Dialog on Sustainability
Field Tours
4:40 p.m. – 5:30 p.m.

- **K-State Rain Garden – International Student Center, K-State Campus**
  Lee R. Skabelund, Assistant Professor of Landscape Architecture
  The rain garden highlights ways to reduce storm-water runoff and improve the water quality of local streams

- **UFM Solar Addition, UFM Community Learning Center, 1221 Thurston Street, Manhattan**
  Bill Dorsett, UFM Instructor/Sunrooms by Sunwrights, Manhattan
  The UFM solar addition was designed as a multipurpose facility providing a highly visible, publicly accessible demonstration of low cost, effective ways to use renewable energy sources for space heating and food production in a realistic setting.

- **K-State Willow Lake Student Farm**
  Rhonda Janke, Associate Professor of Horticulture, Forestry and Recreation and Student Interns' Adviser.
  Willow Lake Student Farm is a 5-acre plot of land located next to Tuttle Creek Reservoir about five miles from Manhattan. Student interns organically grow more than 30 different vegetables, fruits and herbs to sell within the K-State and Manhattan communities
  ****Rhonda has reserved a 14-person van and will be driving folks out to the farm site.**

- **Elaine & Bob Mohr's Garden, 800 South Juliette, Manhattan**
  (*Drive south on Juliette until it dead-ends at a wall. Garden will be clearly visible. Elaine will meet folks at her garden.)*
  The Mohr's wonderful garden includes a high tunnel allows for growing vegetables in the winter without fossil fuel heat, several fruit trees and includes crops not often grown in Kansas such as hardy kiwi and figs.

Dialog on Sustainability
Post Event Potluck Dinner
Thursday, 5:30 p.m.- 7:00 p.m.
Long's Park, 17th & Yuma

Rhonda Janke, Associate Professor of Horticulture, Forestry and Recreation will facilitate a discussion of local foods beginning at 6:00 p.m.

- **Bring a "sack" supper and drink or a potluck dish to share for an informal dinner and discussion**
- **Local residents please bring extra lawn chairs (or a blanket) for adequate seating**
- **Some plates, napkins and table service will be available. Local residents please bring your own table service.**
- **People's Grocery, the local natural food store, is located just south of Long's Park (their front door faces south). Their deli will be open until 7 p.m. for supper purchases.**
- **From the Alumni Center, Long's Park is straight south on 17th Street at the 2nd stop light. The park is on the left side of the street before you reach Fort Riley Blvd.**
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K-STATE RAIN GARDEN EARNS LANDSCAPE ARCHITECTURE PROFESSOR DESIGN AWARDS

by Andy Badeker

A perennial garden at Kansas State University designed to absorb runoff from storms has earned recognition from two landscape architecture organizations.

The Prairie Gateway Chapter of the American Society of Landscape Architects presented Lee R. Skabelund, assistant professor of landscape architecture at K-State's College of Architecture, Planning and Design, with a 2008 award of excellence for his work on the project. The society's Central States Conference also has recognized Skabelund with a 2008 award of merit in the built-design category.

Skabelund, who chairs K-State's green building committee, led the group of students, faculty and staff who created the International Student Center's rain garden in 2007.

"The rain garden highlights ways to reduce storm-water runoff and improve the water quality of local streams," Skabelund said. With the help of students and faculty, including Cary Thomsen, a 2007 master's graduate in landscape architecture, and Dennis Day, a professor of landscape architecture, Skabelund created two permeable pathways and a "level-spreader" to slow and temporarily hold runoff.

"We also collected rooftop and surface runoff to re-use in the garden, which is planted with numerous perennials native to the Flint Hills and the central U.S.," Skabelund said.

Skabelund's coordination of the project began in 2006 with a planning and design charrette that involved about 125 students, faculty and staff as well as landscape architecture and engineering professionals.

"That intensive event provided the analytical and creative foundation for the subsequent design and implementation," Skabelund said. About 60 students, faculty members and volunteers began construction in March 2007. It was completed in June 2007.

"In addition to improving water quality and stream-bank stability along Campus Creek, we wanted students and others involved to deepen their understanding of natural and human systems," Skabelund said.

"They learned about collaboration between disciplines, as well as cost-effective techniques to create beautiful work," he said.

The project also aimed to share information about managing storm water with administrators, staff and local community members. Skabelund has created a Web site at http://faculty.capd.ksu.edu/lskab/ to share ideas about the rain garden and other projects.

