

Agroecology at Merry Lea: From Academic Program to Sustainable Farm

by Janie Beck Kreider

Day is breaking at Rieth Village. Sluiceway, the beloved orange farm cat, prowls the grounds. Chickens cluck. Bees buzz. Greenery and blossoms burst forth and envelop the small three-cottage village as it sighs a brief reprieve between groups of undergraduates. This is the calm between the flurry of May Term and graduation celebrations and the arrival of the summer agroecology cohort.

Nevertheless, the energy level at Reith Village is high. Even in the absence of students and programming, the village is full of activities involving plants and animals and farmers. The work in the gardens, greenhouse and hoop house does not cease. The newly transplanted fruit orchard needs tending, and ten dozen eggs per week will not gather themselves. Spring greens and rhubarb do not know that it is the beginning of summer vacation, and the rows and rows of tomato plants are oblivious to the absence of the Agroecology Summer Intensive students destined to be their caretakers.

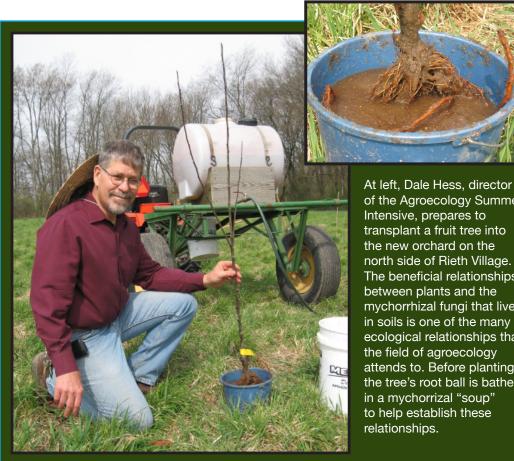
Agroecology Program Director Dale Hess, Farm Intern David Stoesz and newly appointed Farm Manager Jon Zirkle have their hands full, literally, of broccoli and beans. Planting and transplanting are in full swing, not to mention a variety of new projects. The sustainable farm at Merry Lea is expanding in many directions: from the addition of inoculated mushroom logs to chickens. A bulldozer is

> presently clearing space for the construction of a small animal barn. A nut orchard was planted in

the South Kesling Prairie just before the drought last year. Careful tending by students and farm staff resulted in most trees surviving the record dry summer. This year the apples, pears, peaches, plums, cherries, and pawpaws in the new Rieth Village fruit orchard have been bathed in exactly 2.4 inches of spring showers during the month of May.

The number of pastureraised broilers doubled since last year. Stoesz made this possible by constructing a second chicken tractor (a movable chicken coop lacking a floor). He also constructed the eggmobile housing the first laying hens at Merry Lea-20 happy ISA Browns. Their shelter has sparked curious passersby to wonder





of the Agroecology Summer Intensive, prepares to transplant a fruit tree into the new orchard on the north side of Rieth Village. The beneficial relationships between plants and the mychorrhizal fungi that live in soils is one of the many ecological relationships that the field of agroecology attends to. Before planting, the tree's root ball is bathed in a mychorrizal "soup" to help establish these



Director's Desk Sustainable Agriculture at Merry Lea by Luke Gascho

The theme of this issue of *The Merry Leaflet* is the ongoing development of the agroecology program. It is good to reflect on how this programmatic focus has emerged. Whether one looks at the Merry Lea property

by driving around it on county roads or by viewing it via satellite imagery on Google Earth, it is clear that Merry Lea is in the midst of an agricultural landscape. These views have helped convince leaders of Merry Lea to explore the intersection between agriculture and ecology.

In January 1965, the National Audubon Society produced a master plan for the first 80 acres of Merry Lea. In fact, the name, Merry Lea, had not even been crafted at that point nor had Merry Lea been organized as a nonprofit. The organizational name on the report was Rieth's Nature Sanctuary. I am amazed as I read through this document to discover that the ideas proposed parallel the many programmatic concepts that we pursue 48 years later. Land preservation and environmental education are at the forefront of this master plan, but it also includes the need for a farm unit and gardens. The rationale that the report gives is that, "work experience and learning can come from firsthand contact with the soil." The corresponding site map includes areas on this initial 80 acres for gardens, a farm unit, and pasture.

Over the years that followed, other plans for Merry Lea included ideas regarding agricultural programs. In a plan from 1990, program examples of "agricultural and horticultural demonstrations" are named. Dr. Larry Yoder was the executive director at the time. He encouraged many people to think about sustainable farming practices and still does. He continues to teach units in the summer agroecology program.

