

Spring 2018



# The Merry Leaflet

Merry Lea Environmental Learning Center of Goshen College

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## New Options Emerge at Luckey's Landing

Merry Lea's educators often say that Merry Lea is special because it offers people a diversity of ecosystems all within a short hike. No site on the property illustrates this point better than Luckey's Landing.

Visitors to this shoreline on the north side of High Lake and the west side of Merry Lea's property will find not only a calming expanse of water. They can also explore several types of wetlands, an oak savanna and a multi-layered history.

### A more hospitable building

This is why Merry Lea recently renovated the building at this site. While it was occasionally used for visiting school groups, the structure had not been updated since Merry Lea purchased the Luckey property in 1986. Now it has a new roof, new windows, new wood siding, wood paneling on the inside walls, a drop ceiling and better lighting. A utility room and restrooms with showers were also added.

The building was renamed the Eisfelder Pavilion in honor of Mark Eisfelder of Zehr Construction who died in 2017 in the midst of this renovation. Mark worked on every building at Merry Lea over a 20-year period.

Fifth graders from Canterbury School in Fort Wayne were the first group to use the new Eisfelder Pavilion. It was perhaps the most unique Trees are Terrific program ever offered at Merry Lea, as the nearby oak woodland had just received a routine burn and the blackened setting required some creativity on the part of the Environmental Education Outreach Team. But any visit to Luckey's Landing is a unique experience. Here are just a few of the adventures that are possible:

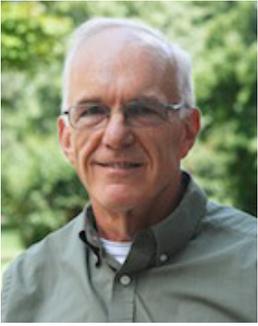


Luckey's Landing just after a burn to remove woody vegetation from the oak woodland. The foreground shows fire-resistant black oaks growing on a sandy gravel ridge. High Lake and its shoreline are in the background along with the Eisfelder Pavilion.



Environmental Educator Carol Good-Elliott teaches the first school group to use the renovated pavilion.

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Dr. Luke Gascho

## Director's Desk

by Luke A. Gascho

### Reflections on the Graduate Program:

# From Imagination to Reality

On May 25, 2018, the tenth cohort completes Merry Lea's Master

of Arts in Environmental Education. Cohort number ten! That brings the total number of graduate alumni to 51. The eleventh cohort begins on July 6 with twelve students—the largest cohort to date. It's stimulating to reflect on the journey that led to the establishment of this important program at Merry Lea.

Early in 1998, the Merry Lea team members and board visualized a preferred future for Merry Lea. The groups recognized that one of the factors that set Merry Lea apart from many other nature centers is that it belongs to Goshen College. This led us to pursue collegiate programs that would make good use of 1,189 acres.

The first step was to work toward a full major in environmental science by adding field biology courses to the undergraduate curriculum. The team also saw the potential for courses at the graduate level beyond the two offered in the summer for area teachers.

Imagination expanded in 2001 when Merry Lea team members visited environmental centers and programs across the country. They toured sustainably designed facilities and interacted with environmental leaders. This led to the construction of Rieth Village and the recognition that Merry Lea had three important strengths that could support a graduate program in environmental education: many years of delivering quality environmental

education programs to regional schools, an outstanding field laboratory, and a highly qualified team.

Over the next two years, the Merry Lea team discussed what a well-designed graduate experience might look like. In November 2004, they shared a new initiative proposal with the Goshen College faculty. The President's Council also reviewed the proposal and strongly recommended that it be redesigned as a full master's degree offered by Goshen College.

With excitement—and some trepidation—the Merry Lea team took on the task of crafting the full degree. In September 2005, the Goshen College faculty approved what would become the first master's program for the college. The program received accreditation through the Higher Learning Commission (HLC) on September 11, 2006.

It was challenging to start from scratch, but by July 2008, the first cohort of three persons was ready to begin. Dr. David Ostergren was hired to direct the program. He started working at Merry Lea on July 1, and the first cohort began four days later!

Each year, the faculty have evaluated the master's program and made improvements. New faculty members have been hired to match curricular needs.

