



Winter/Spring 2010

MAPPED 2010 invites you to Moline, Ill.

Charles Darnell, Western Illinois University
Chair of MAPPED 2010 Host Committee

Western Illinois University and Augustana College will co-host the MAPPED 2010 Educational & Professional Conference, October 2-6 in Moline, Ill. The primary exhibit hall and conference meeting venue will be at the i wireless Center in downtown Moline. Immediately adjacent to the i wireless Center is the conference hotel, the Moline Radisson. Both the i wireless Center and the Radisson are connected by a landscaped river walk located on the banks of the mighty Mississippi and are served by river taxi.

The 2010 conference promises to be a great venue for professional networking and benchmarking with other facility professionals from around the MAPPED region. MAPPED 2010 will also include the return of the popular Supervisor's Toolkit training as well as the Educational Facilities Professional (EFP) exam. The Quad Cities offers great shopping and nightlife, as well as many traditional and ethnic restaurants nearby for an evening on the town. Numerous interesting events are planned, beginning Sunday morning with the traditional golf outing at the TPC Deere Run golf course, host to the PGA John Deere Classic. With a scramble format, mulligans, and a two-putt limit, pros and duffers alike will enjoy playing this truly stunning golf course located on a historical property along the Rock River.

The Sunday evening welcome reception will be at the John Deere Pavilion with hors d'oeuvres catered by Johnny's Steak House. With its ever-changing new and antique full size equipment, the Pavilion's collection always provides for

Continued on page 3



In this issue:
MAPPED 2010 in Moline, Ill. pages 1, 3
President's Corner page 2, 16
Call-out for MAPPED Conference speakers page 3
2009 Conference in review pages 4-7
MSU wins GPS mapping award page 8
Michigan and Western Michigan grounds awards page 8
MSU recycles freon; adds hybrids to trans. fleet page 9
Iowa's energy hawks page 10
Leadership Academy and Supervisor's Toolkit page 10
Iowa's LEED professionals; Student Garden page 11
Western Michigan builds first LEED-EB Gold page 12
IU steam turbines & algae page 13
Illinois adds fry power page 14
Iowa State recognized page 14
Purdue cleans green page 15
MAPPED/APPA news page 16

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Higher Education Facilities
Officers**

Leadership in Educational
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President's Corner

by Chuck Scott, MAPPA President

In my first newsletter article as your MAPPA President, I would like to thank you for having the confidence in me to lead this great organization for this current year. This is a responsibility that I take very seriously. To steer an organization in the right direction takes more than just a firm grip on the tiller. It also requires a competent and devoted Board of Directors. Fortunately you, the MAPPA membership, are blessed to have such a talented group of individuals serving on your Board. Each officer, either elected or appointed, is readily willing to serve the Membership in a manner that will be of the greatest benefit to us all. Each one a volunteer, each one already with a full time job, and each one so full of talent and energy that our Membership are the recipients of hundreds of years of experience. This experience is diverse in nature and covers the gamut of all of Facilities-related functions and responsibilities. Please take the many opportunities before you over the course of this year to reach out to your Board. If you have operational questions, MAPPA organizational questions, or concerns on any topic, we are all ready to help, for it is the relationship developed between the Membership and the Board that makes this such a quality organization.

I would also like to reach out to you this year. There will be opportunities for you to not only work with your Board, but also to serve. Currently, there is a vacancy in the Membership Committee for a volunteer from Wisconsin and openings in each of the Information & Research, Professional Affairs, and Awards & Recognition Committees. Later in this article, I will share with you what committee members are responsible for. Also, at our annual conference on October 3-6, 2010 in Moline, IL, there will be opportunity for others to become a part of your Board by serving as President-Elect or Treasurer. If interested, read on.

I guess you can see by now that I firmly believe that the value of any



organization lies in its Membership, and there are always opportunities to help the organization grow and develop. Engagement of the Membership is critical. It provides new and fresh ideas. It provides diversity of experiences and ethnicity. It benefits those that volunteer by opening new doors to other institutions through networking. This year, I would like to see greater Membership engagement. Only you can make that happen. It can be accomplished by sharing this newsletter with everyone within your own organization. Your staffs may be interested in learning more and networking with others. Your staffs may need the professional development that MAPPA has to offer. Your institution will benefit from the experiences that your staffs gain through MAPPA. Please consider this not only as an opportunity, but also as a challenge. Challenge yourself to meet someone new within your professional organization. Challenge yourself by volunteering to serve on the MAPPA Board or on one of the committees. Provide your institution with the wealth of knowledge and experiences of the MAPPA Membership. Please feel free to contact me with any questions you may have cascott@ilstu.edu

I would now like to introduce you to some of the committee opportunities. Appointments to committees are

Continued on page 16

MAPPA 2010 invites you to Moline, Ill.