Even on heavy clay soils like those found at K-State's International Student Center, rain gardens can provide habitat for butterflies and other wildlife, reduce soil erosion and decrease pollution of nearby waterways, Skabelund said.

Like any garden, rain gardens require tending. Skabelund coordinates with students and staff from K-State Facilities and the International Student Center to maintain the garden. Stacy Hutchinson, associate professor, and Reid Christianson, a water quality researcher, both with K-State's department of biological and agricultural engineering, are helping develop monitoring protocols for the garden. Skabelund also is working with art students to build rain bowls for the garden.

Each year, the Prairie Gateway Chapter honors outstanding contributions to landscape architecture from members in Kansas and Missouri. This year's submissions were judged by architects, landscape architects, planners and artists from the society's Wisconsin chapter. The awards were presented April 12 in Wichita.

The Central States Conference awards program recognizes outstanding work by professionals and students in Iowa, Kansas, Missouri, Nebraska, North Dakota, Oklahoma and South Dakota. This year's submissions were judged by architects, landscape architects, planners and artists from the American Society of Landscape Architects' Connecticut chapter. The awards were presented April 23 in St. Louis, Mo.

Funding for the project's various stages came from the Kansas Department of Health and Environment, the federal Environmental Protection Agency and WaterLINK, a Campus Compact service learning program.

Material and in-kind support came from the Civitas Group, Atwood Rentals, Bayer Stone, Higgins Stone, Midwest Materials & Concrete, Coonrod Construction, Bayer Construction, Blueville Nursery, Horticultural Services, Three Rivers Engraving, Applied Ecological Services/Kaw River Restoration Nurseries, CritSite Prairie and Wetland Nursery, and Bluebird Nursery.

--K-State Media Relations - June 6, 2008

Kansas State Collegian By: Hannah Blick **Date:** Monday, June 23, 2008

Student-run farm provides Manhattan, campus with organic produce

Photo by Matt Binter

They appear to be a random mix of students, from a petite, pale-faced woman full of bubbly energy, to a lanky, quiet man whose intimidating, dark dreadlocks hang down past his shoulders. In any other setting, they might not have even known each other. But here, their passions for sustaining nature and growing organic produce have also sprouted a friendship.

Elena Pyzhov, senior in horticulture, and Varrell Unruh-Carey, junior in horticulture, are just two of the five student interns hired to work on the K-State Willow Lake Student Farm throughout the summer, gaining hands-on experience in their fields of study. The farm is a 5-acre plot of land located next to Tuttle Creek Reservoir about five miles west of Manhattan, on which student interns organically grow more than 30 different vegetables, fruits and herbs to sell within the K-State and Manhattan communities.

A LEARNING EXPERIENCE

Pyzhov said she first heard about the farm from her professor, Rhonda Janke, the interns' adviser. Janke, also an associate professor of horticulture, forestry and recreation, said she encourages her students to get involved in the farm.

"It's a chance to get some first-hand experience and see how what you learn in the classroom can be used in real life," she said. "I try to mention it to all my students. They need this experience."

Mike Magelli, intern at the farm and senior in greenhouse operations, said it's the hands-on experience that will not only boost his résumé, but also his income.

"The pay is nice; we make $10 an hour," he said. "I'm so lucky to get paid for what I love to do, and I'll probably be doing something like this, hopefully, for the rest of my life."

Magelli also said he enjoys working in the garden when he wants to get away from the busyness of Manhattan.

"Out here it's so calm; it's nice to escape for a while and dig your hands in the dirt," he said.

ORGANICALLY GROWN

Because the farm is organic - meaning the produce is grown without the use of conventional pesticides and fertilizers - farm manager Jenny Guilford said they use much more natural methods of ridding the plants of bugs. Guilford, also a senior in horticulture, said they have had problems lately with lepedoptran worms - fat, grub-like pests - eating holes in the cabbage plants and other plants. She said they spray the affected plants once a week with Bt (Bacillus thuringiensis), an organically approved bacterium that is found naturally in the soil.

Janke said this is the perfect time of year for harvesting certain vegetables like lettuces and mushrooms. The students harvest the crops by hand, as well as hoe, weed and cover their plots with hay manually.

Last Wednesday, June 11, three of the interns, Janke and Guilford harvested a portion of their red leaf, green leaf and romaine lettuce, as well as kale - a type of cabbage.

On their knees in the dirt, the interns cut the heads of lettuce out of the ground and brushed the excess soil off the stem. They then filled several plastic tubs with cold water from a spigot and dipped each head in the water until it was clean. The lettuce and kale heads were then laid out on a homemade wire rack to dry in the warm morning sun.

