## From Farmcraft to Exploring Merry Lea Sustainable Farm

# Pre-K to 12 Team Reshapes Curriculum

By Joel Pontius, Assistant Professor of Sustainability and Environmental Education

Lately, Merry Lea has been experiencing exciting new growth involving multiple programming areas. In fall 2016, we look forward to beginning a new PreK-12 **Environmental Education program** called Exploring Merry Lea Sustainable Farm. This innovative program focuses on how our unique farm ecosystem works, and how we care for soils, plants and animals in order to grow healthy food for people. Exploring Merry Lea Sustainable Farm will take the place of Farmcraft. This is a significant change both because of Farmcraft's long and rich history and because it engages so many of us—the PreK-12 Environmental Education Team, volunteers, regional PreK-12 students and teachers, the Masters of Arts in **Environmental Education students** and the farm staff.

# Merry Lea Sustainable Farm as a Place for Environmental Education

The change in curriculum grows out of the development of the Merry Lea Sustainable Farm (MLSF) at Rieth Village. For most of its history, Merry Lea did not have a working farm to draw upon. Gardens and animals were cared for in order that the Farmcraft program could be delivered. The new program will take place at MLSF, where we are caring for soils, plants, animals and micro watersheds and providing

high quality food for the local foodshed.

As a teaching farm, MLSF showcases a wide range of services and organic farming best practices. The farm has grown by leaps and bounds, first under the leadership of its founder, the late Dale Hess and more recently, with Jon Zirkle as director. Fruit orchards, a nut orchard and a five-acre restoration agriculture project are all underway. Recently MLSF has taken on animal husbandry in addition to growing vegetables. First to arrive was a flock of egg-laying chickens that lives in a portable henhouse called the egg-mobile. Last growing season, the farm organically raised its first pigs for the local foodshed.

MLSF recently added a barn, greenhouses, and a vegetable packing area complete with a walk-in refrigerator. These resources enable the farm to offer Community Supported Agriculture (CSA) shares to local community members and to Goshen College students. CSA members receive a weekly share of whatever foods are in season. The breadth and diversity of the MLSF make it an ideal educational setting.

In many ways, Exploring Merry Lea Sustainable Farm will continue the trajectory of Farmcraft. Children will still interact with farm animals and gardens and learn about where their food comes

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## **Working Farm Takes Food Safety Seriously**

Below Andrew Harris, a senior at Goshen College and summer farm intern prepares broccoli for market at the Merry Lea Sustainable Farm's new washing station. Recently the headhouse at Rieth Village was transformed into a packing house, complete with stainless steel countertops and a walk-in cooler.



"Developing personal connections with the sources of the food we eat changes our view of both how fragile our earth's ecosystems are and also how responsive they are to our care."

- Luke Gascho, Executive Director

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# **Embracing Change**

## by Luke Gascho

Spring brings change. It is the kind of change that is much anticipated after

the winter season. This year's rainy, cool weather increased the longing to see the verdancy of May and June.

While we hope for changes in the seasons, we can also resist changes that are on the horizons of our lives or work. I-along with the Merry Lea team members—have experienced many changes over the last year. We still grieve the untimely passing of Dale Hess in 2015. We miss Janie Beck Krieder who moved to Virginia—and has now taken another job after being with us over three years. We reluctantly acknowledge that Lisa Zinn will head to a teaching position in Vermont this summer after serving in many roles with us for 13 years. Three new staff members were added in the past 13 months and two more will begin this summer to replace those who are leaving. Some team members who remain will shift their job descriptions. All this change periodically causes unsettledness in my spirit and a desire for the consistency found in former days.

The reality is that we can never make today just like what felt comfortable in the past. Each spring is different—even while we can make similar observations about them. As I look out my office window, I see the fresh, green leaves on the trees. These leaves never existed before, even while they look like the ones I saw last year. Each spring the trees need to start over

again. They can't pick up the leaves from last fall and try to make them come to life. This is important for me to ponder as I think about the changes at Merry Lea.

