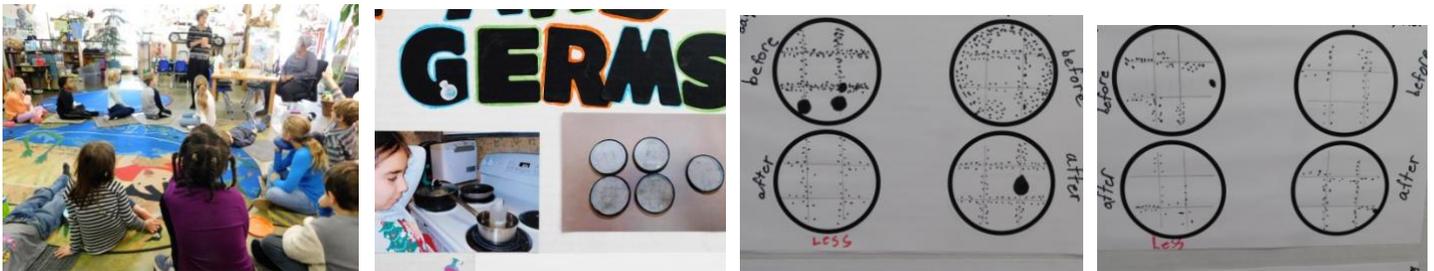
Learn: We went to Mill Creek Greenhouse to visit their grow-out house in the winter as they started their plants. We also went to City Roots to see their sprout house. Natalee, Lily and Bryce researched about what plants need to grow, and they chose experiments to answer questions that they had about it. So this year we were treated to inspiring projects that tested various ways to improve the students' propagation techniques. **Do:** We rooted Forsythia and Willow in the classroom in different waters to see which worked best. Tap water won! After learning about tap water chemicals, the kids decided that the phosphate (that protects the pipes from becoming a problem like in Flint, MI) helped the root growth more than distilled water, which didn't have any added chemicals. Natalee tested different light wavelengths and found that red light resulted in more root growth than yellow, blue, or sunlight, in that order. Bryce experimented with different colors of light for leaf growth. He found that blue light worked best. Lily tested different styles of music for leaf growth: "The Blue Danube" won over "Like a Rock" and "Life is Fun", a rap song. That kinda makes sense when you think about it!

Teach: They taught their findings to 3 judges in our school science fair, as well as to their classmates and parents during practice. Unfortunately, the Corovid virus kept them from being able to share with the whole school during the annual science night.



Protect: Citrus Cleaner in the Classroom and at Home (year 2)

Learn and Do: Ms. Jane taught us how to make Citrus Cleaner last year, and the students use it every day to clean our room and keep us healthy. We went through the whole winter with only 1 classmate getting the flu, which he caught from a younger sibling....not from our classroom! Four students chose to research and experiment with our cleaners at home for their science fair projects.



Teach: The students taught their parents and the class as they practiced for our judged science fair, and then taught the judges. Sofia's and Henry's projects were awarded 2nd and 3rd place! Our school science fair was cancelled due to the pandemic pause, so they had to miss the larger audience.

Restore soil: Compost

Learn: To learn more about soil, we did some tours. One very good teachable moment was a sinkhole that formed on Trenholm Rd. that started the size of a small plastic kiddie pool and grew to be as large as our bus in 1 day. We learned about groundwater (natural and manmade) and soil horizons, which we could see as the hole progressed. We also went to a few farms to see how farmers treat soils. One neat part was to see how hot a compost pile gets, whether it's small like at Old McCaskill's Farm, or large, like at City Roots. The kids enjoyed Chanda's neat poster about Compost! We also visited with a soil geologist and were able to use his tools. We also learned about a green roof when we went to the Schiele Museum of Natural History in Gastonia, where they use compost from the animals in their 18th century farm and their employees' food waste. We also learned about soils in the 5 different regions of the Carolinas, as well as pressures on soils.

Do: We continued to use Fiona's poo and straw in our compost bins until she was killed by a raccoon (Sooooo very sad! Now she's helping one of our gardens grow!), and we still use our snack waste and cage cleanings for our compost.



Teach: The students helped write the part of our school play for our Mid-Winter Festival about composting, starring Maya:

Maya comes out: “Speaking of stinky (landfill), how about me?? I shouldn’t be in the landfill! Don’t you know that in the United States, food is like a religion?! Treat me with more respect! I should at least be composted! (Maya talks like a preacher:)

(**everyone** else says “Did you know”) **Maya**: 40% of the food produced in the U.S. is never eaten, but 700,000 people in South Carolina don’t get 3 meals a day?”

