

Autumn 2011



The Merry Leaflet

Merry Lea Environmental Learning Center of Goshen College

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Merry Lea Alumni: Where are They Now?

This issue is the first of a two-part series on the many and varied nature lovers who have passed through Merry Lea's prairies, wetlands and woodlands—and gone on. What happens to the undergrads who take an ornithology class here? Where did the summer workers from years ago end up? Do environmentalists actually get **jobs**?

Young people have been able to spend extended time at Merry Lea in an number of ways over the years. Goshen College's environmental science and biology majors may take multiple courses with fieldwork on site. Some snag a summer research internship at Merry Lea through Goshen College's Maple Scholars program. Others take the Agroecology Summer Intensive. From 2000 to 2007, Merry Lea offered year-long internships in environmental education. The following year, the graduate program in environmental education began, and three past cohorts are now making their ways in the world.

The following sketches reveal some of the ways people have taken a piece of Merry Lea with them. More stories will follow in the Winter 2012 *Merry Leaflet*.

Tony Swinehart Biology Professor

Then: Tony Swinehart recalls meeting Dr. Larry Yoder of Merry Lea when he was a freshman biology major in 1989. "What really piqued my interest was when Larry told me that Merry Lea had bogs on the property," he recalled. Swinehart had studied bog

ecosystems in high school and was fascinated by them. Not long after, he tagged along on a boyscout program Yoder was conducting at Merry Lea's tamarack bog. "When I saw that ghostly forest of dead tamarack trees, I was hooked on Merry Lea," he says.

Swinehart served as a Dekko teaching intern and worked on the summer maintenance staff in the early 1990s. He also helped assemble

species lists for the property.

Now: Swinehart is currently professor of biology and curator of the D. M. Fisk Museum of Natural History at Hillsdale College in Hillsdale, Michigan. General ecology, freshwater biology, conservation and historical geology are among the courses he teaches.

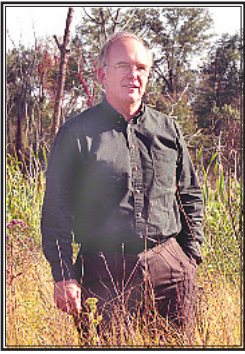
Swinehart brings students to Merry Lea for field trips on a regular basis,



Jenny Allwardt, International Development Worker

Then: Jenny Allwardt attended Merry Lea's Agroecology Summer Intensive in 2008. She came for a hands-on learning experience and left convinced that she really did want to continue on an agricultural career path. Following her time at Merry Lea, Allwardt completed a master's degree in Agricultural, Food and Resource Economics at Michigan State University, East Lansing, Mich.

Now: Allwardt is pursuing a career in international development and has spent time in Bangladesh. More recently, she consulted on a project with the World Agroforestry Centre in Kenya. In the photo above, Allwardt visits with Sarah Obama, President Obama's grandmother. "I was doing survey training and we just happened to be near her village, so we stopped by for a visit," Allwardt explained.



Director's Corner Footprints at Merry Lea

They are everywhere! Visualize the many footprints found along the trails after a group of elementary students participate in an Autumn Adventures program. Picture the deep footprints along the Kesling Wetland after middle school students collected critters in a wetland program. Think of the many steps taken by undergraduate and graduate students

as they traverse the property studying a broad array of natural history topics. Imagine the crisp tracks of a group of adults left in the snow in a winter hike.

There are thousands of footprints that occur at Merry Lea every year. That is what we hope for – and that is what gives us hope. Each footprint helps to fulfill our tagline, “Where Earth and People Meet.” What a simple and grand vision is embodied in this phrase.

The significance of these footprints is not one of damage to our ecosystems, but rather the imprint that is left within the person who engaged in experiences on the land. This issue of the Merry Leaflet reveals stories of people who have spent time at Merry Lea. The stories articulate the imprints made in people’s lives, as well as pursuits that they have chosen that correspond to the experiences they had on this landscape.

We have interacted frequently on the topics of footprints this fall. The title of this year’s Autumn Hope Conference was “Just Footprints.” The participants considered their ecological footprints, discussed the inequities of the North American footprint compared to others on the globe, reflected on how faith calls us to act justly, and learned practices that reduce the size of our ecological impacts. Those who attended left a small footprint at Merry Lea, but many have expressed the ways that the themes of the conference are influencing their daily choices.