Continued from page 1

a fun and interactive display of John Deere equipment, new and old. The John Deere gift shop located next door to the Pavilion is perfect for finding souvenirs for family, friends, and of course, for yourself. Spouse programs, facilities field trips, and a tour of the beautiful campus of Augustana College are also planned.

The MAPPA 2010 theme, "Back to Basics," is intended to explore the pressing need to revitalize our campus facilities and utility infrastructure. With an emphasis on planning and effective communication with administrators and state policy makers on the topics of capital renewal and

deferred maintenance, conference presentations will reinforce the means necessary for "keeping your feet under the leadership table." There will be other familiar educational tracks available including sustainability, creative budgeting, and optimizing with limited resources. As there will be broad facilities content including GIS mapping, campus landscape labor modeling, building services management, and updates on cap and trade legislative trends, we encourage all MAPPA schools to send a large and diverse contingent to the 2010 conference. The central location of Moline in the MAPPA region, a

first timers 50 percent discount, scholarships possibilities, and no increase in attendance fees are all intended to help hold travel costs down in the current troubled economy.

For further information about MAPPA 2010 feel free to contact Charles Darnell at (309) 298 2519 or CG-Darnell@wiu.edu. Registration for Business Partners opens March 2010; MAPPA members and other attendees registration open May 2010.

Bookmark the MAPPA 2010 website and visit often! www.wiu.edu/mappa2010/webloc

Back to the Basics: Call-out for MAPPA Conference Speakers

The Midwest Association of Higher Education Facilities Officers (MAPPA) invites you to submit a proposal for a presentation at the MAPPA 2010 Educational and Professional Conference. The theme this year is "Back to the Basics".

Western Illinois University is hosting the MAPPA 2010 Educational and Professional Conference at the Radisson and i wireless Center in Moline, Illinois. This beautiful venue for the October 2-5 conference is located immediately adjacent to the Mississippi River in the vibrant area of downtown Moline.

In addition to merging with Big Ten and Friends Administrative conference at MAPPA 2010, the highly acclaimed Supervisors Toolkit training and Facilities Professional Exam being offered at MAPPA 2010, will increase networking exposure of all conference attendees.

The audience at this conference will include approximately 200 higher education facilities professionals and upwards of 60+ business partners from nearly every facilities management field. Sessions are approximately 45 minutes long with 10-15 minutes for Q&A. The presentations should be developed for groups of 25 to 75 people.

Presentation topics should be related to the theme of the conference, "Back to the Basics." The educational programming committee is looking for presentations in the core areas of facilities management: Administration and Management, Maintenance and Operations, Facilities Planning, Construction, Energy Systems and Sustainability.

Sample topics may include:

- Facilities Performance Indicators
- LEED projects
- BIM applications
- Cap and trade
- GIS info systems

- Transportation system solutions
- Energy management
- Sustainable custodial management

The Education Committee will review the submissions for:

- Non proprietary presentations
- Overall quality
- Appropriate content to conference theme
- Presenter qualifications
- Contemporary subject

Guidelines for Submission:

- Attached application
- One-hundred word abstract
- Biography/resume
- References

Application (Due May 15, 2010):

- Name
- Title
- Institution
- Address
- City State Zip
- Phone Email
- Title of Presentation
- AV requirements
- Estimated length of presentation

Send to:

MAPPA 2010 Presentations
c/o Doug Greenwood
Principal Building and Grounds Supervisor
University of Minnesota, Duluth
1049 University Drive
Duluth, Minnesota 55812-3011

2009 MAPPA Educational Conference and Annual Meeting

by Gail Riese, Communications Manager, Purdue University

The 2009 MAPPA Educational Conference and Annual Meeting was held Sunday, September 27 through Wednesday, September 30 at the Marriott Hotel and Conference Center in Coralville, Iowa. The meeting was hosted by the University of Iowa and was attended by 380 participants from 62 colleges, universities, and businesses throughout the Midwest. Forty-six attendees participated in a 4-day Supervisor's Toolkit training session; eight others completed an APPA Educational Facilities Professionals (EFP) preparatory course and five MAPPA members took the EFP exam.