“Did you know” “Food is the #1 thing thrown away in the U.S.?”

“Did you know” “The average family in the U.S throws away \$2000 worth of food in a year?”

“Did you know” “Fruits and vegetables are the top 2 things thrown away in the U.S.?”

“Did you know” “Throwing away 1 egg wastes 55 gallons of water?”

“Did you know” “To produce one **pound of beef takes** 1,800 gallons of **water**, and one **pound** of pork takes 575 gallons of **water**?”

“Did you know” “S.C. has joined a nationwide campaign to cut food waste in half by 2030? And if you don’t compost, for whatever reason, find someone who **DOES** and let them turn your waste into **SOIL**, *lovely SOIL!*”

“Did you know” “Here endeth the lesson!”



Restore Habitat: herb and vegetable gardens

Learn: as we learned about gardening, we continued to tour farms. We went to Cottle Farms to pick Strawberries on numerous occasions through the season. Hunter Cottle spoke with us about soil preparation and care, including chemical and fertilizer use, as well as about migrant workers and the laws about that. We went to Sease Farm in Lexington and learned about bees and how important they are to their crops. We also found out that the season was not good for pumpkins, so even though it was October, they had to buy pumpkins for their patch for visitors. Henry also researched an organic weed killer, which used vinegar and Epsom salts. Jason Carter's farm and his cover crops make the most beautiful winter fields and black soil, and we ate his Daikon radishes for snack, too! Also, they know about invasive species!



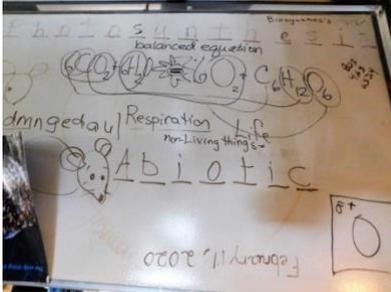
Apple picking & Kudzu!

Do: Thanks to the compost from our repurposed crates, our garden soil was rich and healthy as the kids planted around our existing perennials. They also transplanted "volunteer" plants from the compost crates to the garden! The kids measured and cut tomato stakes, used marigold plants to keep away insect pests and nematodes, and planted milkweed for Monarchs.



Protect: Outdoor Air/B2 (new): Mentor, Amy Curran

Interrupted by Covid19 pandemic. We will continue next year I hope! I communicated with Amy Curran, and I have the materials. The class was beginning a rap for our Poetry Night to teach our parents about air quality and idling, but they got uninspired when the virus hit. We learned about the balanced equation that makes our air: It's called photosynthesis!



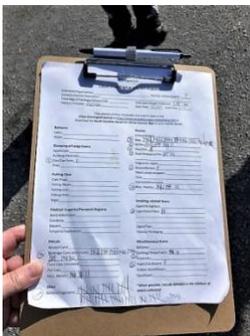
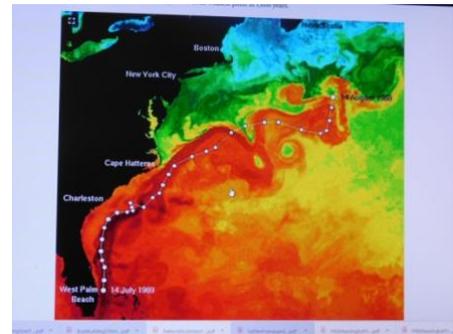
Do and Teach: The kids did, however, participate in the Climate Action Strike at the State House. We talk about the effects of climate change every day in Circle as we take note of unusual weather events and our own more powerful rain and other weather. Because we have these daily discussions, the kids all spoke publicly during the strike. They also sang 2 songs with audience participation. An article that includes their participation is attached at the end of this report. They were also on the news, channel 19, pictured below.



Protect: Water and creek monitoring Mentor: Karen Jackson

Learn: I was fortunate to take another class: Bacteriological and Chemical Stream Testing with Karen Jackson. Unfortunately, we didn't get to borrow the test kits yet, but I did have pictures and took notes, which I shared with the kids. We also researched our watershed, and the path that our 8 Mile Creek water takes to get to the Atlantic, and wrote a lesson for our play concerning this.

Do: We cleaned our creekbank a few times, and documented those events with Laura Blake Orr. We were sad to see the amount of plastic there, especially after a particularly hard rain which (again) flooded our playground. Our balls and pails were there at the bridge on our road, but it wasn't safe to get them! The ground around road was caving in again, so the students couldn't get there with their grabbers! We also had students who volunteered on MLKing Jr. Day to help the Riverkeeper. We later used their list to help us take note of our finds in our own creek.