"After they all dry," Magelli said, "We'll take them right away back to [Throckmorton Hall] and get them in the freezers so they're nice and crisp for the market.

FROM HARVEST TO MARKET

Bright and early every Saturday morning, at about six, Magelli and Unruh-Carey said they gather the produce from two freezers in Throckmorton and load in a truck to take to the farmer's market, located at 5th and Humboldt streets. They said they make sure to clean all the produce and arrive at the market's parking lot, allowing themselves enough time to set up their booth, complete with a Powercat tablecloth and hand-drawn sign of a weeping willow tree, symbolic of the farm.

Later, the girls arrive, and help put the finishing touches on the produce arrangement, making sure the spinach leaves spill from their wicker baskets just right, and the mushrooms peep up at potential customers in a clean and cheerful way.

"Most of our customers are return customers. And Europeans." Magelli said, as Pyzhov reached over him to spritz some dry spinach leaves with water. "We try to keep everything looking fresh for market appeal."

Unruh-Carey said the interns had been somewhat nervous about how they would be received at the market, but that other vendors have been gracious and helpful over the last few weeks.

"We weren't sure what to expect, we didn't want to step on anyone's toes," he said. "But they have all been so great, we've made friends with a few of the other people. They really want to support K-State."

Besides taking their produce to the farmer's market, they have also started selling some vegetables at Call Hall, and Janke said they have been talking with the Derby Dining Center about possibly selling them some produce to serve to students.

Source: Linda Inlow Teener, 785-532-8763, lteener@k-state.edu
Note to editors: Similar stories on K-State's sustainability efforts are available at http://www.k-state.edu/media/webzine/green/index.html
News release prepared by: Jessica Grant, 785-532-6415, jgrant@k-state.edu**Wednesday, May 14, 2008**

K-STATERS HELP LEARNING CENTER WITH DEMONSTRATIONS OF SOLAR ENERGY'S POTENTIAL

MANHATTAN -- A learning center affiliated with Kansas State University has renovated its solar facility to serve as a regional demonstration of passive and active solar technologies.

UFM Community Learning Center, 1221 Thurston St., Manhattan, undertook the renovation with a grant from the Caroline F. Peine Foundation. UFM is a nonprofit campus and community education program serving K-State, the Manhattan area and communities across Kansas.

"We started the renovation project a little over a year ago and we've upgraded everything to make the building even more energy efficient," said Linda Inlow Teener, executive director of UFM. "The building was created in 1980 and much of it had started to age and was in need of replacing. Our goal in this process was to update an existing building and to demonstrate passive and active solar energy. This will help us to begin the process of educating others. We were willing to blaze that trail."

Many activities associated with solar and wind energy, as well as energy conservation and recycling, are planned to accompany the building renovation. K-Staters from across the campus helped in developing the new design for the facility.

The UFM solar addition was designed as a multipurpose facility providing a highly visible, publicly accessible demonstration of low cost, effective ways to use renewable energy sources for space heating and food production in a realistic setting. The more than 1,400-square-foot structure is adjacent to the center's main building, just east of the K-State campus. It was designed to have nearly all of its heating needs met through the use of solar energy.

The solar addition has a greenhouse and a lounge/meeting room with a sink and counter area. With assistance from the Manhattan Community Foundation, a room originally used as a woodshop has been converted into a second classroom for UFM activities.

The south wall of the building features a moveable bead wall system. The wall, that has polystyrene beads between two layers of KalWall Plexiglas, provides moveable insulation. It can be opened for maximum sun and solar energy during the winter, and then closed to hold in the sun's heat accumulated during the day. During the summer, the wall is closed to keep out the hot sun and keep in natural cooling designed into the facility.