It has been rewarding to help form and deliver a program that is making an impact far beyond the borders of Merry Lea. In ten years, imagination has turned into reality. Ω

## Lake Access

Luckey's Landing offers the best lake access for programming available on Merry Lea's property. Here, it is easy to slip a canoe into the water.

"Both in the Pre-K to 12 area and for the collegiate programs, lake and wetland studies are really important to us," Executive Director Luke Gascho emphasizes.

For years, middle schoolers and high school groups have used Luckey's Landing for water quality programs. In this program, students learn how to assess the water quality of a site. Classes look at what kinds of plants and animals are present and whether or not trash is visible. When a pontoon boat is available, they go out on the lake and perform testing recommended by the Indiana Clean Lakes Program.

## Forest ecosystems

Visitors to Luckey's Landing can compare two dramatically different types of woodlands nearby: a maple swamp where red and silver maples grow in mucky soil and an oak woodland dominated by fire-resistant black oaks, white oaks and hickory that grow on dry, sandy soil.

The latter is a recent restoration of an ecosystem that is globally endangered due to fire suppression. With most woody material controlled by periodic burning, sunlight penetrates the open woodland allowing many herbaceous plants to grow on the forest floor. The ground cover includes bottle brush grass, two-flowered Cynthia and starry campion.

## Wetlands

Those who wish to focus on wetlands also have multiple ecosystems within a

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### 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 operated 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 [www.goshen.edu/merrylea](http://www.goshen.edu/merrylea) for more news.

### TEAM MEMBERS

- Luke Gascho, Executive Director
- Kerry Goodrich, Property Supervisor
- Carol Good-Elliott, Environmental Educator
- Douglas Graber, Building Manager and Grounds Assistant
- Tom Hartzell, Coordinator of Undergraduate Programs
- Jane Litwiller, Environmental Educator
- Bill F. Minter, Director of Land Management
- John Mischler, Director of Agroecology
- Ruth Mischler, Assistant Professor, SEED
- Dave Ostergren, Director of Graduate Program
- Joel Pontius, Director of the Sustainability Leadership Semester
- Ellie Schertz, Assistant Farm Manager
- Jonathon Schramm, Associate Professor, SEED
- Jennifer Halteman Schrock, Communications Manager
- Katie Stoltzfus, Public Program Coordinator/Environmental Ed.
- Marcos Stoltzfus, Director of Environmental Education Outreach
- Maria Tice, Admin. Assistant/Volunteer Coordinator
- Jon Zirkle, Farm Manager

### BOARD OF TRUSTEES

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vernal pond nearby where children can dip for macroinvertebrates. Healthy vernal ponds are one of Merry Lea's distinctives because most of these fragile ecosystems have been drained for development. The absence of fish in a body of water that dries up every summer means that vernal ponds are a safe haven for invertebrates such as fairy shrimp. They are also breeding grounds for wood frogs, chorus frogs, spring peepers and the blue spotted salamander.

Sedge meadows are another ecosystem often lost to farming. Bill Minter, Merry Lea's land manager, recently completed a sedge meadow restoration along a section of the shoreline at Luckey's Landing. Now that woody material and invasive, non-native cattails have been removed, species such as fen betony, white turtlehead, great blue lobelia, cardinal flower, chair maker's rush and tussock sedge are reappearing.

### A step back in time

Luckey's Landing offers a window into both the distant and recent past. Geologically speaking, the site wears its history on its sleeve. Its soils and the rolling landscape nearby recall the era 12,000 years ago when the last ice sheet receded, leaving blocks of ice embedded in sediment. The ice melted, forming what is known as a kettle lake. High Lake, Bear Lake and Cub Lake were all part of an 800-acre glacial lake before European settlement.

A report from the state geologist from 1899 describes High Lake before and after drainage. The flat, grassy area along the lakeshore was originally underwater and the gravel ridge behind the Eisfelder Pavilion marked the shoreline. Native Americans camped on this ridge and used the surrounding area as hunting grounds. Records from the 1890s mention the discovery of communal cooking pits.

In the mid-20th century, Luckey's Landing was a resort where teenagers congregated, pushing each other off the diving board and sharing snacks from the candy store. It is the part of Merry Lea that locals most often reminisce about, recalling lazy summer days in the fifties and sixties.