Teach: Lily was our chosen expert on our waterways in our play, with an intro from Natalee:

Lily: “I wish I didn’t have to do this, but my job is to remind you that everything that goes in the storm drain goes straight to the river! It does not go to the Waste Water plant”----(hold hand to mouth like you’re sharing a secret: “We call that the smiley face place!) In our case, every bottle and bag in Columbia that washes into a storm drain goes into poor ol’ Gill’s Creek and then into our beloved Congaree River! (She puts on her mortar board and uses a pointer on a physical map of SC...) Then the Congaree merges with the Catawba and Wateree to form the Santee River before flowing into Lake Marion, then to Lake Moultrie and the Pinopolus Locks and dam, then to the Cooper River and through Charleston, and then to the Atlantic Ocean at Mount Pleasant. If there are no snags, the trip will take about 6 days, and then our trash ends up in our precious *salt marshes* and *estuaries* where the food chain starts and where many fish, crabs and shrimp are born! If the trash makes it past the marshes, it may get to the Gulf Stream, which is one of the mightiest currents on Earth. It moves more water than all of the Earth’s fresh water rivers combined. *Do you really want our trash there?* Think of that next time you see any plastic on the ground and pick it up, PLEASE!”



Protect: Litter Clean Up (sustain)

Mentor: Laura Blake

Learn: Lily's oration in the play also helped the class understand the even greater importance of picking up litter. When on field trips, they kept their eyes peeled, and often we would pull over to clean up an area at their request. In general, the most instructive part of this endeavor was that they were often crestfallen at the immense amount of litter in and around Columbia. I assured them that it's not that bad everywhere, and that it can be better here—especially with their help.

Do: Our class picked up litter 4 official times this year. I reported them using <https://keepthemidlandsbeautiful.org/report-card-form/>. We had some memorable moments! One was when we walked up to the Forest Acres recycle center with the intention of getting items for our play. I had been there earlier to check it out and saw SO MUCH material in the cage/trailer that was incorrect, so I brought 6 large black trashbags, supposedly for our items. The kids were shocked when they saw such things as a kiddie pool and plastic baby swing, as well as scads of plastic bags, and Styrofoam of all kinds. The item that drew the most emotion was a large zip lock that contained, neatly folded and stacked, the wrappers and trays for ~50 packaged seaweed containers, all tightly but neatly ensconced in the zip lock. Oh, and the person's Blue Cross medical insurance card, which must've been expired. Just to round out the stereotype of the neatness and the seaweed, the person's name on the card was very Asian. It was quite an effort and a lot of time that was put into a package in which NONE of the items were recyclable. We felt so sorry for that person! We ended up filling all but one bag with non-recyclables, then we were asked to get out of the cage and leave by a man from inside the building. I'm glad we got an hour or so to do this though!



We also trash-walked Covenant Rd. and Bethel Church Rd. and were stymied and disappointed to not be able to get out the piles of plastic that were stopped by the bridge pipes that go under Covenant Rd. near our school. There had been so much rain that the creek had flooded our playground (AGAIN), and balls and buckets from our school playground were stuck in the creek as well as all the other trash that had washed in from the neighborhoods around our school. 8 Mile Creek is basically where all the roads drain to, so it was totally pitiful. Also, the ground around the bridge was caving in due to the torrent, so we couldn't get close enough to grab with our grabbers. A Forest Acres service truck was there checking it out (only because the fellow had noticed as he drove by), because that bridge had to be rebuilt three times after the flood until they got it right, and it was in the process of failing again as it gushed right before our eyes.

Teach: The students taught about 250 parents and preschool/K's with their play about Recycling, which is at the end of this document.

Restore: Habitat /birds (new)

Mentor: Jay Keck

Learn and Do: Although we didn't get to meet with Jay, we did collect some nests to identify with a nest field guide, and we noticed the materials that each species of bird used, as well as where they were likely to build their nests. Everyone had a great story to tell about an unusual place where a Carolina Wren nest was built, such as in a recently placed football helmet, and generally how quickly it appeared! During the Covid crisis, I put together a powerpoint of bird calls, and that was very fun to learn together. The kids were continually saying, "I hear that one all the time!" We also had an amazing experience with a Barred Owl on a stream clean-up behind our school. We spent a lovely 30 minutes or so when we just sat in the wet (escaped!) English Ivy and observed and conversed with him. It was a very special experience!

