The Merry Leaflet

Merry Lea Environmental Learning Center of Goshen College | P.O. Box 263, Wolf Lake, IN 46796 | 260.799.5869 | goshen.edu/merrylea

Meet our agroecology students

by Jennifer Schrock

Merry Lea's Agroecology Summer Intensive (ASI) ended on August 1 with a feast. The six ASI graduates invited friends, family and members of the Merry Lea Team to a lunch featuring foods they had grown.

Roast chicken, currant barbeque sauce, sorghum grain, vegetable stew and goat's milk ice cream made the meal memorable. All of the ingredients

were locally grown except for a stick of butter and a cup of sugar.

"I'm really proud of all the students and the way their individual passions contributed to the group. Everyone was also willing to be challenged beyond their current knowledge," said John Mischler, who directs the ASI.

Associate Professor Ionathon Schramm, commented on the level of care they extended to each other. "It gives me hope for what you will do in the future," he told them.

I interviewed each student before they left us. This too was a feast. I was struck by the varied motivations that brought them to us and the many ways they hope to make use of what they learned about sustainable food systems.

Enjoy getting to know these engaging people and the ASI! The complete profiles are available on our news page at goshen.edu/merrylea.



Heather Gabel and Director of the ASI John Mischler prepare to install Heather's sculpture, "Together, Hope" at the Merry Lea Sustainable Farm.

Heather Gabel, '21

One of the gifts a liberal arts school like Goshen College offers its students is the freedom to explore and connect multiple disciplines. Heather Gabel, Orange City, Iowa, has taken full advantage of this opportunity.

Heather is double majoring in art and sustainable food systems. While taking the 2019 ASI, she brought art onto the Merry Lea Sustainable Farm in a very concrete way. A sculpture that Heather made during the program now stands in the education garden.

The sculpture is structured around two hoops arranged perpendicular to each other. A closer look reveals a pitchfork, a shovel, a spigot, springs, gears and fence posts. Heather doesn't like to be heavy-handed about the interpretation of art, but she did describe the connections that were in her mind as she constructed the sculpture. Agroecology students talk a lot about cycles, participation and diversity in their classes, and these themes were playing in the background as she recycled rusty metal into something new.

These inorganic objects look strangely at home rising from the soil in a corner of the garden with the Kesling Wetland in the background. It may blend in even more with time.

"I'd like to see plants trellised on my sculpture. And how cool it would be if a bird made a nest here!" Heather says.

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FROM THE INTERIM DIRECTOR'S DESK

by Dave Ostergren, Ph.D.



Greetings,

Summer sailed by with warm, sunny weather finally arriving to help plants grow, seeds ripen, fruit turn sweet, insects emerge, bats feed, birds raise young and all the wonderful things that happen in the heat. A couple of days were hotter than most of us prefer, but that's the way of summer. The change of the seasons brings heat and growth, and we all change with it.

Another big, obvious change is that I am writing from the director's desk instead of Luke Gascho. We miss him, we wish him well in his retirement and we want everyone to know that he left Merry Lea strong and steady. I started as acting director on July 1st with a sense of excitement and just a little feeling that I will be overwhelmed. With the team's wonderful support, we continue to teach amazing classes, design fun programs, welcome our visitors graciously and tend to the land and facilities with the professionalism that comes with decades of experience. We can all rest assured that the Merry Lea Board and Goshen College are working on a plan for the interim period and a process for hiring a new executive director over the next few months.

Today I write from Southern Indiana. I am on a three-day excursion with the graduate students to develop our teamwork and explore different ecosystems. Watching the master's students in a new place prompts me to reflect on what a wonderful place we have in Merry Lea:

- It is a complex natural area that contributes to regional biological conservation.
- It is a place that educates people about the nature on site and encourages them to explore the natural world beyond our borders.
- It is a refuge for creatures great and small.
- It is a place for people to rest and recreate.

Merry Lea invites curiosity and stimulates wonder. It is a marvelously complex place where we can strip away the noise and simply enjoy being with nature.

I encourage everyone to pause each day to enjoy the warmth of August and the seasonal changes that September brings. Peace.