The Merry Lea team is an amazing unit of 15 people with a total of 160 years of service! This group brings new life and energy to each programmatic endeavor we undertake. Over the past ten years we have designed and implemented three new collegiate programs. Our Pre-K to 12th grade programs adjusted to new demands and opportunities. Our public programs continue to morph based on interests and needs. We are very cognizant that when we change one program area, it impacts all the other program areas. We are like a food web in an ecosystem: move one part, and the whole system alters.

During the winter, we had many meetings to discuss the multilayered changes we were experiencing. Often it felt like there were too many variables

Each spring the trees need to start over again. They can't pick up the leaves from last fall and try to make them come to life.

swirling around to make sense of how to shape the future. To aid our thinking, we read and discussed Margaret Wheatley's book, So Far from Home: Lost and Found in Our Brave New World. She reflected on her life's work of dealing with change as a leader, scientist and consultant.

Wheatley writes about emergence, a process of complex interactions that creates something new that cannot be changed. "Once something has emerged, it's here to stay. The only way to create something different is to start over, to begin again," she cautions.

Wheatley also emphasizes the need for adaptability:

Emergence demands a different relationship with life, where we are curious, open, alert. The only thing we can predict is that life will surprise us. We can't see what is coming until it arrives, and once something has emerged, we have to work with what is. We have to be flexible and willing to adapt—we can't keep pushing ahead, blustering on with our now outdated plans and dreams. And it doesn't help to deny what has emerged. We need to be present and willing to accept this new reality.

Both these insights apply to our situation and are meaningful to me.

Through the resilience and insights found in the Merry Lea team, plans have developed in response to the changes. We have redesigned programs, rewritten job descriptions and filled open positions. Vibrancy percolates within the team when we face the changes with candor. Our response to the changes will continue to bring newness that is built on the durable mission of Merry Lea.  $\Omega$ 

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

#### **MERRY LEA TEAM MEMBERS**

Luke Gascho, Executive Director
Kerry Goodrich, Property Supervisor
Carol Good-Elliott, Environmental Educator
Kate Friesen, Farm Manager
Tom Hartzell, Coordinator of Undergraduate Programs
Jane Litwiller, Environmental Educator
Bill Minter, Director of Land Management
Dave Ostergren, Director of the Graduate Program

Joel Pontius, Director of PreK-12 Programs
Jonathon Schramm, Assistant Professor, SEED
Jennifer Halteman Schrock, Coordinator of Public Programs
Maria Tice, Admin. Assistant/Volunteer Coordinator
Doug Yoder, Buildings Manager
Lisa Zinn, Assistant Professor, SEED
Jon Zirkle, Director of the Agroecology Program

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

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from. But while the Farmcraft program had a historical focus, looking backward to the days before electricity, the new program will look forward, seeking to understand the ecological processes that provide the food we eat and modeling what a modern sustainable farm ecosystem can look, feel and taste like in our region.

This new focus also reflects developments in the field of environmental education. In the past 15 years, farm and food-based environmental education programs across the nation have become central to providing students opportunities to learn about community, place and the ecological processes that provide the food we eat. Urban, suburban and rural programs are supporting positive engagement of participants in local community life and providing fresh, healthy foods to local foodsheds. Merry Lea has a unique opportunity to engage with developments in the field of environmental education through the Merry Lea Sustainable Farm.

### Transitioning to Exploring Merry Lea Sustainable Farm

How do we maintain healthy, caring relationships with soils, watersheds, plants and nonhuman animals at MLSF? How do we care for the variety of living organisms that live around MLSF? These questions will drive the Exploring Merry Lea Sustainable Farm program. During the program, students will be busy exploring the farm: searching through the soil ecosystem to find all kinds of fascinating critters, hunting for pollinators, learning about how plants store the sun's energy and interacting with the animals that live at the Merry Lea Sustainable Farm. We look forward to this opportunity to share Merry Lea's approach to caring for our unique farm as an ecosystem with regional PreK-12 students, teachers, chaperones and others. Eventually, we hope to add an outreach component to help teachers and students engage with local sustainable farms and to provide opportunities to learn how to grow food of their own.  $\Omega$ 