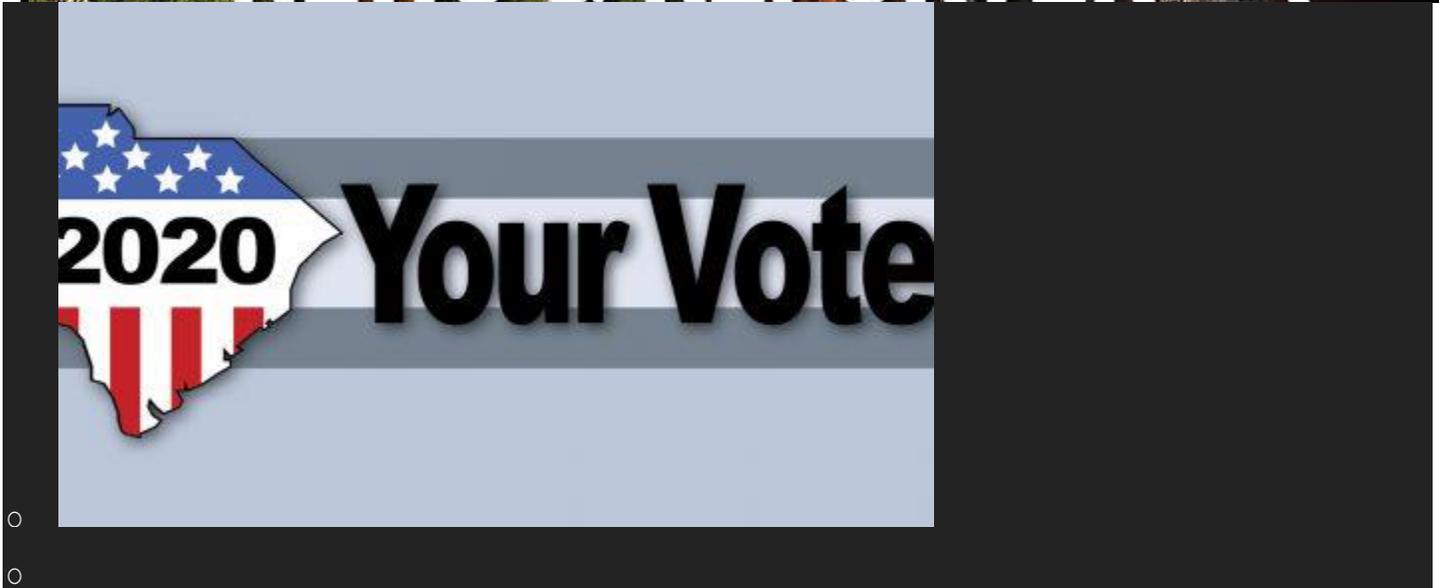


See him up there?!



We didn't get to meet with Jay to tour our forest at school as scheduled, so I did this for my Zoomies (power point attached.) They enjoyed it a lot---we're going to do it again and again. I drew names for them to learn an assigned bird, then we pretended we were camping (which we also had to cancel~~~so sad!). We pretended it was morning, and as I advanced to each picture, that "bird" (student), began singing quietly. Then as they all added in as the sun "rose", we had a cacophony, which is glorious! They'll get new assignments each time....

We also had a feeder-post on our deck with 2 seed feeders, a suet cage, and a humming feeder, but recently one of our very well-fed local raccoons (possibly the one who got Fiona, our chicken) got the best of the post, and down it came. We'll build a better one soon.



Youths rally to save the environment

By [Elle Johnson](#) | Sep 24, 2019

Eleven-year-old Lily Anderson (actually, Lily Denk!) climbed the Statehouse steps with her classmates Friday to tell adults what they believe about climate change and its impact on their future.



Elementary students from Harmony School sang “Light a Candle for Peace” and “We are the World” in front of the crowd at the global climate strike at the South Carolina Statehouse.

“We are here protesting against climate change,” Denk said. “We’re not trying to get it to stop, because it’s going to happen, but we’re trying to get it to slow down.”

Anderson and her classmates were protesting at an international climate strike, which was taking place in over 150 countries.

Anderson’s classmate, 11-year-old Natalie Kaufman, said she came to the climate strike to support Greta Thunberg, the 16-year-old environmental activist from Sweden who started the worldwide climate strike.

“We need to do something about climate change, because a lot of animals and plants that we love are going to die because of it,” Kaufman said.

Anderson and Kaufman were two of the many Harmony School elementary students who spoke at the climate strike. They were also in the group of

students who sang “Light a Candle for Peace” and “We are the World” in front of the crowd.

Harmony School is a private elementary school that has one combined elementary class that consists of first through fifth grades. Jennifer Mancke, the class’s teacher, said this “allows students to learn at their own pace.”

