Making Sustainability Accessible: from the Kitchen to the Neighborhood

RICOTTA, MOZZARELLA, GOAT CHEESE, cream and yogurt, oh my! This article butter get you in the mood for living sustainably while having fun.

For undergraduate students in Merry Lea’s Sustainability Leadership Semester (SLS), each Friday afternoon consists of a hands-on, sustainable living skills lesson. The aim of these “Fun Fridays” is to equip each student to take steps in reducing their personal footprint and increasing their self-sufficiency.

Since the middle of August, undergraduates in the SLS have shared classes, meals, field trips, hikes and social activities. Fun Fridays often integrate a few of these categories. Some Fun Fridays have entailed making apple cider, soapmaking, fiber arts, preserving food and more.

On the last Friday of October, all nine students in this year’s SLS cohort met in one of the kitchens at Rieth Village to make various cheeses, butter and crackers.

“Part of sustainability is accessibility,” explained Tom Hartzell, coordinator of residential undergraduate programs and an environmental educator at Merry Lea.

Accessibility in making cheese and crackers looks like using common ingredients – milk from the store and vinegar for curdling – and using common kitchen tools. The only special tool required is a cheesecloth: a fine, mesh cloth that holds the curds together, but allows the excess liquid to drain.

The relative simplicity in process intrigues Lily Kauffman, Mountain Lake, Minn., even though participating in Fun Friday activities is not new to Lily. She lived at Merry Lea in the summer of 2019 for the Agroecology Summer Intensive program.

“I really like these homesteading activities, because they’re hands-on, don’t solely require head knowledge, and you can take recipes home to try them out,” said Lily, a senior double majoring in sustainability studies and sustainable food systems at Goshen College.

Fun Friday activities illustrate a hallmark of the SLS program: experiential and hands-on learning. Each class in the SLS takes an interdisciplinary approach to specific sustainability topics like freshwater resources, policy, economics and religion. Therefore, the SLS attracts students from diverse majors and minors.

Emma Zuercher, Apple Creek, Ohio, is majoring in American Sign Language (ASL) interpreting at Goshen College. She originally planned to go to Ecuador this fall for Goshen College’s Study-Service Term (SST), which are international study programs where students live with host families, take classes and serve in the community. However, that program was canceled due to COVID-19 travel restrictions and public health concerns.

Participating in intercultural classes or experiences is a requirement for each Goshen College undergraduate. This is the first year Merry Lea offered the SLS as an option for fulfilling these intercultural requirements.

Emma and fellow student, Sierra Ross Richer, Goshen, Ind., signed up for the SLS to attain those credits.

Even though she’s not learning a new language in Ecuador, Emma described how the SLS allows her to focus on the nuances of the English language in a way she never previously encountered.

“This still feels like an immersive language experience,” she said. “There are many ways of using English, and many languages of English. For example, there many ways to talk about policy, sustainability and the environment, but those things weren’t accessible to me before.”

Understanding sustainability and learning the vocabulary of the subject helps her be a better ASL interpreter.

However, Emma emphasized that the language of sustainability should be accessible to everyone, not laden with scientific jargon. During various field trips...
RESILIENCE is the capacity to quickly recover from or adjust to difficult circumstances; thus, it is key to getting through tough times. I have been thinking a lot about the importance of resilience recently, given the difficulties that we have all been facing throughout this past year.

Fortunately, we can draw inspiration from lots of examples of resilient organisms that call Merry Lea’s ecosystems home. Many of these creatures are overlooked due to their small size.

Tardigrades, also known as water bears, are near-microscopic residents of Merry Lea. These common but strange, miniscule animals have plump bodies and eight stubby legs, each ending in four claws. They can live just about anywhere but prefer moist environments such as clumps of moss. Perhaps the most fascinating thing about tardigrades is that they are virtually indestructible. They can tolerate temperatures as cold as minus 328 degrees Fahrenheit and as hot as 300 degrees; they can withstand six times more pressure than what is found in the deepest part of the ocean; they are resistant to extreme amounts of radiation; they can exist in a dehydrated, dormant state for over 100 years; and they can even survive in the vacuum of space.

Planaria are flatworms measuring only a few millimeters in length and are found in Merry Lea’s aquatic habitats. They have flat bodies, including spade-shaped heads with two rudimentary eyespots, and very simple organ systems. These carnivores eat small living and dead animals, such as snails and other worms, by sucking them into their mouths: which are located in the center of their bodies’ undersides. What makes planaria so resilient is their ability to regenerate. If any part of their body is cut off, including the head, it will grow back. In fact, a single worm can be cut into over 100 pieces and each piece will grow into a new worm.