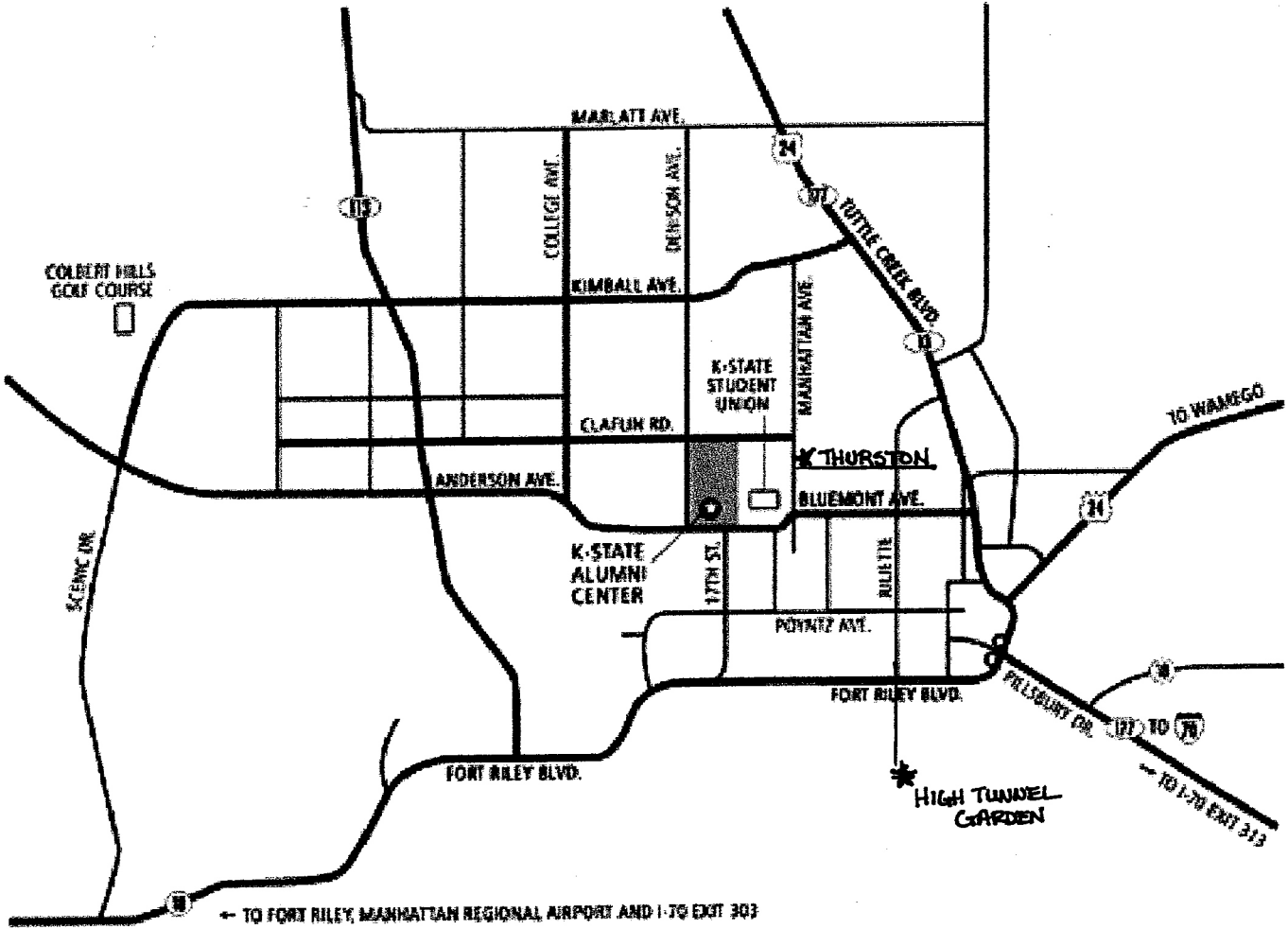
"There have been days where it was negative 10 degrees outside, but the inside of the building remained around 55 degrees -- without the help of an additional heating source," Teener said. "It really has good insulating value."

The new photovoltaic array, under construction between the solar addition and the main UFM building, will include 15 interconnected solar panels mounted to an aluminum frame. The cells will collect energy from the sun and convert it into 220-volt electricity through an electrical inverter. The inverter feeds electricity into UFM's electrical wiring system, and any excess energy will flow into Westar Energy's electrical grid. This is the first small system in Kansas that will be connected to the grid. The project is scheduled to be complete this summer.

"I hope this project interests people and prompts them into looking at alternative energy sources," Teener said. "I want people to take advantage of the tours we offer of UFM and the educational opportunities this building provides. There are simple thing that people can do in a house to make it more energy efficient, and we hope to be able to give practical advice for people looking to take the next steps in energy efficiency through our experience."

K-Staters who helped UFM with the new design include Gary Coates, professor of architecture; R. Todd Gabbard, assistant professor of architecture; Ruth Douglas Miller, associate professor of electrical and computer engineering; Bruce Snead, instructor for the Kansas Industrial Extension Service; and Kim Williams, professor of horticulture, forestry and recreation resources. Also assisting was Brad Lutz, senior in electrical engineering, **Andover**.

More information about the UFM solar addition and classes on solar energy and environmental awareness is available at http://www.tryufm.org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