## **Remembering Farmcraft**

The smell of a wood-fired cook stove and the flavor of a hot cornmeal muffin on an autumn morning. The rough feel of the crank handle on the old cider press and the satisfying crunch of apples being chopped by metal forged a century ago. The soft "thump, thump" of chicken beaks pecking cracked corn that a first-grader tossed into the laying hens' pen. Many of the PreK-12 students who have experienced Merry Lea's environmental education programs fondly remember such experiences from Farmcraft, an engaging program that focused on how work was/is done on a Northern Indiana farm without electricity.

According to Larry Yoder, the originator of Farmcraft, the program evolved out of the Sunflower Festival, a public event at Merry Lea that dates back to the early 1970's. For the festival, Merry Lea grew sunflowers and visitors could come during a fall weekend and pick the heads for their own birdseed supply. To broaden the festival's appeal, a variety of demonstrations including baking, cider pressing and apple butter making were offered. Larry would bring his antique 6hp Mogul engine from the Yoder farm and belt it to Lynn Goodrich's burr mill to grind corn meal and whole-wheat flour. Bill Minter arranged for a portable sawmill and turned out lumber to the sound of steam whistles. The local draft horse association provided hayrides. Hundreds of regional people flocked to Merry Lea each fall for this popular festival.

As Larry reflects, it was a great deal of setup work for one weekend, so it was natural to leave much of the set-up in place, recruit some of the volunteers and feature many of the same activities for weekday school programs that were in demand mid-September to the end of October. And so Farmcraft, a program packed full of experiential activities such as corn shelling, baking in the summer kitchen, caring for animals and cider pressing became the major fall PreK-12 program at Merry Lea.

Over the years, the Farmcraft program underwent many stages of development and evolution. Gardens and animals were cared for in order to deliver the program to large numbers of PreK-2 students. Infrastructure was restored and built for program delivery at the Farmstead. The curriculum was adapted to focus on energy cycling through a nonelectric farm system. We are so grateful for all of the learning opportunities provided by the Farmcraft program, and for all the lives it touched.  $\boldsymbol{\Omega}$ 

# Volunteer trainings provide playful introduction to Merry Lea's curriculum



Volunteers prepare to teach Merry Lea's Trees are Terrific program. Standing, left to right: Ed Gerholt, Fort Wayne; Emma Gerig, Goshen, Ind., Rick Bonar, Churubusco, Ind. Seated: Julie Davidson, Columbia City, Ind.

"I support!" chanted Emma Gerig from the center of a tangle of bodies that looked a bit like a Chinese fire drill.

Emma, a senior education major at Goshen College was impersonating the heartwood of a tree during a volunteer training she attended while taking Merry Lea's environmental education course for teachers this spring.

Veteran volunteer Julie Davidson sat on the floor making slurping sounds. She was a tree root. Meanwhile, Rick Bonar and Larry Yoder clasped hands in order to represent the sapwood or xylem of the tree. Their line was, "Gurgle, slurp, transport water."

By the time the demonstration was complete, successive rings of other volunteers encircled the core of the human tree, representing cambium, phloem and bark.

"We make food! We make food!" shouted the participants on the fringes who were leaves.

This lively, noisy jumble is part of Merry Lea's Trees are Terrific curriculum, designed for primary children. It is a fun way to learn how a tree functions, and volunteers master the exercise by acting out the parts themselves.

Twice a year in the spring and fall, Merry Lea provides a daylong training session for its teaching volunteers. Volunteers are coached in safety procedures, shortwave radio etiquette, natural history and behavior management. They try out activities and hike the trails they will use with the children.

The day begins with introductions and a chance to trade teaching tips. Ed Gerholt, Fort Wayne, Ind., describes himself as a farm boy from southern Indiana. Before retiring, he was a financial manager, but now he's trying to reacquaint himself with the outdoors he enjoyed so much as a child. He's taken the Master Naturalist program to scratch that itch.