We are fortunate to call these astounding creatures our neighbors, but for an even better example of resilience we need not look any further than the Merry Lea team. Time and time again they have risen to the challenge of pursuing the Merry Lea mission in the midst of COVID-19.

Since the onset of the pandemic, we have provided safe environmental education experiences to over 500 students and 100 adults. Our education team launched new schoolyard-based and virtual education programs, hosted over 80 people at a modified version of our annual Enchanted Forest event, and continue to teach Nature Preschool students four days per week. Additionally, our four graduate students have made it halfway through the Master of Arts in Environmental Education program, learning the importance of adaptability when designing and delivering environmental education. Lastly, our Sustainability Leadership Semester recently concluded with its largest cohort ever of nine undergraduate students. None of this would have been possible without the fortitude and commitment of the entire Merry Lea team. They are our true champions of resilience!
Sustainability, continued from page 1

and classes, Emma noticed how the same environmental ideas can be talked about in different “languages” to appeal to or be understood by different people groups.

Witnessing Sustainability

Unlike a typical semester in college, where students take an array of courses, SLS students are able to dive deeper into the complexities of sustainability and how that translates into specific action steps.

“How [sustainability] is played out in the professional world on a global level is super complex,” said Denver Beck, Archibold, Ohio. “This semester and the canoe trip have shown me how sustainability actually looks in the real world and translates to career and jobs that make a society or place sustainable.”

At the beginning of the SLS, each cohort canoes from Merry Lea to Lake Michigan over the course of eight days to explore the watershed. Merry Lea is part of the St. Joseph watershed: all water in this area will eventually end up in the St. Joseph River, which drains into Lake Michigan.

Along the way, the groups stop at various locations to get out of the river and talk with individuals and organizations who work in the broad field of sustainability within the watershed.

“The canoe trip gives a good foundation for the rest of the semester. Talking about sustainability in class and how bad most everything is due to climate change, it’s easy to get bogged down and give up,” said Denver, a junior majoring in sustainability studies and minor in art at Goshen College. “But meeting these people who are making a difference in these local communities, seeing examples of steps you can take and work you can be doing, is powerful.”

The SLS is designed for students who want to create a resilient future for their communities despite our rapidly changing planet. Immersion in the natural world, interdisciplinary perspectives and personal leadership development are central to the semester.

Taking a class dedicated to developing leadership skills was unexpected for Lily. “It could easily be taken for granted that we would already be leaders, because we were in this semester trying to tackle sustainability,” she explained. However, she's glad that an inclination for leadership was not assumed, so that she could identify her individual strengths for becoming a better leader.

Sustainability in Action

Each SLS cohort also takes a class called Sustainability Problem Solving. In this class, students apply what they learned about the natural world and social systems through a service project. This year, all the SLS students partnered with Fellowship Missionary Church in Fort Wayne, Ind. to develop community-building proposals for the local neighborhood of Pettit-Rudisill. Notably, this neighborhood has limited resources. The area has few green spaces or a garden-sharing program.

Because the majority of residents in Pettit-Rudisill are renters, those individuals cannot always plant gardens. Creating a community garden in vacant lots would decrease isolation between families and increase food distribution.

This group discussed the pros and cons of planting and maintaining edible shrubs versus fruit trees. Implementing a public garden creates potential for various levels of community engagement: preparing raised beds and plants, harvesting fruits, installing artwork and more.

Another group proposed a neighborhood learning exchange program to bring people together for sharing knowledge and life skills.

“We are trying to implement community classes for kids and adults based on different life skills, like cooking skills or financial literacy,” said Ben Zimmerman, Archibold, Ohio., who is part of the group. Ben pointed out that even if Pettit-Rudisill obtained better food distribution, it is not a given that people necessarily know how to use or prepare...
different foods. “In other models and other places, cooking classes have helped with that [lack of knowledge]. It builds health and family connections within the community,” mentioned Emma, who also helped develop this proposal.

Fortunately, various Fort Wayne organizations offer cooking classes in other neighborhoods. These existing programs may model successful formats, and offer partnerships and potential for sharing resources like curriculum. All of the SLS students kept sustainability at the forefront and used an asset-based approach. Each group discussed the intersections between self-reliance and community development as manifestations of sustainability. They also identified existing strengths and resources available in Pettit-Rudisill. On Nov. 18, the cohort presented their proposals to Merry Lea staff to wrap up their semester.