From 2004 to 2010, Merry Lea hosted an annual community picnic at Luckey's



High Lake as seen from Luckey's Landing on a summer day. Lakes abound in Northern Indiana, but many of them are ringed by houses. High Lake has a limited amount of development. It is also a no-wake boating lake.



Dave and Ed Dunlap (left to right) are brothers who grew up in the Wolf Lake area. After attending a Wolf Lake reunion in April, the two visited Luckey's Landing to reminisce.

Landing focused on local history. One of the picnics looked at the mint and onion era. Another covered the Native American history of the area and offered a hike to the ridge where the cooking pits were found.

Unfortunately, it can be a challenge to visit Luckey's Landing because parking

is not available at the south gate. Please do not block this fire lane. It is a 1.2-mile hike from the Learning Center trailhead, but well worth the walk. Note that outhouses are no longer available at Luckey's Landing.

Find Merry Lea's trail map at [www.goshen.edu/merrylea](http://www.goshen.edu/merrylea). Ω

# Kinderforest in Review: Educators Celebrate an Amazing Year of Outdoor Learning

On May 9, Merry Lea's Environmental Education Outreach (EEO) team wrapped up its first year of Kinderforest in a long-awaited burst of greenness. For a full day every month, two classes of kindergartners from Wolf Lake Elementary School, Wolf Lake, Ind., traded desks and bulletin boards for tree trunks and the crunch of leaves underfoot.

The children were part of an innovative model of education that is common in Europe but only beginning to take off in the United States. According to a 2017 survey, only about 250 nature-based preschools and forest kindergartens serve 10,000 children across the United States. Fewer than five are located in Indiana.

## Outdoor Learning

As the EEO Team and Wolf Lake teachers looked back over the year, they found much to celebrate. They were pleased with the reciprocal relationship that developed between Wolf Lake teachers and Merry Lea and encouraged by the amount of interest other schools displayed in the program. First and foremost, however, Kinderforest worked for the children.

The Kinderforest day begins with time at a "sit spot." Each child returns to the spot they chose at the beginning of the year to observe changes in the world around them and to write about what they see. Coming upon the group during this time is like encountering a band of small monks. The woods is silent and the children pay no attention to approaching guests. They are busy looking and listening.

A generous amount of free play follows. This block of time looks like what people over fifty might think of as an ordinary childhood: children roam where they please, climb on logs and make things out of leaves and sticks. But today, in the era of state educational standards, computer screens and organized sports, such experiences are a luxury.

After lunch, which is eaten outdoors in Merry Lea's council house, teachers present an activity related to that week's classroom learning. Children might be challenged to find shapes, colors or letters in the woods around them. A counting exercise involved stringing leaves on a stick. April's assignment was to make a nest out of materials found in the woods.

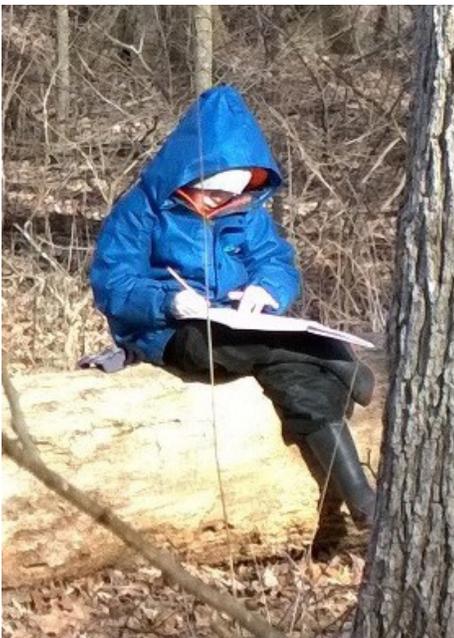
What did the children learn over the course of the year? Natalie Roberts, a student in Merry Lea's master's in environmental education program, focused on the students' Kinderforest experience for her yearlong research project.

Natalie's front-row seat as an observer enabled her to recognize the learning taking place during an activity like walking along a log with a friend. The process requires physical coordination, self-confidence and problem solving. As children taught each other how to navigate tricky spots and adjust their speed when the log was wet, Natalie witnessed increases in emotional development, social skills and self-efficacy.