A woodland sunflower in bloom at the Learning Center Building.

ABOUT MERRY LEA

Merry Lea was created with the assistance of The Nature Conservancy and through the generosity of Lee A. and Mary Jane Rieth. It is owned by Goshen College. The center provides a comprehensive program of environmental education and recreation.

The Merry Leaflet, published in spring, summer, fall and winter, provides news about programs and developments at Merry Lea. Jennifer Halteman Schrock is its editor and the author of articles without bylines. See the news tab at goshen.edu/merrylea for more news.

TEAM MEMBERS

Chad Agler

Building Manager and Grounds Assistant

Kerry Goodrich Property Supervisor

Carol Good-Elliott

Environmental Educator

Tom Hartzell

Coordinator of Undergraduate Programs

Krista Freel Environmental Educator

Bill Minter Director of Land Managemt

John Mischler Director of Agroecology

Ruth Mischler Asst. Professor, SEED

Dave Ostergren

Interim Executive Director

Joel Pontius Director of Sustainability Leadership Semester

Ellie Schertz Farm Manager

Jonathon Schramm

Assoc. Professor, SEED

Jennifer Halteman Schrock Communications Manager/MCCN

Marcos Stoltzfus Director of Environmental Education Outreach

Katie Tipton

Public Program Coordinator, Educator

Maria Tice

Admin. Assistant / Volunteer Coordinator

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Merry Lea prepares to host a nature-based preschool

This September, a forest clearing near Merry Lea's Kesling Wetland will be home to a nature preschool four days per week. Tree trunks will serve as seats and an open shelter will keep off the rain.

Central Noble Primary School, Wolf Lake, Ind., and the Cole Center Family YMCA, Kendallville, Ind., are collaborating with Merry Lea on the innovative new nature preschool. District administrators initiated the project by inviting Casey Weimer, CEO of the YMCA, to hold a preschool at Central Noble Primary. They also passed along their enthusiasm for Merry Lea's Kinderforest program.

Merry Lea's Environmental Education Outreach Team (EEO) is now preparing a space and crafting a curriculum for the preschool. It will offer preschoolers nature-based early childhood education similar to Kinderforest.

What is a nature preschool?

According to the North American Association for Environmental Education, a nature preschool "must put nature at the heart of the program, it must be based on high-quality early childhood education and environmental education practices, and it must also help lay a foundation for environmental literacy."

Krista Freel is one of two environmental educators who will each spend two days with the program. She radiates enthusiasm when she discusses student-led, inquiry-based learning. A visit to her office provides a glimpse into the careful curriculum development and regular evaluation that gives depth and polish to Merry Lea's programming.

"The most exciting part is pioneering an idea that is new in this region. We hope we can get other people interested in what we are doing because we believe it has value," Krista says. She envisions a preschool experience that addresses the whole child: body, mind and spirit.



Environmental Educator Carol Good-Elliott assists Property Supervisor Kerry Goodrich in preparing a shelter for the YMCA Preschool at Wolf Lake. Good-Elliott will also teach in the program two days each week.

"We all have a need to be in nature, a need for a safe community and a need to find our sense of self. If preschoolers can build that esteem within themselves, they will have an intrinsic motivator that will help them throughout their schooling," Krista says.

Rocks, sticks and mud

Teachers will use natural materials to teach regular preschool concepts like comparing sizes and colors. As Krista points out, working with rocks and sticks can help children retain ideas in ways that worksheets don't.

Imagine a group of children mixing soil and water and figuring out what to do with the mud that results. This activity sounds simple, but it involves planning, communication, creativity and even some basic engineering skills. At the kindergarten level, making mud meets multiple Indiana State Standards.

Helping to staff a preschool four days a week is a big commitment for the EEO Team, but Marcos Stoltzfus, who directs the EEO, believes the decision makes sense

"This is directly mission-aligned. We know that having kids outside four days a week in all weather and all seasons will benefit them. Also, we are getting many requests for information on nature-based early childhood education. It just makes sense for us to have a program we can claim as ours, to demonstrate to educators in the area," he said. The preschool will also provide an opportunity for students in Merry Lea's Master of Arts in Environmental Education program to become familiar with another form of environmental education.