“This church is very committed to doing good for the community and making sure this community can continue afterwards on their own,” mentioned Anna McVay, Geneseo, Ill. She described being initially hesitant to propose possible solutions as someone outside the neighborhood. However, while working with church members and other local partners, she became assured that the students’ proposals would be evaluated by the residents of Pettit-Rudisill, as the church intends to pass on full autonomy to the community.

Back in the Rieth Village kitchen, Anna squeezes milk curds together in a ball between her gloved hands. She repeatedly squeezes and pulls apart the ball, adding warm water to it periodically, in order to make mozzarella. Sierra and Emma pick rosemary, thyme and oregano from the education garden right outside the kitchen. They chop up the leaves and mix it in with the goat cheese.

Each Fun Friday features a sustainable practice, but the personal time and energy required to develop these skills varies widely.

For making mozzarella, that’s standing over a bowl with hot water or whey and working balls of curds for about 15 minutes until it stretches and holds together when pulled apart. For community-building projects, the development of sustainable practices requires much more time and energy than a single afternoon. The SLS students reviewed grant research and case studies, and met with representatives of the Neighborhood Association, Fellowship Missionary Church and other local organizations.

Attaining Sustainability

Due to the diversity of interests and majors within the SLS cohort, the students all agree that sustainability encompasses much more than environmental science.

“Sustainability isn’t just about the planet. It’s about people, it’s about systems, and it’s about considering everyone and everything,” said Lily.

Trying to define sustainability can feel too constricting for Lily, so she constructs images instead. “I have a utopia image [of sustainability] in my head, but that’s not what sustainability is about. Our world is too broken and fallen.”

She quotes Jonathon Schramm, a professor at Merry Lea, “He says, ‘Don’t let the perfect get in the way of the good.’ Maybe that’s a good definition of sustainability: not perfect, but we can work towards good.”

PROWLing After School

BEFORE NATURE PRESCHOOL AND before Kinderforest, there was PROWL. Since 2013, PRogram for Outdoor Wilderness Learning (PROWL) has connected students in kindergarten through 5th grade from the Central Noble School District to Merry Lea. Twice a week after school, a bus from Central Noble Primary or Central Noble Elementary has transported students to the Merry Lea Farmstead Site for outdoor fun and exploration.

For a few weeks in fall, winter and spring, PROWLers from various grade levels clambered off their buses to tromp in the forests, prairies and wetlands of Merry Lea. That is, in a typical year they would. In a pandemic year, PROWL has shifted to take place at Central Noble Primary School this fall instead. The school has a large, grassy lawn that slopes down to a small wooded area and a meadow.

PROWL emphasizes that nature is anywhere and everywhere, even at a playground.

The bell rings signaling the end of the school day, and one by one, about 20 first graders jog to a paved section of the playground with backpacks sliding off their backs. They come with wide grins and a renewed excitement after a day of school.

The PROWLers are in a pre-assigned group - Fire, Ice or Cloud - and bear curious name tags. Students with names like Maci Monkey, Calvin Cheetah and Jackson Jellyfish show off their tree cookie necklaces with their handwritten nature names.

They fuel up with some snacks as they wait to play a group game.

At the helm of this program is Tom Tree: otherwise known as Tom Hartzell, coordinator of residential undergraduate programs and an environmental educator at Merry Lea.

“Do frogs look the same their whole life?” Tom asks groups Fire, Ice and Cloud. They are lined up in their respective groups facing orange cones 20 feet away, ready for a relay race.

“No! They’re tadpoles first!” Students yell various, similar answers.

“But even before that, they start as eggs in the water,” Tom explains. He gets down on all fours and clutches his knees as he rolls on the ground.

He then demonstrates likeness to a tadpole with his hands forming a tail behind his back. The students show their own tadpole impersonations in place. As tadpoles develop, they’re also called pollywogs and...
have legs along with their tail. Tom makes little hops with both feet together. The last and final stage is a fully developed frog, as represented in Tom’s long frog leaps.

Tom counts to three and yells “GO!” for the first three students to roll their way to the orange cones and back as frog eggs. One girl giggles through her face mask the whole way down and back.

Each student rolls, wags their tail, hops and leaps their way through the frog relay race. After they are all declared winners for completing frog metamorphosis, groups Fire, Ice and Cloud follow their trail guides to explore their schoolyard.

**Much of PROWL is student driven.**

Students guide their exploration time based on their emerging interests. Some may build obstacle courses, climb trees, make art from berries and leaves, or use a magnifying glass upon everything they see.