"Things that seem really simple often have a lot of learning going on," Natalie says.

It was clear that the children's observational skills increased over time. Their ability to stay focused at their sit spots went from less than five minutes to fifteen. Independent of adult prompting, the children shared observations with each other. Natalie noted that the hike out to the trail shelters slowed down over the course

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"Sit spot" observations are an important learning tool in the Kinderforest program. At left, a boy at his sit spot writes in his journal. At right, a child shares observations from her journal. The observers in the background are educators who came to a Kinderforest Showcase that Merry Lea hosted March 21.

of the year because the children kept stopping and showing each other things they had found.

Natalie also found that the children's imaginative play became longer and more detailed. A downed log became a train and the leaves were the boarding tickets. Trees became places to play house. Advances in cognitive development, social skills and use of language made this possible.

### Teachers Notice Many Benefits

As the Kinderforest year drew to a close, Wolf Lake kindergarten teachers Nancy Duffy and Jodie Jordan were emphatic in their praise for the program. At the beginning of the year, they assumed that science education would be the main benefit of Kinderforest, but as time went by, they were surprised by the breadth of learning that took place in the woods and the number of state standards they hit without really trying.

According to Nancy, the sit spot exercise led to better writing in the classroom. When children were given a free writing period, they often chose to write about their Kinderforest experiences. When a child was having trouble finding a topic, a friend might prompt her with an idea from a shared experience during Kinderforest.

"It's a real world reason to write, and when they have a real reason to write, they write better, and they write longer," she said.

Jodie reported on the children's enhanced sensitivity toward nature compared to what it had been at the beginning of the year. They were aware of grasses coming up on the playground and upset when a nearby tree was cut down.

Jodie was also pleased with the way Kinderforest benefitted many different types of students: those with high energy that found the classroom confining and those with less confidence. She also saw the gap between academically struggling and gifted students diminish due to the shared outdoor experience.

"I have never in my teaching career had children who were so supportive of each other," Nancy remarked, as she described the social development she attributed to the Kinderforest experience.



The children loved climbing on logs during unstructured time. Photo by Marcos Stoltzfus.

"They talk out a problem. No matter if they are high ability or low ability children, they give one another a chance to talk. It is beautiful," she added.

### Community Interest

Educators outside of Wolf Lake Elementary School and Merry Lea are watching the program with interest. Over twenty teachers and administrators from other schools attended a Kinderforest Showcase that Merry Lea held March 21. The group was introduced to the educational philosophy behind Kinderforest and observed the outdoor classroom in action.

During the showcase, Marcos Stoltzfus, director of the Environmental Education Outreach Team emphasized the importance of the reciprocal relationship that developed between Merry Lea educators and their nearest school. The initiative came from Wolf Lake Principal Robby Morgan who realized how he might capitalize on the environmental resources available in his community. What emerged was a partnership, not merely a service Merry Lea provided.

"We're willing to work with you to see how Kinderforest might work in your context," Marcos told the group. Since

then, he has been exploring possibilities with several schools.

Troy Gaff, superintendent of the Central Noble School District attended the showcase. He is supportive of the Kinderforest approach at Wolf Lake. "Even as an outdoor guy, I was hesitant because it was removing children from classroom learning. But once I saw it working, it was a no-brainer," he said. He has fielded requests from the community asking that the program continue into higher grade levels.

Joe Pounds, director of adolescent well-being at the Dekko Foundation, Kendallville, Ind., also visited the Kinderforest program during the showcase. He was interested because the foundation supports healthy child development in the region. His interest was also based on personal experience:

"I remember very little about my third grade experiences. What I do remember mostly involves discipline. But fifty years ago in third grade, we were brought to Merry Lea. I was here at a sit spot writing a haiku. I remember the light that day, and I remember the spider I was writing about," Joe recalls.

On April 6, Merry Lea received a \$5,000 grant from the Dekko Foundation for its Kinderforest program. Ω

# 2018 People and Ideas...People and Ideas...



A student in Merry Lea's Sustainable Living Skills course helps to socialize a baby goat at the Merry Lea Sustainable Farm.