One protestor, Gloria Prevost, said she was happy children came to the climate strike.

“It’s so encouraging seeing children that are involved in this, because I’m not going to be here that many more years to do it, and it is critical,” said Prevost.

But young adults are taking more action than just having a climate strike.

Carlee Pokalsky and Caitlyn Lizana, friends who are both 21, organized the Columbia climate strike. The pair also started the first Sierra Club chapter at the University of South Carolina. The Sierra Club is a nationwide environmental organization bringing people together to create a powerful and effective environmental movement.

“When she (Pokalsky) told me she was trying to start a student chapter I was thrilled to be a part of it because environmental activism and awareness is super important to me,” Lizana said. Lizana is a fourth-year environmental science student who is also a member of the South Carolina Wildlife Federation chapter at UofSC.

In addition to actively being involved in environmental groups, Lizana tries to lessen her ecological footprint by becoming vegetarian.

Grace Kazmierski, assistant director for student engagement at UofSC’s Office of Sustainability, said promoting veganism and vegetarianism is important because “eating meat is more detrimental to the environment than eating plant-based foods.”

“Meat and dairy production contributes to our changing environment due to the greenhouse gas emissions from the methane that cows produce, the deforestation and loss of biodiversity that occurs in order to prepare land for pastures, and the water depletion and pollution from livestock production,” said Kazmierski.

Kazmierski said UofSC’s Sustainable Garden is a great way for students to get involved in the environment and to help build biodiversity.

Larry Cook, director of the Office of Sustainability at UofSC, agrees with Kazmierski that the garden is where students volunteer the most to either help the environment or to help build their future career in sustainability.

The garden is permaculture, Cook said. This means the produce is planted so the plants help each other grow. “The idea is that the garden is self sustaining in a way,” Cook said. However, it still needs to be cared for, which is why there are volunteers who tend to the plants and harvest them.

Produce from the garden is sold at UofSC’s Healthy Farmer’s Market, which helps lessen fuel emissions by reducing the amount of transport needed to deliver the produce. Lizana often buys local produce for this reason.

UofSC’s Office of Sustainability and Sustainable Carolina Garden are only some ways young adults get involved with the environment. The Office of Sustainability is partnered with many on-campus and off-campus organizations to help the environment, such as Plant Based Pals, a group promoting veganism. Other environmental groups on campus are the Sierra Club and the South Carolina Wildlife Federation, which helped put on the climate strike.

These small efforts are one way young people are contributing to a better environment.

“Don’t ever think anything you do to contribute to positive change is insignificant. Change starts with one person,” Lizana said.



Adults also participated in the global climate strike in Columbia, one of several around the state.



Harmony School elementary students hang flags at the climate strike. The flags that the students made show images of a pollution-free world.



South Carolina young adults and children make their own signs to protest the climate change during the global climate strike. (Mine, actually....Jen)

We Will Recycle You, the Play

Max the Trashman talks loud: “So, I have a question for you. What does the guy behind the counter say when a **landfill** walks into McDonalds?”

Sofia: “I don’t know, what?”

Max: “So, do you want flies with that?” He tosses a clear bag of plastic onto the pile.

Sofia: “You’re full of funnies today!”

Max: “It looks like this landfill is just about full too. Remember when we thought one would NEVER fill up?”

Sofia: “Yah. That’s when we thought plastic was a great invention.”

Max: “AND when we thought that it would (air quotes) *Go away forever.*”

Sofia: “Like my homework. Outa sight, outa mind.”

Plastic stands up and startles them.

Natalee, covered with plastic bottles and clams: “Are you out of your mind? Look at me! I should be in a recycle bin!”

Max: “What? Why? You scared us!” Sofia puts a cheap bottle of water to her lips.

Nat: “You SHOULD be scared! Did you know that I am made of the same oil that gasoline is made from? YUM! And that every human is consuming about a credit card worth of plastic each week from water, food and air emissions? I’m so bad that 8 states and 55 countries have banned single-use plastic! (She acts like a beauty queen and does the smile and wave.)

(**Sofia** stops and looks at her bottle. She puts the top back on and throws it in the landfill.)

Nat: “Actually, if you don’t drink that, this water could be locked up in the bottle for 500 years, because that’s how long I can last on the side of the road! Isn’t it GREAT?!” Sarcastically, with a big smile, waving again.

Sofia: “Actually, that’s terrible.”

Nat: “That’s what they designed me for. I’m light, long-lasting, and CHEAP!” (cheep cheep like chicks from all)

Max: “Well you’re cloggin’ up my landfill!”