Chuck Harvuot, Warsaw, Ind., describes how he watches the parents accompanying the group to see who is paying attention and then appoints them as cabooses to make sure no one is left behind. Russ Voorhees, a retired teacher from Fort Wayne, Ind., shares a tip that keeps children from running ahead of him on the trail.

After experimenting with the activity pictured, the volunteers head outside for a tree hike. The hike is a lesson in knowing the concepts you want to teach so you can snatch the opportunities to teach them when they arise. Environmental educator Carol Good-Elliott demonstrates how to take advantage of a large pin oak that came down along the lane leading back to Rieth Cottage. On one side of the lane, about six feet of the stump was left standing and can be used to show children how the heartwood inside had rotted, weakening the tree. On the other side of the lane, children can try counting the rings of a sawn off log to estimate how old the tree was when it died.

The swamp further down the lane affords the opportunity to learn that some trees are adapted to growing with their roots submerged while others are not. A handful of rich humus with bits of wood still visible illustrates that dead trees break down into soil that will nourish other plants.

Volunteers also teach Nature's Recyclers. This program demonstrates how recycling is practiced by almost every living thing, from spiders that conserve protein by eating old webs to birds that reuse nests or nesting materials. To prepare for Nature's Recyclers, volunteers spend the afternoon brushing up on worm anatomy and the use of worm bins to turn garbage into fertilizer. Outside, they roll over logs to find rolypolies, sow bugs and other decomposers that live in the soil.

The next volunteer training will occur in early September and will focus on the new program taking shape at the Merry Lea Sustainable Farm. New volunteers are welcome.  $\Omega$ 



#### **Photo Caption:**

At right, teaching volunteers in training use their arms and legs to illustrate alternate versus opposite branching of twigs. This concept is included in the Trees are Terrific program.

**Left to right:** Maria Tice, volunteer coordinator; Katie Stoltzfus, student in the MAEE program, Julie Davidson, volunteer.

# Are You Interested in Volunteering?

Merry Lea has an ongoing need for volunteers. Roles include teaching children, farm and garden work, kitchen help and sharing an area of expertise. Volunteers get to know each other at spring and fall trainings and the annual volunteer dinner. Contact Maria Tice, mariact@goshen.edu, for more information.

## **Volunteer Feature: Larry Yoder the Younger**



Larry Yoder oversees a huddle of children during a program at the Learning Center Building.

Not everyone would want to arrive at Merry Lea with a confusing name like Larry Yoder. After all, the original Larry Yoder — who served as director here for nearly two decades — is still renowned and still frequents the property. But volunteer Larry Yoder doesn't mind a bit. He recently retired from teaching social studies at Central

Noble Middle School where he shared his name with a much younger man. "I enjoy being at a place where I can be the younger Larry Yoder," he jokes.

Larry grew up in Middlebury, Ind., where he had what he describes as an outdoor childhood. Throughout his life, he maintained an interest in nature through many camping vacations. He bought his first set of camping gear with

an income tax refund; then later upgraded to a pop-up camper.

Turkey Run and Brown County
State Parks are some of Larry's
favorite camping spots in Indiana.
"You can't go wrong in Michigan
or Wisconsin either," he adds.
Meanwhile, camping in the Boundary
Waters in Minnesota is a special
treat for him. He recalls spending a
week fishing at Lake McCuen on the
Canadian side of the border. He only
saw one other party of boaters the
whole time. "What you notice first is
how quiet it is," he grins.

Larry found that Merry Lea's Farmcraft program fit particularly well with his background as a social studies teacher. It gave him a chance to talk about Indiana history and the ways that people change landscapes over time. Trees are Terrific is another program he particularly enjoys, but any time you can be on a trail talking about things that matter is a good time as far as he is concerned.