## "Found Food" Potluck Sparks Reflection

Sustainable Living Skills is a much-loved undergraduate course taught at Merry Lea. On a weekend in late March, book-weary students gather at Rieth Village for a weekend of cheese-making, bread baking, gardening and other hands-on skills. Readings, discussion and a two-week sustainability challenge leading up to the weekend add depth and breadth.

This year, Dr. Joel Pontius, the professor of record for the course, began the weekend with a "found food" potluck. Students were asked to bring food items they found: in the back of the fridge, in a dumpster or in another creative location. Joel's contribution was a deer he picked up shortly after it collided with a car. The students helped butcher it.

*When the professor mentioned that we were going to be eating dumpster-diving food and deer, I was not happy about it. My first thought was: "Why he wants to eat trash and dead animals?"*

*But then my perspective changed. Isn't*

*that what I already do? I eat fast food, which is practically fake and dangerous. I also buy meat at the store, but I do not know what they gave that animal when it was alive (drugs, steroids?)*

*I learned how much food people waste. When I got to Merry Lea, and I saw all that food from dumpster diving, I was amazed. How can people just throw away food—good food—when there is so much hunger in the world? We should be so grateful that nature still gives us food and nutrients.*

—Aranza De Alarcon, a freshman psychology major

*While before this weekend I would have had very little faith in my ability to preserve foods, make bread, or skin a deer, I feel like I now have the confidence needed to try. That foot in the door is all that's needed to start practicing and getting better...*

*The repairing, creating, and reimagining session made me want to consider cradle-to-cradle cycles in my own life. I love the idea of slimming down my wardrobe, keeping quality items and repairing or reimagining them.*

—Isaac Longenecker, a junior accounting major

## Human Health Meets Agroecology in Tanzania

Dr. John Mischler, Merry Lea's director of agroecology, spent ten days in Tanzania this spring consulting on a project involving a fungal infection that affects peanuts and corn. The fungus produces mycotoxins—toxic substances that are particularly harmful to children. They can cause lifelong damage to infants who ingest infected porridge.

The opportunity came by way of Goshen College President Dr. Rebecca Stoltzfus who had received a grant from the Bill and Melinda Gates Foundation in her field of nutrition shortly before coming to Goshen College. The president was eager to involve Goshen College faculty and students in this work. She invited John, along with

Professor of Physics Paul Meyer Reimer, to join the research team because of their experience with remote sensing Geographic Information Systems.

John and Paul visited the Nelson Mandela African Institute of Science and Technology in Arusha, Tanzania, and the Kongwa District where the research is being conducted. They met collaborators and began planning the best ways to gather data from the region: in this case, urine samples from infants.

After the field team has collected the data, researchers can then identify hot spots for mycotoxins and analyze the patterns they reveal. They know that mycotoxin levels are higher during times of plant stress, but what are the stressors that are affecting a given area's food supply?



Dr. John Mischler, director of agroecology, on a visit to a farm near Arusha, Tanzania. Banana trees are in the background.

## Who Cares About Climate Change? Curriculum Underway for Pastors

When Pastor Doug Kaufman began researching climate change, he discovered a curious thing: climate change believers and climate change deniers are not far apart in terms of their actions and their carbon footprints.

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# 2018 People and Ideas...2018 People and Ideas...



**Doug Kaufman, director of pastoral ecology for the Center for Sustainable Climate Solutions and Mennonite Creation Care Network**

Doug will build on this insight as he develops learning experiences and a curriculum for pastors whose attitudes toward climate change may vary widely.

"We will explore not just literal climate change denial, but also subtle forms of denial and distancing," he says.

Doug became a weekly visitor at Merry Lea in January 2018 when he began a part-time position as director of pastoral ecology for the Center for Sustainable Climate Solutions (CSCS) and Mennonite Creation Care Network (MCCN). Goshen College is one of three partner organizations involved with the CSCS, Harrisonburg, Va. Merry Lea sponsors MCCN, along with Everence, Goshen, Ind.