As you will note, our alumni have been at Merry Lea in various eras, engaged in different kinds of work and a range of learning experiences. Rarely did their work make significant changes on the Merry Lea landscape, unless they were involved in a restoration project. Some of them were involved in teaching other students, which means they facilitated learning that extends beyond the borders of Merry Lea. Some alumni collected data, which was not harmful to the ecosystems. Yet in each person’s involvement at Merry Lea, the land has provided a particular, lasting influence.

We each have choices as to where we tread and how much impact we make. The Merry Lea mission guides us in thinking and practicing wisely. The result is that this place fosters generative stories like the ones in these pages. §



mostly because of the rich geological and ecosystem diversity present in a localized area. This includes the glacial esker, kettle lakes, sphagnum bogs, marshes, fens, ephemeral ponds, constructed wetlands, swamps, prairies, and forests. With his conservation class, he focuses on the sustainable features of Rieth Village and the ecosystem restoration and management efforts undertaken by Bill Minter.

Swinehart has also brought students to Merry Lea to conduct senior thesis research on its lakes and wetlands. One student recently submitted a paper on the tamarack bog for publication in a peer-reviewed journal.

Comments: “Part of what brings me back to Merry Lea with my students is a deep attachment that I have to the place. I know the land there like the back of my hand, and all the places—even particular trees—are like old friends. Seeing these places brings about an upwelling of emotions and strong positive memories of my times there as a student.”

“Merry Lea also had a huge role in my personal and social development,” Swinehart says. He credits peers and elders with helping him develop self-confidence, teaching skills and diplomacy.

Krista Daniels Interpretive Naturalist

Then: As a biology major at Goshen College, Krista Daniels first became acquainted with Merry Lea through Dr. Mary Linton and Linton's salamander study. This inspired Daniels to take more environmental classes, including a class for education majors on teaching natural history, held on site

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

ADMINISTRATION AND STAFF

Offices at the Learning Center Building

Executive Director	Luke A. Gascho
Director of Graduate Program	Dave Ostergren
Director of Land Management	Bill F. Minter
Property Supervisor	Kerry Goodrich
K-12 Education Coordinator	Paul Steury
Environmental Science Educator	Carol Good-Elliott
Environmental Educator/Maintenance	Jane Litwiller
Admin. Assistant/Volunteer Coordinator	Roberta Miller

Offices at Rieth Village

Director of Collegiate Programs
Lindsey Fellow
Director of Sustainability Semester
Public Programs Coordinator
Program Director Emeritus

Dale Hess
Ryan Sensenig
Lisa Zinn
Jennifer Schrock
Dave Miller

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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, Editor. Look online at www.goshen.edu/merrylea/latest for the additional news about Merry Lea.

during May term. Following graduation in 2000, Daniels became one of Merry Lea's first environmental education interns.

Now: Daniels is an interpretive naturalist with the Elkhart County Parks, working out of Oxbow County Park, Goshen, Ind. She plans and teaches a wide variety of public programs and school programs on topics ranging from reptiles and amphibians to Potawatomi survival skills. She also prepares articles, posters, press releases, interpretive signage and other communications. Recently, she's been trained to operate the Bonneyville Mill near Bristol and provide historical interpretation about this site.

Comments: "My internship at Merry Lea was a perfect fit. Merry Lea helped me recover my childhood outdoors. Being in that setting and having the connection with kids helped me identify that environmental education was the track I wanted to pursue. Also, the support and the encouragement I got from Dave Miller and other staff members was important. I cried when I had to leave Merry Lea!"



Krista Daniels

Jabin Burnworth, High School Science Teacher

Then: Jabin Burnworth joined Merry Lea's master's program in environmental education in 2010 in order to "up his game" as a high school biology and environmental science teacher. While a student here, he conducted a study of woodpeckers at the Edwards Wetland.

Now: Through one of Merry Lea's graduate field trips, Burnworth made a connection that netted him a \$10,000 grant to write a new high school curriculum for the Dunes Learning Center at the Indiana Dunes National Lakeshore. He spent last summer living in a camper near the dunes and doing research for the curriculum. Meeting other researchers was also an important part of the experience.

In the fall, Burnworth returned to his teaching job at Manchester Junior/Senior High School Manchester, Ind., with many new experiences to share.

Comments: "I never saw another soul at Edwards Wetland. It was my peaceful getaway."