Weimer encourages local families to consider the YMCA Preschool at Wolf Lake.

"Kids who have had a quality early education opportunity will be more successful in school," she said, citing statistics that show that this advantage has lasting benefits. To inquire about openings, call 260-347-9622.

Meet our agroecology students continued from page 1

Cailin Smith, '21

What's a biochemistry major doing in Merry Lea's Agroecology Summer Intensive (ASI)? Cailin Smith, Knightstown, Ind., says she joined the group because a lot of biochemical research is agricultural.

"I know I want work that helps reverse the effects of climate change in the future, and with a biochem. degree, there are lots of options," Cailin explains. She felt the ASI might help sort them out. She also saw it as a valuable complement to her lab and textbook training.

Cailin wasn't sure she would excel at hands-on learning. While her background gave her a good grasp of the carbon, nitrogen and phosphorus cycles that are important in agriculture, that wasn't going to help her move a cow or milk a goat. She was nervous about working with animals. But by the end of the program, she found that even scooping poop out of a pen had its rewards.

"Both ways of learning are good. Both are equally exhausting. But when you're

outside learning by talking to people and doing things, it is more enriching and fun," Cailin says.

One outcome of Cailin's time at the Merry Lea Sustainable Farm was greater clarity about the kind of biochemical research she wants to pursue.

"We talked a lot about the effects of commodity farming and large-scale agriculture. This gives me insight into where I should put my energy in the future. I want to work somewhere where regenerative agriculture is the focus," she concluded.

Georgia Ringle, '20

Georgia Ringle, Burlington, Mich., came to Goshen College's sustainable food systems major by way of a culinary program. Georgia attended a technical high school where she received training in culinary skills. She chose her first college with this in mind, but soon realized that the time pressure of churning out meals every day was not something she enjoyed.

After earning an associate's degree at Lake Michigan College, Georgia transferred to Goshen College to study sustainable food systems.

Georgia's goal is to become a sustainability consultant for large industrial agriculture operations. While sustainable practices are usually associated with small family farms, she sees ways that industrial agriculture can make choices that are healthier for people and the planet as well.

During the ASI, Georgia had the chance to tour Miller Poultry, which processes chickens from egg to grocery store. Field trips like this one enabled her to imagine herself working as a corporate consultant.

"Miller Poultry was interesting to me because it gave me insights that could be useful in my career field," Georgia recalls. On another field trip, the group visited the Community Harvest Food Bank in Fort Wayne. Georgia would also enjoy helping nonprofits such as food pantries find ways to make high quality food available to all. *continued on page 5*



Cailin Smith with a worm bin she created.



Georgia Ringle rendering lard.

Stephen Lowe, '22

Stephen Lowe, Harrisonburg, Va., approaches agriculture with an appreciation for the complexity of the profession and an educator's eye.

Stephen intends to graduate with a music education major and a minor in agroecology. He hopes for a bi-vocational future that includes teaching music during the school year and time for farming in the summer. Taking the Agroecology Summer Intensive at the Merry Lea Sustainable Farm was one way to find out if this could work for him.

"Society sees farming as simple man's work, but it takes a lot of knowledge and skill and precise timing. It takes a lot to farm healthily for both the earth and humans," Stephen says.

One complex challenge Stephen and the other ASI students faced was planning the education garden at the Merry Lea Sustainable Farm. This involved balancing the needs of multiple stakeholders. In the fall, the Environmental

Education Outreach Team (EEO) uses the garden for children's programs, so the cohort had to consider how their plantings would function educationally. What tactile experiences could children have? What might teachers and parents learn? They also had to think about how much time it would take to maintain the garden after they left. Their time in the education garden concluded with an orientation they planned for those who would teach in it soon.

During the ASI, Stephen created a plan for a food forest for the Goshen College campus. With an eye to food literacy, he considered siting, signage and plant selection. The exercise gave him yet another opportunity to appreciate complexity and hone his skills as an educator.

Lily Kauffman, '21

Lily Kauffman, Mountain Lake, Minn., joined the ASI partly as a way to take a condensed "gap year." She hoped to gain more experience with sustainability before declaring a major. Now she is leaning toward sustainability studies.