Nat: “There’s a cure for that---get your peeps (cheepcheep) to recycle! I’m great and soft as carpet and fleece jackets; I make unbelievably soft blankets, and can be hard as wood-like docks, boardwalks, and outdoor furniture. And they will LAST! Practically forever!”

Max: “Look at me. I recycle-----I’ve been wearing these pants for a week!”

Ariel pops up full of plastic bags and looks at audience. “Hey! Does anyone out there have a plastic bag in their house full of plastic bags, or is it just me?”

I’m plastic from oil too! But I’m a different story. Americans get 100 billion of me each year, but never never NEVER put me in your recycling bin!

Here’s a joke: What can stop 100 recycle center workers in a second? A plastic bag! I clog up the machines at the recycling plant, and everything has to stop until I’m found and pulled out! So NEVER bag your recycling!

But don’t leave me out on the road, either. I’ll last for 20 years in a tree, and one bag can even ruin a 500 pound bale of cotton. Farmers hate me!

If you “accidentally” (with air quotes) get one at a store, give us to a grocery store, or maybe someone with----you know----- a dog or cat!”

(everyone says “Pee You!” “Clean that litter box!” “Pick up that poop!” until Maya gets up)

Maya comes out: “Speaking of stinky, how about me?? I shouldn’t be in the landfill! Don’t you know that in the United States, food is like a religion?! Treat me with more respect! I should at least be composted! (Maya talks like a preacher:)

(**everyone** else says “Did you know”) **Maya**: 40% of the food produced in the U.S. is never eaten, but 700,000 people in South Carolina don’t get 3 meals a day?”

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“Did you know” “Here endeth the lesson!”

Bryce lifts a huge barbell of polystyrene foam like it weighs a lot: “Well, I have a dream too! I have a dream that someday I’ll be recyclable! I bet you didn’t know that I’m not! But I’m polystyrene foam, and I’m not recyclable, no way, no how!”

I’m just another product of fossil fuel that uses a LOT of power in the form of steam, and I even helped make the hole in the ozone layer until they changed from using CFC’s to make me.

Now though, I can still cause cancer because of the chemicals in me---- studies show that workers who make me have high rates of some kinds of cancer.

Did you know I can last for at least thousands of years on the ground and possibly forever in a landfill?

And when I make it to the ocean, animals eat me because I float! New York City, Los Angeles, Washington D.C. and many other places have banned single-use containers made out of me.

And there are packing peanuts made out of corn starch that ARE biodegradable, which I’m NOT. But you can use me in plant pots to save on lovely soil!

So I have a dream! Until then, I’m like those Chic Fil A cows----Don’t use me!----THANKS!” (He lifts the barbell again, showing off and mooing)

Parker: “Hey you styrofoam! Don’t steal the show~~~I’m aluminum and steel, and I have a magnetic personality! The machines at Sonoco recycling use magnets to scoop me up, but don’t flatten me, or I get blown away with

the paper! I am the most recycled material on the planet, and I can be recycled over and over without losing my strength. That's good for the planet, because it cuts down on huge, ugly, open-pit iron mining. Did you know that if you hold a steel can up to your ear, you can hear the recycling plant calling?

Oh! and did you hear that scientists discovered how to make electricity with scrap metal? It was an "aluminating" experience! Haha! As for my aluminum, recycling me is very important because aluminum is the only recycling that actually costs less than starting from scratch. Recycling one aluminum soda can can save enough energy to power your t.v. for three hours! What a satisfying idea! Why isn't as much aluminum lying around as other trash? People collect me and sell me! But DON'T CRUSH ME or I'll get blown away with the paper and cardboard, too!" Hey! Why are recycle bins optimistic? Because they're full of cans! Haha!

Oscar: "Hey Hey I heard my name! Do you know the definition of a paper cut? It's a tree's one glorious moment of revenge! Yes, trees folks! Miles and miles and rows and rows of pine trees! And zooming logging trucks and paper plants. I know you probably get your news on line, but did you know that an archeologist dissected a landfill and found an 80 year old newspaper that was still readable? Paper doesn't age in a landfill because it's protected from the weather down there! Almost all clean paper is recyclable! But don't wad it up—keep it flat so that it can fall through the conveyor! Cardboard and pasteboard too---we all have to be flat. Break it down! I wish I could break dance to help you remember, but I'd hurt myself! Hate all those catalogs and ads? Send them on to become tissue boxes! And use cardboard in your garden to keep down weeds, and compost those pesky paper plates, because they're NOT recyclable! We use 100's of the preschool paper plates for art! Hey! Recycle paper! Turn in the same book report 2 weeks in a row!"