In 1999, staff members again identified sustainable agriculture as an area to pursue at the undergraduate level. "What are distinctive programs that we can do because of our land and setting?" we asked. It was clear that the agricultural link was a key one to cultivate through curricular development. The next steps were to outline potential courses and write a job description for a professor of agroecology. By 2004, Dr. Dale Hess was hired to fill this role. He has done an excellent job of pulling the curriculum together, implementing the program, and serving as the main instructor in the program.

As we assessed the program, we saw that hiring a farm manager and creating a sustainable working farm would help the program move to the next level. These advances are described in this issue of the newsletter. The improvements in this program and the corresponding learning experiences will serve many students as well as the general public. Agroecology will improve the health of food systems by showing the value of ensuring that ecosystems are healthy while food is grown. This is another way of showing people "Where Earth and People Meet"—the tagline for Merry Lea. Ω

continued from page 1

if a band of gypsies has taken up residence on the Rieth Village lawn.

Each of these new projects contributes to the expanding vision of the Merry Lea Sustainable Farm. In the early part of the 20th century, Goshen College boasted a full-fledged farm and School of Agriculture on its main campus in town. During World War I, the college fell on hard times financially, and the farm was sold. However, the importance of young people understanding where their food comes from was not lost on the staff of Merry Lea. For many years, the ever-popular Farmcraft program has introduced K-12 students to gardening, small livestock, and food preservation. Then in 2007 the Agroecology Summer Intensive

A four-season farm reflects nature's way of integrating both plants and animals into an ecosystem and offers more diverse learning opportunities for students.

at Merry Lea was inaugurated in collaboration with the college's environmental science program. Developing the scope of Merry Lea's sustainable farm to a four-season diversified farm will give students and interns the opportunity to engage in innovative, interdisciplinary study of the agricultural environment.

Merry Lea's sustainable farm reflects nature's model of integrating both plants and animals into an ecosystem, and offers the diverse and varied learning opportunities that students desire. It also provides a more realistic atmosphere in which to learn about sustainable business

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.

ADMINISTRATION AND STAFF

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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. Look online at www.goshen.edu/merrylea/latest for more news.

continued from page 1

practices and financial viability for smaller-scale operations.

The farm is marketing its produce to college staff and students and the campus food service. It also donates to local food pantries. Opportunities exist to sell through local farmers' markets and to develop a CSA.

"A functioning farm at Merry Lea will serve not only the Agroecology Summer Intensive, but also Merry Lea's K-12 programming, masters' program, public programs, and the wider community in ways we haven't yet imagined," reflects Hess.

The farm will model some approaches to agroforestry, where trees are managed together with crops and/or animal production systems in agricultural settings. Collaborative relationships are being established with other agroforestry sites in the region and Merry Lea hopes to become a demonstration site for this kind of agriculture.

"Developing this type of farm would benefit more than just our students, but people around the region and the world interested in researching alternative, sustainable models of agriculture" observes Merry Lea Executive Director Luke Gascho. He looks toward the future of the farm as "a viable model that will attract proponents of small scale sustainable agriculture to come, learn, and contribute to the community."

Additionally, Merry Lea hopes to continue to develop international partnerships in order to open up conversation and learning opportunities between farmers from vastly different contexts and areas of interest. This interest is reinforced by Hess' years of involvement in agricultural systems in sub-Saharan Africa and the recent visit of Gascho and Hess to sustainable farming projects in Benin, West Africa.

The Merry Lea Sustainable Farm offers its students and faculty the opportunity to engage in interdisciplinary work in sustainable agriculture within Goshen College's liberal arts culture. As it contributes to the diversification of Noble County's agricultural landscape, the future looks bright for the Merry Lea Sustainable Farm. Ω

Eggmobile Provides Fresh Pastures for Chickens

In contrast to the caged lifestyle of most chickens on industrial farms, the chickens living in this house on wheels roam and peck within portable fencing.



Farm Manager Joins Merry Lea Team



Jon Zirkle

In 2008, Jon Zirkle was putting his undergraduate background in geography and environmental studies to use in a skyscraper in Chicago, III. He wore dress clothes, worked in a cubicle and saw little in the way of nature.

"I found it painfully ironic to be in such a sterile environment, as far from soil as possible. I enjoyed the work, but it felt so disconnected and abstract," Zirkle says. Craving a more tangible experience, he resigned from his cubicle job and hiked the Appalachian trail. Next, he headed to the University of Vermont, Burlington, Vt. There, Zirkle pursued a master of science degree in plant and soil science, with a focus on plant pathology, agroecology and agronomy.