Jabin Burnworth

Jason Kauffman, Urban Conservationist

Then: Jason Kauffman's first involvement with Merry Lea involved trapping and marking salamanders for a population study Dr. Mary Linton was conducting. Later he served as a Maple Scholar under Dr. Dave Miller, studying the impact that garlic mustard, an invasive species, had on forest insects.

Now: Kauffman has worked as an urban conservationist for the Elkhart Soil and Water Conservation District for the last five and a half years. His job involves protecting waterways from the erosion that can take place at construction sites. Kauffman reviews all of the construction proposals in Elkhart County and makes sure their erosion plans comply with state rules. The number of projects under his care has been as high as 450.



Tony Swinehart

continued next page



Merry Lea Alumni: Where are They Now?

Maddie King

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Maddie King, Naturalist

Then: Maddie King (pictured above in Virginia) was attracted to Merry Lea’s master’s program in environmental education because it was a small program with a family feeling and a Christian emphasis. She was also eager to get practical experience teaching children. A perk she didn’t expect was learning about food justice issues and the food industry.

Now: After King graduated in 2010, she landed a job as an environmental educator and curriculum developer at the Sheridan School Mountain Campus in Luray, Va. There, she led nature hikes for K-12 students in the Shenandoah National Park and restructured the outdoor and environmental education curriculum for the entire school.

Currently, King is working at the Dunes Learning Center in Chesterton, Ind., as the lead naturalist and programs coordinator. She supervises ten naturalist interns and facilitates the residential environmental education programming.

Comments: “[My year at Merry Lea] was probably the greatest year of my life so far,” said King. “Every time I think of Merry Lea, I think of how much I gained as a person, as well as what they gave me to take with me when I left. I was able to find a job, and I felt confident within the job.”

Daragh Deegan Aquatic Biologist

Then: As an environmental science major at Goshen College, Daragh Deegan took many courses that brought him to Merry Lea. Among them were Forest Resources and Land Management with Bill Minter and Entomology with Dr. Dave Miller.

Now: Deegan works for the City of Elkhart as an aquatic biologist. His program monitors the health of fish and macroinvertebrate communities in area streams. He also works with local and regional watershed groups that are focused on improving water and quality and researches the sub-lethal effects of contaminants on fish.

“When I oppose environmental destruction or promote environmental restoration, Merry Lea and the things that I learned there always play a role.”

Comments: “It is a lot easier to learn about the natural world when you are getting your hands dirty and directly connecting with it, and Merry Lea’s unique relationship with Goshen College provided me with that opportunity. I learned fundamental ecological and biological principles through hands-on education at Merry Lea.

“Living in northern Indiana, I frequently see polluted and unstable waterways, row crops, ag drainage ditches, fragmented landscapes, invasive species, and impervious surfaces. I still think of Merry Lea and her diverse ecosystems as the poster child for what things could look like. When I oppose environmental destruction or promote environmental restoration, Merry Lea and the things that I learned there always play a role.”

Andrew Gascho Landis Doctoral Candidate

Then: Andrew Gascho Landis arrived at Goshen College as a freshman biology student in the fall of 1996. A night hike at Merry Lea

the following spring sealed his fate: “All the frogs were going nuts, and I remember touching this huge spotted salamander. After that I was totally hooked,” he recalls.

Gascho Landis spent three May terms at Merry Lea and also worked as a Maple Scholar. His four months of careful attention to the herbarium added over 100 specimens and 45 new species to Merry Lea’s plant list.

Now: Gascho Landis is completing a Ph.D. at Auburn University in Auburn, Alabama. His focus is on freshwater mussels. By manipulating the conditions in a series of ponds, he is able to observe the mussels' responses to varying environmental conditions and how this affects their ability to reproduce.

Comments: "My first date with my wife was at Merry Lea!"

Hannah Miller Doctoral Student in Education

Then: Hannah Miller came to Merry Lea's master's program and Indiana's quiet countryside after seven years of living, learning and teaching in Shanghai, China—a city with a population of over 18 million. "To be able to walk through trails at Merry Lea on the way to class was an experience I will never forget," said Miller. "I was completely sold on the quiet solitude of nature."