Margot: "I am glass and I am still recyclable, for now. I have to be clean and shouldn't have a metal or plastic top. Of course the very best thing to do is to reuse me! Take foods out of plastic and store them in me-----I am

soooooo safe! I'm so safe that I just can't get over it! And I'm always young and never get old!" (smile the beauty queen smile!) But don't try to recycle windows or mirrors please! Just bottles and jars. Or just Keep me! (smiling again and waving)

Craven: Looking shy and sheepish: "I'm not recyclable. I'm pitiful. My name is **Wishful!** If you try to recycle me, your bin might be thrown away! The workers don't have time to pick all of me out, so don't try to recycle Solo cups and tops and straws or plastic spoons and forks or paper plates--- basically party stuff, don't recycle any weird plastics like hoses or chip bags or wrappings of any kind, and no cords or coat hangers or kiddie pools or mirrors! Don't try to recycle any small plastic things, because they end up in the paper sorter, which is basically pollution. And don't try to recycle ANY Styrofoam in your bin...none! And whatever you do, PLEASE don't bag anything! Wishing just don't make it so! I wish it did though! On a lighter note: Dinosaurs eat people who don't recycle! (aarrgh!)"

Lily: "Speaking of wishing, I wish that I didn't have this job to do, but I do! My job is to remind you that everything that goes in the storm drain goes straight to the river! It does not go to the Waste Water plant"----(hold hand to mouth like you're sharing a secret) "We call that the smiley face place!) In our case, every bottle and bag that goes in a stormdrain in Columbia goes into poor ol' Gill's Creek and then into our beloved Congaree River! (Using a pointer on a simple map...) Then the Congaree merges with the Catawba and Wateree to form the Santee River before flowing into Lake Marion, then to Lake Moultrie and the Pinopolus Locks and dam, then to the Cooper River and through Charleston, and then to the Atlantic Ocean at Mount Pleasant. If there are no snags, the trip will take about 6 days, then our trash ends up in our precious salt marshes and estuaries where the food chain starts and where many fish, crabs and shrimp are born! If trash makes it past the marshes, it may get to the Gulf Stream, which is one of the mightiest currents on Earth. It moves more water than all of the Earth's fresh water rivers combined. Do you really want our trash there? Think of that next time you see any plastic on the ground and pick it up, PLEASE! Oh no! It's happening to our friends *right now!*

After Lily: Margot and Lily come on to wave the water. ...Plastic/Natalee and Plastic bags/Ariel whirl around toward beach and water scenery)

Natalee, (with **Margot and Lily** waving the water) : “Oh! Oh! South Carolina is sooo beautiful, but not with us in the wrong place! One plastic bottle or bag in a river is like one hair in spaghetti-----think about it!”

“Oh no! We made it to the salt marsh and estuary at Sullivan’s Island----I see the lighthouse! This is not the ancestral home of THESE clams!” (She points out one of her fruit clams)

Fish, swimming around and looking at the bottles: “Yum yum! Let’s eat those shiny fish! They’re just waiting for us!”

Turtle, swimming over and looking at the plastic bags: “No! I want them, and their jellyfish friends, too! Yummy!”

Pelican, flying *carefully* around: “I can scoop them off of the water faster than you! That’s what my pterodactyl ancestors evolved this huge mouthbag for!”

They *carefully* try to eat the plastic bottles and bags.

Max and Sofia enter with a garbage bag and a grabber:

Sofia: “There’s some plastic trash! Quick! Grab it before they get it!”

Max: “Hey----we’re not just garbage men anymore----we’re recycling converts, so you know we have the strongest courage of our new convictions! Let’s get in there and get them! (They grab Plastic bottles and Plastic Bags with their grabbers: the fish, turtle and pelican get scared and get away.)

Sofia says loudly while everyone comes to the front on each side of Sofia and Max: “Recycling. It just makes common sense, which might be why so many people don’t do it! So remember this and sing with us!

(Everyone comes to the front while she’s talking. _____ leads the clapping and everyone and sings “Plastic you annoy, do not be coy...”

We Will Recycle, Reduce, Reuse You! (to the tune by Queen)

Plastic, you annoy, you are not coy
trashin' up the *street* gonna be a
big mess some day

You got mud on your face
a big disgrace
you and those cans all
over the place!

Singin' we will we will recycle you!
We will we will recycle you!

Plastic you're a hard one soft one
messin' up the street gonna
end all the life someday!
You got blood on your face!
A big disgrace!
Messin' with life all over the place.