Zirkle's new role as Merry Lea's farm manager should give him plenty of chances to get his hands dirty. Zirkle will have oversight of all aspects of the Merry Lea Farm, from planting crops to harvesting and marketing them. He will also assist with agricultural research and the Agroecology Summer Intensive courses.

Zirkle says the part of the job that appeals to him most is the opportunity to experiment with different aspects of the work and to learn by trial and error. "I am a visual person; I like to see the results of my work," he explains.

Zirkle also appreciates the chance to work in a setting that emphasizes an ecological approach to farming. In his previous job as an extension agent with Michigan State University, he worked primarily with conventional farms and agribusinesses.

According to Zirkle's resume, he can identify weeds, milk goats, teach youth, speak some Spanish, discourse on organic wheat and implement green cleaning policies. He also has an interest in landscape architecture and enjoys music. At Merry Lea—where everyone wears many hats—he should fit right in. Ω





NatureFest Engages

by Jennifer Halteman Schrock Coordinator of Public Programs

Each year in May, Merry Lea holds a two-day NatureFest, with hikes, camping, canoeing and other nature activities for people of all ages.

When I first began planning NatureFests, I thought that every attender should take a two-hour hike. If they did not arrive armed with field guides, then they should leave well supplied with them after a stop at the Merry Lea bookstore.

What, I wondered, would be the point of attending a NatureFest if you didn't want to learn the scientific names of ten or twenty new species? If a property has unique features like an esker, a floating bog mat, endangered Blandings turtles and warblers here just this weekend, why drive 45 minutes without looking for them with the most skilled guide you can find?

What I've learned over the years is that most people's passion for nature is a bit more—relaxed. It is also more varied. We don't all connect with the natural world in the same way. While some people are driven by a relentless curiosity, others just enjoy running in a beautiful setting. There are gardeners and fisher folk and hunters and sketchers and collectors and astronomers and marshmallow-roasters.

At our 2013 NatureFest, we tried to provide a broad sampling of ways to connect with the natural world. We also emphasized the theme, "Nature nurtures us all." What we do have in common is that we are all dependent on the earth for everything that sustains us—our food, our water, our clothing, our shelter. It is easy to live within the modern delusion that products come from stores, but in reality, we cannot manufacture any of these things out of nothing.





Diverse Interests

During Festival Hours, the lunchtime period when people wander from station to station, several of the booths highlighted the transformation of natural materials into products like furniture, maple syrup and clothing.

Those who *did* want a two-hour nature hike bushwhacked through brush on the west side of the property with Bill Minter, Merry Lea's land manager. They returned muddy and enthusiastic. Ω

Captions:

Counterclockwise from top left to top right

1. Two plein air painters set up their easels during NatureFest and created paintings on the spot. Plein air is the art of painting outdoors with natural lighting and whatever the weather offers. Here, Evie Schwenk puts the finishing touches on her canoe scene overlooking Kesling Wetland.

2. Daraugh Deegan, an aquatic biologist with the City of Elkhart brought fish mounts and a live gar to share with NatureFest attenders. Here, Tilie Schramm, Goshen, Ind., enjoys her first opportunity to pet a fish.

3. About 50 people ran the Turtle Trot 5-K. The trail took them through the Kesling prairies and around Onion Bottom. For a number of runners, it was a first race.

4. Chilly weather made a hayloft concert an especially appealing NatureFest activity Friday night. Barn beams and quilts added atmosphere to the folk music provided by Kate Truscello, Craig Mast and David Kempf, all of the Goshen area.

5. Fans came to Paul Steury's wild edibles table to peruse his extensive cookbook collection and sample garlic mustard pasta, autumn olive jelly and teas.

6. Goshen middle schooler Benjamin Good-Elliott got to see Jessie Smucker's insect collection up close. Smucker, a Goshen College student, studied entomology at Merry Lea this May term.

7. Elena Dupen, Columbia City, Ind., demonstrates the skill of spinning wool into yarn.









Merry Lea's current board members, left to right: Marcia McNagny, Columbia City, Ind., Board Chair; Amy Wechter, Ligonier, Ind.; Heather Harwood, Syracuse, Ind.; John Yordy, Goshen, Ind.; Fancheon Resler, Albion, Ind.; Janeen Bertsche-Johnson, Goshen, Ind.; Gordon Moore, Syracuse, Ind.; Michael Caywood, Huntertown, Ind., Jim Histand, Goshen, Ind., Luke Gascho, Executive Director of Merry Lea, Goshen, Ind.