Now: Currently, Miller is pursuing a Ph.D. in curriculum, instruction and teacher education at Michigan State University, East Lansing, Mich. Her work includes teaching a class on science education and working on a research project entitled Carbon TIME. Carbon: Transformations in Matter and Energy is a literacy project focused on developing K to 12 curriculum materials on how carbon and energy cycle through natural and human-made systems on the Earth. The project is sponsored by a 1.5 million dollar grant from the National Science Foundation. The National Geographic Society is also involved.

Comments: "I was surprised by how collaborative and participatory Merry Lea's master's program was. It changed the way I thought about educational systems."

Katie Mast Communications Officer

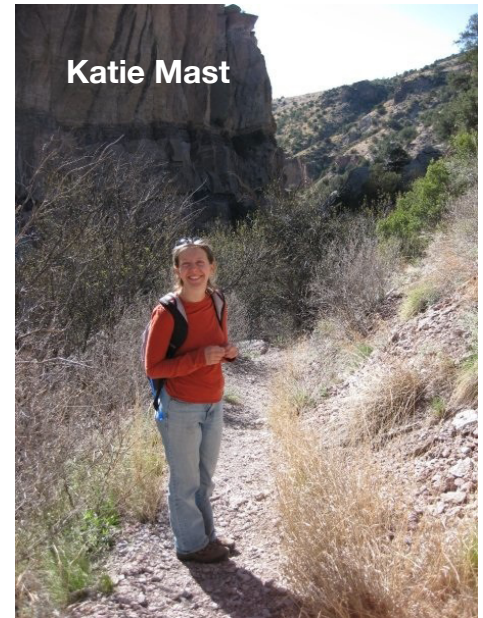
Then: Katie Mast spent a summer at Merry Lea as a Maple Scholar while she was pursuing an environmental studies major at Goshen College.

Following graduation in 2005, she returned for a yearlong environmental education internship.

Now: Mast lives in Albuquerque, New Mexico, where she writes for the Albuquerque Biopark: a combination zoo, botanical garden, aquarium and fishing beach. Her position includes writing for the web and for newspapers and preparing interpretive texts that go on the grounds. She also handles public relations.

Two recent projects that especially interested Mast included reporting on the birth of the first baby seal to be born at the Biopark and working on a story about a native species recovery program. For the latter, she traveled to the southwest part of New Mexico with a team searching for the Mexican garter snake. "It was interesting to watch people doing conservation work on the ground," Mast says.

Comments: "Merry Lea was a major factor in my choosing Goshen College. It informed my understanding of ecological studies and experiential learning. Having the opportunity to teach environmental education shifted my thinking about what I thought



I wanted to do. I found out I really enjoyed working with kids and the communication aspect of education."

Do you have a story for our next issue on Merry Lea alums? If so, please email jenniferhs@goshen.edu. We are especially interested in stories about K-12 visitors or community members who were influenced by their time here, as these visitors are harder to track. §

Staff Quiz

What has become of Merry Lea alumni? In some cases, the answer is, "They came back!" Can you match these early roles with the current staff member who once performed them?

1. She weeded sorghum and sunflowers and mowed miles of trails the summer of 1989.
2. He dismantled old trailers at Luckey's Landing and dug holes for outhouses.
3. Her internship included playing the drums in a music group known as the Bufflehead Jamboree.
4. One of his youthful mistakes included losing all his keys in Cub Lake after getting a frontloader stuck in the mud there.
5. He is not a Merry Lea alum, but was recruited by one of the alums featured in this issue. §

Answers:

1. Carol Good-Elliott, environmental educator
2. Paul Steury, K-12 coordinator and graduate instructor
3. Jane Litwiller, environmental educator and maintenance assistant
4. Kerry Goodrich, property supervisor, never left. He is still here after 30 years.
5. Luke Gascho, executive director, says he would not have applied for this job if his son Andrew hadn't made him aware of Merry Lea.

Butchering Provides Hands-on Ecology Lesson



Children participating in the November 10 butchering day had much to think about as 10 chickens and 11 turkeys lost their lives and were transformed into meat.

In November, the Farmcraft programs that Merry Lea offers for elementary school children come to an end and the residential animals—the pigs, chickens, goats and turkeys—complete their work as environmental educators. The turkeys and chickens have one more lesson to give: they provide a butchering demo.

This year, 31 homeschooled students attended the annual butchering day, as did many of Merry Lea's graduate students. For the grads, butchering is an opportunity to gain practical experience with a behind-the-scenes part of animal education programs. For those who eat meat, it is a reminder of lives ended and the potential environmental impacts of raising animals for food.