Opening day activities began with a golf outing at the Finkbine Golf Course at the University of Iowa. Thirty-eight golfers from 25 colleges, universities, and companies participated. Members of the winning team were Hugh Barry (University of Iowa), Gail Riese (Purdue University), Adam Daugherty (Atlas Technologies), Damian Eallonardo (Skender

Construction), and Gary Shields (KJWW Engineering Consultants). The evening program featured a reception for first-time attendees and a general welcome session.

Monday keynote speaker Sam Glenn recounted humorous, motivational stories and tips for maintaining a positive attitude. This was followed by concurrent educational sessions focused on topics ranging from sustainability to the economy and creative budgeting. Following the sessions, attendees visited with our valued business partners at 52 exhibitor booths. The ever-popular large school/small school exchange discussions concluded Monday's sessions. That evening, University of Iowa President

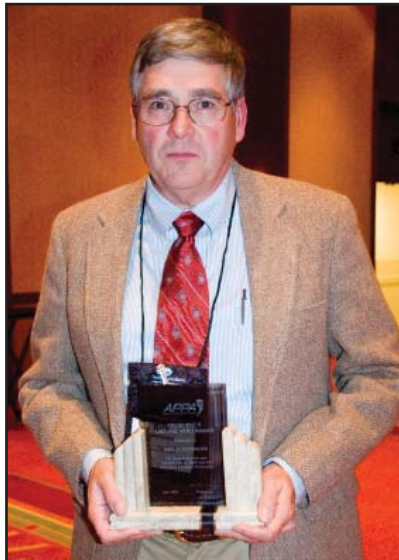
Sally Mason, Facilities Management Associate Vice President and Director Don Guckert, and Planning, Design, and Construction Director Rod Lehnertz welcomed guests during a reception at the Old Capitol Building.

A general business meeting was conducted Tuesday morning and included committee and officer reports. Bill Elvey, APPA's Immediate Past President and Director for Facilities Management at the University of Texas at Dallas remarked that MAPPA and APPA's most important resource is its members. He encouraged members to continue networking with one another.

Following concurrent educational sessions, lunch speaker Don Guckert gave a presentation on the Iowa flood of 2008. Officer elections for 2010 were conducted and Ruthann Manlet (University of Minnesota) was unanimously elected President-Elect and Kris Ackerbauer (University of Wisconsin-Madison) was elected secretary. Additional concurrent

Continued on next page

Right: MAPPA Secretary Kris Ackerbauer receives the APPA President's Unsung Hero Award.



Above: John Ott presents the president's gavel and scepter to Chuck Scott.



Above: John Ott with Presidential Service Award winner Greg Fitcher.

Left: John Ott thanks Board Member Jerry Carlson for his support.

educational sessions and on-site learning experiences followed lunch. The on-site programs occurred at the University of Iowa Power Plant, LEED capital project locations, and sites of flood recovery and mitigation.

During Tuesday's banquet, President-Elect Chuck Scott (Illinois State University) recognized members of the 2009 Meeting Host Committee and the Professional Development Committee. Bill Elvey presented MAPPA Secretary Kris Ackerbauer with the APPA President's Unsung Hero Award for his loyal dedication and commitment to MAPPA and APPA. He also congratulated Ruthann Manlet for her outstanding service as the MAPPA Representative to APPA's Professional Development Committee.

Outgoing MAPPA President John Ott (Ohio State University) expressed his appreciation to colleagues for their support during his term in office and specifically recognized outgoing MAPPA Board Members Jerry Carlson (Butler University) and Ralph Zia (Northeastern Illinois University) for their contributions. Ralph was

also honored with the MAPPA Meritorious Service Award. John also presented Presidential Service Awards to Jerry Carlson, Greg Fichter (Indiana University), Brandon Baswell (Michigan State University), and past APPA President Chris Ahoy (Iowa State University).

John Ott presented the presidential gavel and a scepter to Incoming MAPPA President Chuck Scott.