Lily's interest in justice is one reason this major might fit her. Both the sustainable food systems major and the sustainability studies major emphasize systems thinking and attention to societal justice issues.

"Any kind of injustice, I want to understand and try to turn around," she says.

During the ASI, Lily oversaw the herb garden. Chocolate mint, lemon balm, basil, garlic chives, oregano: each has a taste, a texture and a scent as well as an appearance. Visiting the herb garden with Lily brings these multi-sensory nuances to the foreground since her vision is limited. When Lily shared a presentation on the herb garden with members of the Environmental Education Outreach Team, they pressed her for teaching tips. She did her best to describe how the children they work with might have a five-senses experience with the herbs too.

Whatever major she chooses, Lily says her goal is to be creative and joyful, celebrating the beauty of the earth.

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Stephen Lowe with cucumber vines he trellised.



Lily Kauffman tending the herb garden.



Olivia Downey during an ASI class presentation on animal enrichment.

Olivia Downey, '22

During a course in animal husbandry, Merry Lea's ASI students take turns caring for animals and learning to understand their needs. This includes milking goats, moving cattle from pasture to pasture, protecting chickens from predators and keeping pigs happy.

Olivia Downey, South Bend, Ind., was particularly taken with the pigs. She focused a project on animal enrichment, coming up with an exercise designed to stimulate and engage them.

Imagine you were kept in the same room 24 hours a day with nothing in particular to do except eat. Human beings would experience a rapid decline in both physical and mental health under these circumstances. Most farm animals live limited lives like this.

While Merry Lea's pigs have access to an outdoor pen where they can root in the mud to their content, it is still not the lifestyle their wild ancestors lived. They don't roam through forests for acorns, swim rivers or compete for mates. Intelligent animals like pigs are particularly in need of enrichment.

Olivia began her project simply by watching the pigs to see how they spent their time. Charting these observations enabled her to see what kinds of enrichment might be most beneficial for them. She then designed a toy for the pigs out of PVC pipe. When rolled, bounced or nuzzled, the toy dispenses popcorn, blueberries or other treats. Olivia observed the pigs playing with her toy and again charted her observations. The pigs were definitely intrigued!

ASI students often list learning to care for animals as a highlight of the program. They use words like "rewarding" or say that the animals taught them patience. Simply paying attention to other species' perspectives seems to change their own worldview. Trying out these small acts of caretaking is a reminder that human beings hold the fate of other species in their hands.

Merry Lea celebrates baby boom

As the Merry Lea Team expands, so does the number of offspring. Three employees welcomed new babies this summer.

- Elwin Ross Mischler was born June 26 to Ruth and John Mischler. John is the director of the ASI and Ruth is a SEED faculty member who teaches in the ASI.
- Rowan Jeffery Hartzell was born July 14 to Tom and Amy Hartzell.
 Tom is the coordinator of residential undergraduate programs.
- Lucy Joyce Agler was born to Chad and Dawn Agler on August 15.
 Chad is the building manager and grounds assistant.

There are now 19 children under 18 who know (or will know) Merry Lea as mommy or daddy's workplace. Parents of older children report that sharing Merry Lea with their children is a welcome fringe benefit.

"My kids enjoy dipping for tadpoles," says Marcos Stoltzfus, who has two preschool daughters. Carol Good-Elliott's son, Benjamin, now 19, also enjoyed dipping in the vernal pond. She still has a poem about fairy shrimp that he wrote for a school assignment.

Interim Executive Director Dave Ostergren, whose children are now 21 and 16, sent his kids out to explore the property on days off from school. It was a good mix of safety and independence.

Children of team members often helped with Enchanted Forest programs, bringing cocoa to animal actors or acting themselves. Roles such as the spider and the fly in its web or the frog and toad dialog worked well for parent-child duos.

Whether they attend Nature Fest, help with bird banding or simply listen to stories at the supper table, the new babies will be shaped by the land as well.

Cross-property hike orients master's students

In mid-July, students in Merry Lea's Master of Arts in Environmental Education program pack their water bottles for a cross-property hike with Bill Minter, director of land management. They begin at the Kesling Farmstead on the far eastern property line and hike on and off trail to the Glacial Retreat Center on the western border.