"Outside, the kids are all very eager to learn and listen," he says.  $\Omega$ 

## **Firsthand Fest Takes Shape:**

# Volunteer Inspires New Public Program

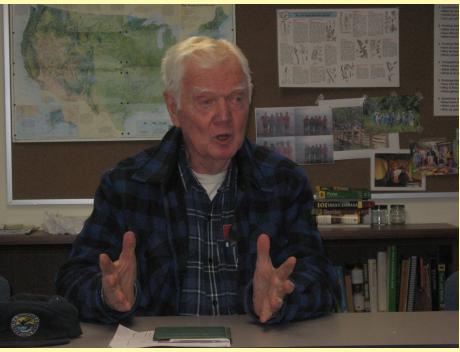
In May 1999, Merry Lea Volunteer Neil Case and his wife, Mona, spent a month volunteering at the Upper Souris National Wildlife Refuge in north central North Dakota. Curious about how the fracking boom that has extracted oil and gas from this state in recent years was affecting natural areas, Neil visited the Upper Souris again in May 2015. He returned home with a fire in his belly.

"I came back strongly opposed to fracking," Neil says. "It pollutes soil, water and air. What more is there?"

North Dakota has more national wildlife refuges than any other state, but many of them are small, encompassing just a lake or two. On a map, the Upper Souris shows up as a narrow diagonal slash straddling the Souris River. It is only a mile or two wide at most places. This means that what is going on in the landscape nearby reaches into the refuge.

Neil was able to connect with a park ranger he knew from 1999, and together they visited some of the same places he had frequented. Much had changed. Now there were many more roads, much more traffic and oil rigs everywhere. Neil's guide told him that during dry periods, the dust from the gravel roads makes it seem like you are driving in fog.

Neil is a serious birder, so he was particularly interested in how the North Dakota birds were faring. The



Neil Case, Albion, Ind., presents research on fracking to students in Merry Lea's master's in environmental education program during an environmental issues class.

rustic prairie pothole country that Neil remembered had had birds on every lake and pond. In 2015, the birds were gone. The combination of human disturbance and water pollution had taken its toll. The most striking example was a lake where Neil recalled seeing thousands of white pelicans nesting. Not even one remained.

Neil returned with a desire to let people know what he had witnessed. In early spring, he spoke with Merry Lea's master's students during their environmental issues class. He is also the inspiration for a new public program coming up Friday, September 30. It is called a Firsthand Fest, and it will be an opportunity to hear from people who have firsthand knowledge of environmental problems—or better yet, solutions. Neil Case will be one of four featured speakers. Open mike periods will allow for a broader range of stories. We're including brick oven pizza and a dessert bar to make sure things don't get too heavy. See the events page on Merry Lea's website for more details, and join us.  $\Omega$ 



## Word of the Month: ovoviviparous

**Definition:** producing young by means of eggs that are hatched within the body of the parent, as in some snakes.

At first, Environmental Educator Jane Litwiller thought someone had put cherry tomatoes into the northern water snake's cage. The 27 mysterious red objects were egg-shaped, a little under an inch long and the consistency of a jellybean. Jane concluded that they must have come out of the snake, but what were they? Why would a species that gives birth to live young lay eggs?

After consulting a veterinarian, we learned that northern water snakes sometimes pass unfertilized eggs, known as slugs. They do produce eggs; they just hatch them internally. Mystery solved.  $\Omega$ 

# Merry Lea Team Bids Farewell to Lisa Zinn

The most mourned change on Merry Lea's horizon is the loss of Lisa Zinn: director of the Sustainability Leadership Semester, professor, environmental educator, web master and entertainment engineer. After 13 years at Merry Lea, Lisa and her wife, Hannah Miller, will move to Vermont in July to take up teaching responsibilities at Johnson State College, Johnson, Vermont.

"I've enjoyed Merry Lea's land, especially since I live nearby, but what I will miss most is the people," Lisa remarks.

Lisa will be remembered for her able leadership, ability to navigate moments of crisis gracefully, expertise as a birder and determination to do whatever needs doing with a winning spirit. She is affectionately known as "Fun Lisa." After all, it was Lisa who taught team members to play broomball—now Merry Lea's official winter sport. It was also Lisa who brought hacky-sack games into the corporate culture. Students and faculty alike have found that standing in a circle and keeping a beanbag-like ball in the air is a great way to clear the brain of cobwebs.