"Butchering gives people a chance to reconnect with where their food comes from," observed Carol Good-Elliott, environmental educator.

While the graduate students began the butchering process outside in crisp, sunny weather, the homeschool students gathered inside for a round of instructions and discussion. Parents, too, came to learn;

several families had their own poultry they hoped to butcher.

Soon the nervous students had divided into three groups and were eagerly heading to three different stations. At the butchering station, someone chased and grabbed a turkey or chicken from the pen and held it upside down to calm it. Then, after laying it on its side and thanking it for its work, the head was chopped off.

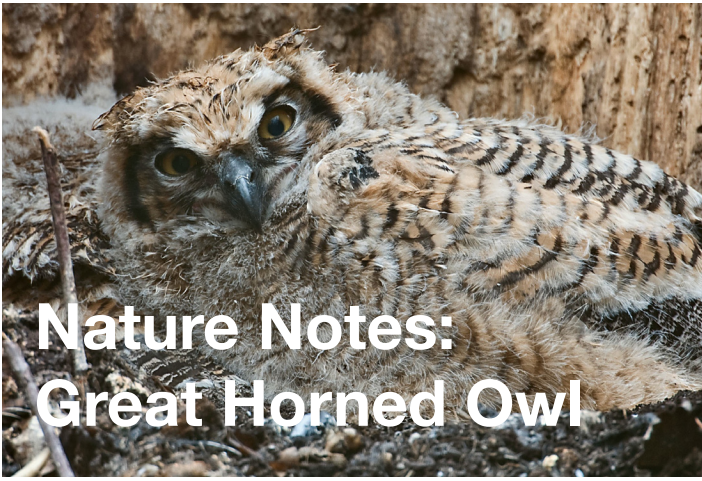
At the next station, the leader picked up the bird and dunked it into a pot of water heated by a fire underneath to scald it. Then, the students gathered for a chance to pluck the feathers. Cold, wet hands were the reality of this task.

After the bird was featherless, it was taken inside a barn for gutting. Grad students took turns explaining the gutting process. Students also received an anatomy lesson from Lisa Zinn, who teaches in the K-12 program.

This is the second year that the butchering process doubled as an educational program. Last year, an anatomy and physiology class came all the way from Penn High School in Mishawaka to participate. §

by Annalisa Harder





Nature Notes: Great Horned Owl

Last spring, visitors to the dipping pond north of the Learning Center Building had the chance to peek into a great horned owl nest. Two juveniles were visible from the trail for several weeks, as they peered down at the world from a dead snag. Paul McAfee snapped the photo above. Sadly, the tree blew down this fall.

by Jason Derryberry

With chilled fingers I hiked through the misty Merry Lea morning. Distant shapes of what might be oaks blurred into the colorless sky. Crunching on brittle leaves, I approached a sturdy black and grey trunk. The dewy bark rose from a carpet of tan leaves and was adorned with furry green patches of moss and dirty white mushrooms. Frigid from the cold, rusty leaves trembled in the wind. With my eyes, I explored the oak from base to canopy, the fog of my breath drifting like campfire smoke into the nearby woodland.

An owl appeared. Feather-covered legs gripped an ascending branch of the oak. The great horned owl, *Bubo virginianus*, rotated its neck in slight but quick movements: left, further left, right, left again, and fully behind. This magnificent bird could have continued to move her neck a full 270 degrees around, an ability necessary for a creature that cannot move the eyeballs in its sockets. Her yellow eyes were surrounded with brownish orange feathers and set in the traditional round, owl-like face. With binocular vision well adapted to low levels of light, she could easily

see a scampering mouse on the forest floor. Thin black stripes, like parentheses, outlined the face, while two horn-like feathers rose above the head like ears. "Great horned owl" is actually a misnomer: the protrusions aren't horns, but feathers adapted to funnel sound like human ears.

I stepped forward in hopes of a better view and my foot kissed a leaf: crunch. The bird glanced downward, her mottled brown and white feathers jostling in the wind. Her shoulders rose; her wings spread; she jumped and soared. I watched the graceful and powerful creature soar into the sunlit mist.