While climate change has been examined in many ways, Doug's background as both a congregational pastor and conference pastor gives him a unique angle. He sees climate change as a spiritual and a pastoral problem. When he imagines the multi-day learning experiences for pastors that he is preparing, he pictures a fusion of head and heart, theology and nature. Doug hopes to delve into intellectually demanding questions like, "What are the implications of understanding God as creator?" He also hopes to help people renew the connection to nature that is their birthright.

The first retreat for pastors will take place September 17 to 19, 2018, at Camp Friedenswald, Cassopolis, Mich. It is entitled, "Who Cares About Climate Change?" Amy Huser, the sustainability and outdoor education director at Camp

Friedenswald, will lead the outdoor experiences that are part of the event. For more information, contact Doug Kaufman at [ddkaufman@goshen.edu](mailto:ddkaufman@goshen.edu). Ω

## Building Manager Likes Being Part of Educational Setting

Douglas Graber joined the Merry Lea Team as its new building manager and grounds assistant March 1.

Douglas comes to Merry Lea following 20 years as director of maintenance at Tabor College in Hillsboro, Kans. The combination of a position at a nature center and family members in Goshen, Ind.,—including a new grandchild—wooed Douglas and his wife, Nancy, away from the sunny prairie state.

### Caring About Nature

"Being part of a great learning experience for young people appeals to me," Douglas reports. "I hope I can be of assistance to the professional staff. I care about what they are doing and why and how they are doing it. I care about the world of nature."

For Douglas, caring about the world of nature began on his childhood farm in Freeman, South Dakota. He recalls how the alfalfa fields his father mowed always sported a mop of uncut alfalfa in the center. His father left the center uncut out of compassion for the animals that would be herded into the center of the field as the tractor circled a shrinking perimeter. He also avoided heavy use of fertilizers and chemicals.

In high school, Douglas read Rachel Carson's *Silent Spring* and started a recycling club. He hatched pheasant eggs under chickens and observed the ways that raising wild chicks affected the hens' foraging patterns. At Goshen College, he majored in biology.

Douglas used his biology degree in a variety of ways over the course of a lifetime. Initially, he taught science to middle school students at Sarasota Christian School, Sarasota, Fla., for eight years. Later on, a background in both biology and farming served him well

in international service assignments in Zambia and Jamaica.

This spring, Douglas had the chance to do two things he was looking forward to: mow the trails for program use and participate in a controlled burn.



**Douglas Graber, building manager**

## Friends of Merry Lea Get a Taste of the Bahamas

Blue holes, bush medicine and lesson plans about mangroves were part of the Friends of Merry Lea Dinner on April 6.

The annual event includes a hike, themed meal and presentation. Students in Merry Lea's master's in environmental education program shared experiences from their course in international environmental education on Andros Island in the Bahamas. The course provides exposure to unfamiliar ecosystems and the chance to see climate change impacts such as bleached coral firsthand.

MAEE Student Travis Silveus explained the blue hole phenomenon. These are circular caverns open to the surface that are filled with water. They form in limestone.

Carina Zehr, who focused on edible wild foods for her master's research, co-led the hike. She also shared stories about the use of medicinal plants in the Bahamas. Ω



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## Coming Up

### NatureFest 2018

May 18 to 19

7 p.m. Friday to 1:30 p.m. Saturday  
Meet at the Farmstead Site

Where would you go if you wanted to make a birdhouse, learn to milk a goat and explore a ditch with an ecologist? Try Merry Lea's NatureFest, featuring these and many more activities. Families can camp overnight if they wish. See [goshen.edu/merrylea/naturefest](http://goshen.edu/merrylea/naturefest) for the schedule and fees.

### Pasture Walk

Thursday, July 12 Time TBA  
Meet at the Rieth Village Site

Join Assistant Professor Ruth Mischler for a walk in the five-acre Woody Perennial Polyculture plot. The area contains a mix of vines, brambles, fruit and nut trees as well as grazing livestock. Contact [ramischler@goshen.edu](mailto:ramischler@goshen.edu) to register.



*"I have learned that if you explore, you can find all kinds of really cool stuff."*

— A kindergartener from Wolf Lake Elementary School

Learn more about Merry Lea's innovative Kinderforest program on pages 4 to 5.  
Photo by Kelly Lynch