Board Members Provide Quiet Care for Merry Lea

Although they are not as visible as volunteers who teach children, another dedicated group offers time and insights to Merry Lea and has a sense of ownership in its accomplishments. These volunteers serve on the Merry Lea board.

The board supervises the executive director and provides financial oversight. It approves annual budgets, reviews financial reports and approves changes in direction, such as the move toward more undergraduate and graduate programming.

Merry Lea's board members are not expected to raise funds or micromanage details. Rather, they contribute insights from their professional lives and personal experiences. The members featured below represent the diverse areas of expertise that are sought when board members are chosen.

Education:

Michael Caywood has been an educator for 40 years. For a number of those years, his school, Holland Elementary in Fort Wayne, Ind., was an Environmental Studies Special Emphasis Program. While that program has been discontinued, the school continues to send its fifth graders on a week-long trip to the Outer Banks area of North Carolina to study marine eco-systems, and Caywood is part of these trips.

"I am most interested in Merry Lea's educational programs for children," Caywood reports. "Too many children do not have access to wild places or do not have anyone who will take them to these places.."

Environmental Work:

Heather Harwood, a recent addition to the board, is a landscape architect and the executive director of the Wawasee Area Conservancy Foundation. This organization seeks to protect its watershed through education and acquisition of wetland areas. Hence, Merry Lea's land management projects are of particular interest to Harwood.

"I hope to be able to share the challenges and results we face owning 750 acres in the Wawasee watershed," she remarked.

Business:

Gordon Moore owns a car dealership in Nappanee, Ind. "Of

greatest interest to me as a business owner was the data Merry Lea was collecting on its wind turbine and solar panels," Moore says. "We had an ongoing program to reduce our energy consumption and we had reached a plateau on savings and I felt I needed to look at some sort of renewable production. Their data was key in my making the decision to install my first solar array."

Faith connections:

"My vocation is serving as campus pastor of Anabaptist Mennonite Biblical Seminary (AMBS), and my avocation is caring deeply about the connection between faith and creation care," explains Janeen Bertsche-Johnson. She became an Indiana Master Naturalist in 2008 and earlier founded the Earthcare 4-H Club to do environmental education with youth. She is also one of AMBS' liaisons to the Seminary Stewardship Alliance, a group of 24 seminaries sharing ideas for environmental stewardship.

Merry Lea's staff and board members met jointly for the first time this February, when the directors of each of Merry Lea's programs shared strategic plans. Board members then had the opportunity to ask questions. It was a highlight for both groups. Ω



These hands belong to board member Fancheon Resler, who provided a container gardening workshop at Merry Lea's NatureFest this year. Forty years of involvement with 4-H groups and ten years with Master Gardeners has kept Resler studying the natural world. "I've also had connections all my life with Noble County. This has helped me to be aware of ways Merry Lea can relate to local groups and individuals," Resler says.

Kids Need Mentors with Biophilia

I asked my honey pie what she thought of biophilia and she replied "What's that?"

"It's the thought that love of nature is something that is in all of us," I said. According to E. O. Wilson, the entomologist who named the concept, "Biophilia...is the innately emotional affiliation of human beings to other living organisms."

My wife said that being outdoors is refreshing to her. "I love the feeling, especially when I'm giving back and when I am planting, so I can watch flowers grow," she reflected.

According to the Children and Nature Network,¹ by enabling your biophilia, that inborn bond with the flora and fauna of your homeland, you will:

- Reduce stress
- Become more focused

· Enhance your emotional and social development

• Enhance creativity, problem solving ability, self-esteem, self control

Improve cognitive ability AND

• Improve health

Stephen Kellert, a former professor of the Yale University School of Forestry and Environmental Studies who writes prolifically about the human/nature relationship, emphasizes the breadth of nature's impact on us. "Nature is important to children's development in every major way-intellectually, emotionally, socially, spiritually, and physically," he preaches.

I suggest that we as adults need to model biophilia. We need to play outdoors often-and with kids!

Louise Chawla, a researcher from the University of Colorado whom I met at the North American Association of Environmental Education, published an article entitled, "Learning to Love the Natural World Enough to Protect It."² She says that people who became environmentally minded

had both a place to escape to and an environmentally minded mentor. The adult mentors "gave attention to their surroundings in four ways-care for the land as a limited resource essential for family identity and wellbeing; a disapproval of destructive practices; simple pleasure at being out in nature: and a fascination with the details of other living things and elements of the earth and sky."