Great horned owls have acute hearing and are capable of pinpointing the location of a sound left and right, up and down, and front to back. This sense is even better equipped than their sight, partly due to the placement of the ears on their heads. The right ear is usually set higher on the skull and at a different angle than the left. With this capability, owls can quickly ascertain the location of a skunk or squirrel and swoop down for the kill, crushing their prey with a force of 300 pounds per square inch (psi). By contrast, an adult human male can squeeze his hand with a force of 60 psi. Many other creatures are hunted by this owl, including raccoons, bats, woodpeckers, pigeons, and even red-tailed hawks.

Great horned owls begin to increase their activity at this time of year, with young looking for potential lifelong mates. They will sing and court through the autumn, laying eggs in the midst of the January cold. Covered in a blanket of waterproof feathers, they are well insulated from blizzards and frost. New owlets will hatch in the early spring, just as migratory birds return to the area and snakes and frogs and forest critters become more active, giving the owls more opportunities for food.

Due to its excellent adaptability and survival skills, the great horned owl's range spreads from the southern tip of South America to the northern tip of North America. They are one of nature's most awe-inspiring birds and well deserving of the name: great. §

Jason Derryberry is a current graduate student in environmental education with an undergraduate background in creative writing.

Autumn Hope Attenders Calculate Ecological Footprints

The thirty-odd people who attended Merry Lea's annual Autumn Hope conference October 7 to 9 did some math as well as some hiking this year.

Just Footprints: Stepping Carefully in our Creator's World was the theme, and this called for calculating ecological footprints. Merry Lea's Paul Steury led the group through the exercise and also took people on a hike that helped attendees visualize the amount of

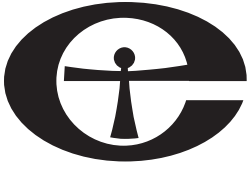
land needed to support them. Most were disturbed to realize how many "earths" their lifestyles required.

On Saturday afternoon, participants attended break-out sessions that posed practical ways to live more lightly on the earth. At left, Bill Minter, Merry Lea's land manager, explains how landscaping measures can reduce one's carbon footprint and watershed impact.

Other workshops covered solar power, trimming your carbon

footprint on a budget, maintaining a healthy relationship with food and composting.

The candles in the photo, near-left, were part of Sunday's worship. During the morning service, Tina Schlabach, pastor of Waterford Mennonite Church, Goshen, Ind., shared from her own faith journey, using the biblical metaphor of God's banquet as an invitation to a whole and peaceable relationship with creation. §



“Where Earth and People Meet”

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Environmental Learning Center
of Goshen College

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Volunteer Trainings Open to All

This fall marked the beginning of a new training program for Merry Lea's teaching volunteers. Volunteers are now asked to attend four of twelve training sessions offered over a two-year period.

Paul Steury, who coordinates the K-12 program, is overseeing the new initiative. He has designed the volunteer curriculum to provide a knowledge base in natural history, science, teaching theory, and critical issues. “We feel our volunteers already do a good job, but we want them to be the best possible trail guides out there,” Steury said. He also feels it is important for volunteers to have a chance to chat and enjoy each other's company.

Twelve volunteers attended the first session that Steury led on November 7. The group discussed the United Nation's vision for environmental education which includes four steps: learning the ecology of an area, learning about the environmental issues the area faces, studying one of those issues from a variety of perspectives, and acting upon that issue.

The sessions also include practical teaching tips. Carl Hurst, Goshen, Ind., says he gained a new idea to use on the trail at the November 7 session. “I found the suggestion to have students select an object along the path and ask a question about it helpful,” he reported.

Volunteers' needs shape the curriculum, but **anyone** is welcome to attend. §



Valentine Hike

Saturday, February 11, 4 to 6:30 p.m.
Bring your sweetheart to the Farmstead for a couples hike beginning at 4 p.m. A candlelit supper and heartfelt dessert will follow. \$15 per couple.

The programs below are volunteer training programs. Come meet our volunteers and see if you want to become one!

* **How Ice Has Affected Us: Geology of Northern Indiana**

Monday, December 5, 2011, 3 to 5 p.m.
Dr. Larry Yoder, former director of Merry Lea, will lead the session at the Glacial Retreat Center.

* **The Original Hoosiers: Miami History and Culture**

Monday, January 9, 2012, 3 to 5 p.m.
Meet at the Learning Center Building.

* **Bird Identification: Telling a Vireo from a Fly Catcher**

Monday, March 5, 2012, 3 to 5 p.m.
Lisa Zinn will share her fascination with the feathered world