Tom and the graduate students in Merry Lea’s Master of Arts in Environmental Education program help facilitate the activities and encourage each first graders’ interests. On this particular day, Alex Mihalik, New Castle, Pa., and Danilo Rodriguez, South Bend, Ind., lead their groups into the wild areas of the school’s property.

Danilo gathers his group and introduces the first activity to immerse the kids in the space. He hands out cards with various shapes on them, tasking the first graders with finding something in nature that matches the shape on the card.

Triangular leaves, crisscrossed sticks and grass seed heads shaped like a bottle brush are discovered.

One girl holds an armful of milkweed pods already bursting. As she walks through the prairie, some seeds escape with their silks strings and float away.

Eventually all the students find milkweed pods and shout, “What is this?” in all directions.

Still clutching the pods, the girl and her friends gather around to investigate what these could be.

Looking at an open pod, she exclaims confidently, “It’s a seed!”

The students ponder and hold up the wispy white silks attached to the small, hard, brown ovals. They determine the brown parts are the seeds that make more milkweed plants. The shell or pod around them all just holds them until they’re ready.

What remains, the soft, white hairs, are a mystery. They throw a few up in the air and watch how far the breeze takes the seeds.

The students hypothesize whether the seeds would fly without the white hairs or not, and soon figure out the silks’ purpose. The seeds travel far to find space for it to grow.

The girl who once had an armful of pods now lays them at her feet.

She offers up some great insight into why seeds are important. “Seeds grow into plants for us to eat – and for animals too,” she says. She starts talking about her favorite garden plants that she eats at home.

**PROWL is about seeding relationships.**

These small moments in nature all add up to enrich and fulfill the PROWL experience.

When Tom started this after-school program in 2013, he did it with the intent of strengthening Merry Lea’s relationship with the surrounding community to be mutually beneficial. Tom worked with schools, families and students to make Merry Lea more accessible.

He approached Troy Gaff, then the principal of Wolf Lake Elementary (which is now Central Noble Primary and Central Noble Elementary schools), who identified the need for more after-school options for children. Gaff secured busing from the school directly to Merry Lea, and Merry Lea was able to offer PROWL at no cost.

Since then, PROWL persisted through two principals who also believe in experiential environmental education. Robby Morgan of Central Noble Primary School and Jared Knipper of Central Noble Elementary School continue to work with Merry Lea on this after-school program.

PROWL continues to be offered at no cost and registration always fills up right away. The mission of PROWL involves developing relationships across three levels: between Merry Lea and the local school, between students and place, and within and between families.

“I’ve seen students develop a strong sense of place at Merry Lea. When a student comes back to PROWL after a previous session or on a Merry Lea field trip, they remember the trails and what they did. And they’re proud to show it off to other students,” Tom says.

PROWL is not only educational and place-making, but it is also a social opportunity for families. At the end of each session, the students host the people they live with at Merry Lea and lead a hike, do a skit or show artwork that demonstrates their time during PROWL.

“This shows families that Merry Lea is a place they can come and spend time together and see Merry Lea as their backyard. It’s community-building that way,” Tom explains.

“I’ve seen families from PROWL come to hike or come to other public programs. It’s one extra step in helping families see Merry Lea as a resource.”

But what has been unexpected for Tom is how PROWL has impacted him. “As someone who lives in this community, it has helped me feel so much more connected – so much more like this is home. I get such joy and energy from interacting with these students.”
There is much to be thankful for this season. Students in the Sustainability Leadership Semester completed all of their coursework safely, multiple student groups engaged in outdoor education both at Merry Lea and at schools, and families are hiking together in our forests and prairies.

Merry Lea has always been a place of respite: a tribute to our steadfast mission for benefitting the human spirit and body. Even in a time of sickness, uncertainty, and division, spiritual and physical renewal can be seen happening at Merry Lea every day.

**But we need your help to continue serving our community in these ways.**

As a financially independent non-profit organization, Merry Lea relies on the generosity of people like you.

Will you demonstrate your commitment to environmental education and nature conservation by becoming a sustaining **Friend of Merry Lea**? Your gift will make a difference!

You may give online at goshen.edu/merrylea/donate. Or you can call our office at (260) 799-5869

Regardless, we wish you peace, joy, love and laughter in the coming year, and invite you to rest for a while with us at Merry Lea. May our ‘happy meadows’ provide soothing, stability and common ground for you and your loved ones.

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**Thank you for your support**

Thank you to the following people for donating to Merry Lea during this quarter. Your support has contributed to delivering safe environmental programming, maintaining facilities and upkeeping hiking trails!