The cross-property hike is the first of a series of professional field experiences designed to help students integrate what they are learning in their classes. Currently, their coursework is focused on natural history, environmental pedagogy and research methods.

Bill's hike offers both a big-picture sweep of what the property contains and many intriguing details Google wouldn't tell you. Insights into the ways human decisions have shaped the land alternate with a sense of wonder at nature's resilience.

A field that was farmed for decades sprouts Michigan lilies when it is left fallow and then managed with periodic fire. A prairie dock seed bides its time, putting down roots. Ten years after the seed was planted, the mammoth leaves emerge, fighting their way upward through the grasses. One gets the sense that land management is part science, part mystery.

Below are a few of the questions and answers that came up during the hike:

What is the perimeter of Merry Lea?

Merry Lea has 17 miles of boundary line. This is more than Chain O'Lakes State Park has. Horizontal blue blazes mark the property lines; double blue circles mark a corner.

Why does the southwest part of the Kesling Prairie look different from the northern part?

Big bluestem towers overhead on the northern half of the prairie. It mixes with a yellow expanse of cup plant and coneflower. On the southwest slope, the



Drainage tile may be familiar to Hoosiers, but it often confuses people from other parts of the country. Bill keeps an unglazed ceramic tile along the hike's path to show how the land was drained in the past. Water seeped through the walls of the porous clay and ran off via ditches. This dropped the water table to the level of the tile.



The eleven members of the 2019 - 2020 master's cohort arrive at the western edge of Merry Lea's property after a four-hour hike. The dome in the background is part of the Glacial Retreat Center and is used for geology programs.

prairie is shorter. The purple spikes of savanna blazing star punctuate grasses that remain thigh-high. This is a clue that the southwest-facing slope is warmer and drier than the northern side of the prairie. Therefore, different plants flourish.

How and when was the land drained?

Much of Merry Lea's acreage was drained for farming in the 1850s and 60s. Back then, what is now Thumma Ditch was originally Carroll Creek. A steam shovel was used to straighten and deepen the channel to move water downstream more rapidly. The high banks on either

side of Thumma Ditch were created using material dug from the creek.

What kind of soil is underneath the Bear Lake Prairie?

A clay with a high pH known as marl. It is formed from mussel shells. This marl beach prairie is one of the best places at Merry Lea to look for unusual plants.

Why does the Wysong Meadow contain several trees?

"If I were a raptor, I'd want to sit there," Bill says. The meadow is a prime hunting ground for species like red-tailed hawks, and he left them a place to perch.





1700 S. Main St. Goshen, IN 46526

Events

Learn more at: goshen.edu/merrylea

Please register for Merry Lea events online if possible. See https://www.goshen.edu/merrylea/category/event/. Call 260-799-5869 if you need assistance with registration.

LEARN TO MAKE GOAT CHEESE

WHERE: Merry Lea Sustainable Farm (Rieth Village Site) WHEN: Saturday, September 14, 8:00 AM - 11:00 AM

Try your hand at milking our resident goats and then learn how to process their milk into goat cheese. This program is intended for adults. Cost: \$15 per person. Register by September 12.

WOMEN'S NATURE WALK

WHERE: Merry Lea Farmstead Barn

WHEN: Saturday, September 28, 8:30 AM - 11:00 AM

Rediscover the restorative power of natural spaces and of women in community. The morning includes walking together in the wilderness, stopping to read aloud the words of women authors. Coffee and light snacks will be provided. Please dress for the weather. Cost: \$10/person. Register by September 26.

ENCHANTED FOREST

WHERE: Merry Lea Farmstead Barn

WHEN: Friday, October 25 and Saturday, October 26,

7:00 PM - 8:30 PM

This is one of the only opportunities in the year to hike Merry Lea's trails at night. Guides will lead groups by lantern-light to find and interact with real "live" animals. Costumed employees and volunteers will answer questions about life as a native Indiana animal. This family-friendly evening is a great alternative to Halloween events too scary for young children. Cost: \$3.50 per person; registration not required.