Modeling those attributes while in the presence of the child does even more, As Dr. Chawla states, "The very fact that a parent or grandparent chose to take the child with them to a place where they themselves found fascination and pleasure, to share what engaged them there, suggests not only care for the natural world, but, equally, care for the child."

In his article, "The Art of Mentoring," Ricardo Sierra from Hawk Circle Wilderness Education compares mentoring to planting seeds. "Some are planted shallow and sprout quickly and have immediate growth. Some are planted deep, and their fruit is

harvested long after the teacher is far away," he explains. He believes role-modeling is the highest form of mentoring. "People learn through observation of even the tiniest details.

Environmental Education with Paul Steury

and while much of this mentoring is unconscious, it is still highly powerful and influential," he adds.

Kids today have plenty of other mentors: athletes, rock stars, Disney television celebrities, video game characters. What they need is more people near them who demonstrate that getting out on a trail, seeking out mysteries and caring for this earth is a super cool thing!

Clinical Psychologist Anne Wilson Schaef states, "As I look back over the significant teachers in my life, one of the characteristics that consistently stands out is their curiosity. We sometimes think that curiosity is reserved for youth and is only natural in young children. Yet I am sure that if we think about the people we have known, those that we remember most vividly are those who remained incurably curious throughout their lives. There is an intimate link between curiosity and aliveness."

Mentor that curiosity. Not only will it bring you to life; it will also show kids young and old that you are a caretaker and lover of this earth! Ω

Paul Steury is the coordinator of Merry Lea's programs for children.

Outdoor Childhoods

Can you match these childhood experiences to the correct person now serving Merry Lea as a board member? Use the photograph on page 6.

1. Was involved in summer-long Boy Scout conservation projects in Germany, Switzerland, South Dakota and New Mexico.

2. The family spent Sunday afternoons roaming fields and forests. They depended on the soil to produce their food.

3. Grew up on Lake Wawasee on a property with its own beach and natural spring. Siblings had the run of the entire lake.

4. Spent many summers at Camp Friedenswald; also enjoyed the Boundary Waters.

5. The family farm bordered a river and included wetlands.

6. Dissected frogs while brothers rebuilt car engines. Ω



http://www.childrenandnature.org

² Available online at http://nature.bryanmahler. com/archive/learning-to-love-the-natural-worldenough-to-protect-it/



Merry Lea Environmental Learning Center of Goshen College

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"Where Earth and People Meet"

Upcoming Public Programs at Merry Lea

Eagle Eyes Series: Sharpening Your Observation Skills

These hikes are for families with kids 12 and under looking for summer fun. Participants will work on the art of observation but also talk about why it's tough to notice what we know is out there. Trail games like "Camouflage" will help you learn to see.

Woodlands with Paul Steury

Tues., June 25, 9:30 to 11:30 a.m., Learning Center

Wetlands with Janie Beck Kreider Tues., July 16, 9:30 to 11:30 a.m., Farmstead

Prairies, leader TBA Tues., August 1, 9:30 to 11:30 a.m., Rieth Village

Sabbath Hike Series: These hikes are for adults or youth seeking a reflective approach and a change of pace from their busy lifestyles the rest of the week.

Prairie Flowers, Sun., July 28, 3 to 5 p.m. Meet at the Farmstead

Essence of August, Sun., August 11, 3 to 5 p.m. Meet at Rieth Village Naming Nature, Sun., September 8, 3 to 5 p.m. Meet at the Learning Center

Autumn Change, Sun., October 20, 3 to 5 p.m. Meet at the Farmstead

Wilderness First Aid at the Farmstead

Thurs. and Fri., August 29 to 30, 8:30 a.m. to 5 p.m. Instructors from the SOLO School of Emergency Medicine and Rescue, Conway, N.H., will teach this 16-hour course. Participants earn a two-year certification.

Autumn Hope Conference

Fri., September 20, 6 p.m. to Sun. the 22nd, noon This faith-based weekend is a blend of guided hikes, group reflection, workshops and worship. Details coming soon. Save the date.

Nature and the Arts Weekend at the Farmstead Fri., October 11, 6 p.m. to Sun., the 13th, 5 p.m.

Merry Lea's annual nature photography workshop will broaden its scope to include some other media. Choose to attend just one session or come for the whole weekend. Details coming soon. Save the date. Ω