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Merry Lea Brings Field Trip to the Schoolyard

“CAN A ROCK EAT OR DRINK?”
Marcos Stoltzfus, director of environmental education outreach, asked a pavilion full of kindergarten students with genuine curiosity.

“NOOO!” Came the resounding response. The first clue that a rock might not be a living thing.

“Can a rock move on its own?” Marcos set down a rock on a table and stared at it. He then put his back to it and quickly turned around as if to catch the rock red-handed. No, it didn’t move.

The kindergartners giggled through their masks. Rocks must not be living things then.

On a late sunny morning, Merry Lea educators led a program that felt very similar to a typical field trip in the fall. But instead of hosting students at Merry Lea, Merry Lea met the class outside their school.

Right next to West Noble Primary School is a local park with wide open spaces, tall trees, a pavilion with picnic tables and a small patch of woods with a trail loop.

Students became detectives to figure out what makes something alive. They had four clues to figure out whether something was nonliving, living or was once living: a living thing can grow, move around, eat or drink, and make more of itself.

It takes a skilled educator to discuss concepts like life cycles, nutrients and reproduction in kindergarten-friendly language.

“Can a raccoon make more raccoons?” Marcos asked the group as he held up a raccoon fur for the students to touch after they’ve sanitized their hands.

“NOOO!”

With a grin on his face, Marcos had them cradle their arms and asked if baby raccoons exist. They agreed that baby raccoons exist. He asked them if those raccoons can grow up to also have babies and become mommies or daddies. They agreed: a raccoon must be able to make more of itself, and the students understood the concept.

After testing out these clues on various examples they could see and touch, the kindergartners were ready to explore and find evidence of living and nonliving things throughout the park.

Katie Tipton, an environmental educator and public programs coordinator at Merry Lea, and Marcos both led the groups. Two graduate students in Merry Lea’s Master of Arts in Environmental Education program observed the new field trip. Later in the season, they would lead trail groups of their own both at Merry Lea and in schoolyards.

As the groups went their separate ways, the young detectives immediately went to work. They observed grass, bugs, leaves and tree stumps with their handy toolkit: senses of sight, touch, hearing, smell…and magnifying glasses.

Reflecting on the start of the pandemic, it was unclear what field trips would look like or if Merry Lea would be able to host any programs at all.

This fall season has brought familiarity to the newness of 2020, like watching kindergartners excitedly explore and make new discoveries in a forest or grassy lawn. Fall has returned the sounds of pounding feet to trails at Merry Lea and elsewhere, the oooh’s and ahhhh’s of smelling walnuts and the squails of finding critters underneath logs.

Even with modifications, environmental education can happen safely while remaining hands-on and immersive. Kindergartners can still express creativity, practice problem-solving and appreciate nature with all-outdoor programming while wearing face masks.

The two kindergarten groups eventually transitioned into the forest where students were tasked with the open-ended project of building an animal home. Animals require nonliving things, like shelter, to survive.

Although Katie didn’t give any building supplies to the students, they didn’t need prompting on what materials they could use. Kindergartners scrambled to collect twigs, fallen leaves, rocks and feathers.

“Cherries!” One girl discovered a bush with red berries.

“How can I keep this up?” Another girl puzzled out loud as she tried to prop up two sticks together precariously.

“Oh, my bag! I can use my bag!” And she reached for the brown paper bag that Katie had given each student with their program materials for the day. It now served as a wall for her triangular animal home.

“Let’s get some food for our frog in the basement,” one student told another. They were working together on a shelter that looked like an open floor layout outlined by sticks and filled with yellow leaves.

Whether at Merry Lea or in the schools’ backyards, outdoor education connects students to nature with physical, mental and emotional benefits. They build motor skills as they construct animal homes, develop recognition of local flora and fauna, identify patterns in weather and seasons, practice writing and reading in their journals, and build a sense of place with local nature.

Thanks to their explorations, the kindergartners were confident in identifying what was alive or not alive. “Thank you for letting us come over,” said one student as they waved goodbye to return to their indoor classroom.
Michiana Regional Seed Swap

WHERE:
Virtual via Zoom

WHEN:
Saturday, Jan. 16 9 a.m. – 12 p.m. (approximate)

The Michiana Regional Seed Swap is designed to be a resource for regional residents in Michiana and beyond. This year, you can participate from the comforts of your home! Hear from different speakers and engage in educational breakout sessions based on your interests. The event is designed to bring together like-minded individuals to exchange knowledge and passion about seeds.

Cost is free. Registration required. See our website for more details.

Learn more at:
goshen.edu/merrylea