There is no replacing Lisa, but her work will go on. Joel Pontius will direct the Sustainability Leadership Semester and pick up teaching responsibilities. Carol Good-Elliott will take over bird banding. Even the Spring Birding Challenge that Lisa began and headed up each year has a successor. She recently learned that some Amish participants have adapted the team birding idea to their own context. Their Meadowlark Area Spring Birding Contest had ten teams and sixty participants this year. Many were youth; most birded on foot or bicycle.

The Merry Lea team held a farewell party for Lisa on June 8. The challenge of planning a party worthy of "Fun Lisa"

inspired the Merry Lea team to try something new: canoe races on the Kesling Wetland. Stories, photos and of course a hackysack game were part of the celebration. Unfortunately, broomball was not an option.  $\Omega$ 



Lisa Zinn, director of the Sustainability Leadership Semester, models her new sports jersey: a goodbye gift from the Merry Lea Team. Lisa is a broomball enthusiast.

## **Adopt-A-Net Returns**

Each summer Merry Lea participates in a national bird banding research program called Monitoring Avian Productivity and Survivorship (MAPS). You can support bird banding research at Merry Lea by sponsoring a bird net.

We are asking for your help in keeping our nets up to research quality standards. Nets wear out because they are exposed to sun and rain all summer.

If you donate the \$100 cost of a new net, we will keep you informed about how your net is doing. We will send you photos of birds that are caught and banded from your net, and we will see whose net catches the most birds. Adopting a net is a great way to join in this exciting research.

You are also welcome to visit during banding times and see your net in action. Contact carolge@goshen.edu.  $\Omega$ 



David Bontrager, a rising senior at Goshen College, frees a catbird from a net. David is spending the summer at Merry Lea, dividing his time between bird banding research and grazing research.



"Where Earth and People Meet"

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# **Upcoming Public Programs**

Read more about Merry Lea's public programs and register at https://www.goshen.edu/merrylea/category/event/.

## Nature Play Day Tuesday, June 14, 1 - 6:30 PM Learning Center Site

Help your favorite children connect with nature through wetland dipping, hikes, crafts and a bring-your-own-roastables campfire supper. No charge.

## Noble Co. All-In Block Party Saturday, June 25, 10 AM - 3 PM Courthouse Square, Albion

Look for Merry Lea's booth at this community event. Explore Indiana geology and take an urban tree hike.

## Food Preservation: Canning Tuesday, July 19, 2 - 4:30 PM Farmstead Barn

Gain confidence preserving seasonal food from the garden. \$10 covers supplies. Call 260-799-5869 to claim your spot.

## Indiana Humanities Literary Hike Saturday, July 23, 10 AM - 1 PM Farmstead Barn Site

Hike through wetlands, woodlands and prairies at peak bloom with Micah Towery of the Goshen College English department. We'll pause to hear the work of Hoosier authors. This event is part of a series by Indiana Humanities celebrating Indiana's bicentennial. \$10 includes a farm-fresh lunch. Use the link provided on our site to register.

## Wilderness First Aid Course Monday & Tuesday, August 29 & 30 8:30 AM - 5:30 PM Farmstead Barn

Hands-on practice with medical scenarios is an important part of this course. The curriculum covers patient assessment, rescue techniques, fractures, dislocations, splint

improvisation, spinal cord injury, managing environmental emergencies, shock and preparedness. Participants earn a two-year certification. The cost of \$175 covers instruction and lunches.

## Firsthand Fest Friday, September 30, 6 - 9:30 PM Farmstead Barn

A mini storytelling festival featuring people who have firsthand knowledge of the ways the earth is changing. The evening also includes brick oven pizza, a dessert bar and an open mike time, so bring a story of your own.

#### **Enchanted Forest**

Friday & Saturday October 28 & 29 7 - 8:30 PM

#### **Farmstead Barn**

Take a night hike by lantern light and meet costumed talking animals native to Merry Lea.  $\Omega$