We will we will reuse you
we will we will reuse you!

Plastic you're a bad one, sad one pleading for your jobs
Gonna make you go away some day!

You got trash on your face, a big disgrace;
somebody better put you
back into your place.

We will we will reduce you!
We will we will reduce you! Everybody!

We will we will reuse you! Sing it! We will we will recycle you!



On Monday, January 20th, more than 60 volunteers, including students from Harmony School, joined Congaree Riverkeeper for an MLK Day Of Service Cleanup along Rocky Branch at Maxcy Gregg Park in Columbia. We removed approximately 1,500 lbs of trash.

	Debris Type	Comment	Count
Debris	Plastic Bags - Retail		342
Debris	Beverage Cans (aluminum)		234
Debris	Glass Bottles + Fragments		186
Debris	Plastic Food Wrappers + Film		150
Debris	Plastics	Misc. Plastic	145
Debris	Plastic Bottles		133
Debris	Latex Balloons		4
Debris	Mylar Balloons		3
Debris	Building Materials		3
Debris	Cars + Car Parts		1
Debris	Tires		1
Debris	Dumping of Large Items	Shopping Carts	3
Debris	Fishing nets		1
Debris	Rope		10
Debris	Band-Aids + Gauze		1
Debris	Condoms		1
Debris	Tampons + Applicators		1
Debris	Aerosol Cans		4
Debris	Food cans (tin + steel)		7
Debris	Metals	Misc. Metal	48
Debris	Plastic Caps + Lids		18
Debris	Plastic Fragments (rigid)		9
Debris	Straws + Stirrers		29
Debris	Utensils & Dinnerware (spoons, cups, plates, etc.)		5

	Debris Type	Comment	Count
Debris	Lighters		3
Debris	Cigarettes + Filters		25
Debris	Cigars + Cigar Tips		11
Debris	Tobacco Packaging		3
Debris	Clothing, Shoes + Fabric		68
Debris	Paper + Cardboard		37
Debris	Rubber (hard + foam)		4
Debris	Styrofoam		59

Harmony Bottle Bill

To our Representatives at the State House

We the students of Harmony School believe that a bottle deposit bill could make our state of South Carolina a more beautiful and welcoming state by helping to stop the ugly litter that is so noticeable to our citizens and our visitors. We have researched the states, provinces, and countries that have deposits for containers, and we have chosen some of the ones that we like all or part of. We have chosen a lot because there is a lot to like in how states chose to show that they care about their environment and people. We want to be involved and see you work on our idea, and look forward to sitting in the gallery when that happens.

Thank you for caring too.

Sincerely, the Elementary class at Harmony School

Iowa	Iowa Code §455C.1 – 455C.17	1978 5¢	Beer, wine coolers, wine, liquor, carbonated soft drinks, mineral water	Any sealed bottle, can, jar, or carton composed of glass, metal or plastic	Retained by distributor and bottlers
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Maine	Me. Rev. Stat. Ann. tit. 38, §§3101 - 3118	1976	15¢ (wine/liquor) 5¢ (all others)	All beverages except dairy products and unprocessed cider	Any sealed container of four liters or less composed of glass, metal or plastic	Property of state
Massachusetts	Mass. Gen. Laws Ann. ch. 94, §§321 - 327	1981	5¢	Beer, malt, carbonated soft drinks, mineral water	Any sealable bottle, can, jar, or carton composed of glass, metal, plastic, or a combination; Excludes biodegradables	Property of state general fund
Michigan	Mich. Comp. Laws §§445.571 - 445.576	1976	10¢	Beer, wine coolers, canned cocktails, soft drinks, carbonated and mineral water	Any airtight container under one gallon composed of metal, glass, paper, or plastic	75% to state for environmental programs; 25% to retailers
New York	N.Y. Environmental Conservation Law §§27-1001 - 27-1019 (Amended 2013 SB 2608)	1982	5¢	Beer, malt, wine products, carbonated soft drinks, soda water, and water not containing sugar	Any sealed bottle, can, or jar less than one gallon composed of glass, metal, aluminum, steel, or plastic	80% to the state general fund; 20% retained by distributor
Oregon	Or. Rev. Stat. §§459A.700 - 459A.740	1971	10¢ 2¢ (standard refillable)	Beer, malt, carbonated soft drinks, bottled water (will cover all beverages except wine, distilled liquor, milk, milk)	Any sealed bottle, can, or jar composed of glass, metal or	

substitutes
and infant
formula by
2018).

<http://www.ncsl.org/research/environment-and-natural-resources/state-beverage-container-laws.aspx>