The 2009-2010 MAPPA officers were installed:

- Chuck Scott (Illinois State University), president
- Ruthann Manlet (University of Minnesota), president-elect
- John Ott (Ohio State University), past president
- Kris Ackerbauer (University of Wisconsin-Madison), secretary
- Brandon Baswell (Michigan State University), treasurer
- Fred Plant (Valparaiso University), senior regional representative

- Gail Riese (Purdue University), newsletter editor
- Jeri King (University of Iowa), information and research
- Doug Greenwood (University of Minnesota-Duluth), professional development
- Kristie Kowall (Illinois State University), membership
- Jerry Carlson (Butler University), awards and recognition
- Greg Fichter (Indiana University), professional affairs

The banquet closed with a performance by the University of Iowa Steel Drum Band.

Wednesday morning featured closing remarks by Chuck Scott and University of Iowa Sustainability Director Liz Christiansen and concluded with a sustainable mini expo.

Next year's conference will take place October 2-6 in Moline, Illinois.



Above: John Ott recognizes Chris Ahoy with the Presidential Service Award.



Left: Bill Elvey presents Ruthann Manlet with a plaque for her service to the APPA Professional Development Committee.



Above: John Ott was thanked for his term as MAPPA president by incoming president Chuck Scott.



Above: John Ott recognizes Brandon Baswell with the Presidential Service Award.

MAPPA 2009: Images from Iowa





MSU Physical Plant wins award for campus GPS mapping

by Chris Neary, Michigan State University

Engineering and Architectural Services just put MSU on the national facilities management map.

The Physical Plant, represented by Planner/Inspector/Analyst II Jade Freeman and his EAS team of Engineer IV Scott Gardner, Planner/Inspector/Analyst III/Supervisor Kathrine Neils, Engineer Aide V Nicholas Voss and Engineering Aide IV Brian Keeseey, earned the 2009 Munsys Excellence Award.

The announcement was made in late April.

Munsys is a Florida-based company that uses its products to “assist utilities and government with the management of infrastructure assets,” according to its website.

The award is given to a governmental unit that best meets the “diversity and value exhibited in projects” using “Munsys spatial solutions,” according to an e-mail from Munsys to Freeman. EAS uses Munsys database software to store mapping information in an Oracle Spatial GIS database, keeping a spatial inventory of campus infrastructure.

In 2006, EAS started using Munsys software to manage the growing infrastructure mapping requirements facing EAS. This was a “new way to apply software,” according to University Engineer Bob Nestle. He said Freeman took “quantitative analysis” and applied it to mapping areas of new and imminent construction, developing it into a “very powerful and very valuable tool.”

“Jade is the creative sparkplug behind this,” Nestle said. “He made improvements to the system that surprised even Munsys.”

Freeman said maps maintained by Campus Planning and Administration were incorporated into the mapping system. Since then, Freeman has been able to “manage a large number of features, many of which had not been mapped in the past such as road centerlines.”

Nestle noted that Munsys’s latest features use information from maps and GPS to make better construction predictions and analysis.

“It proves that maps are not just lines on paper: there is something behind it,” Nestle said. “There is intelligence behind the maps.”

Realizing Munsys’s potential beyond EAS’s mapping needs, Freeman helped expand its use throughout the Physical Plant Division.

Landscape Services started using the system in 2008 to map landscape areas (see “Satellite technology assists landscaping plans”), and Telecommunication Systems recently began testing a new Munsys module which will be used to manage the campus’s fiber optic cable network.

Freeman said such uses by Physical Plant departments were key to MSU winning the award because the departments are building on the core EAS use of the software.

In addition to the EAS Munsys team, Freeman credited Assistant Vice President for the Physical Plant Ron Flinn, Landscape Services Manager Gerald Dobbs, Landscape Architect II/Supervisor Adam Lawver, Professional Aide Adam

Kingsbury and Planner/Inspector/Analyst III/Supervisors Richard Carroll and Jeff Carpenter for their contribution to earning the Munsys award.

Munsys is not the only one recognizing the EAS team’s innovative uses of the software. Other universities – and fellow users of the Munsys product – are looking to the team for advice and regard MSU as a leader in the realm of facilities management.

Phil Martin, CAD/GIS & document management manager at the University of Colorado at Boulder, commended MSU on its award, noting that Freeman’s demo of MSU’s Munsys uses to Martin’s team “made a big impression on the decision makers here in Facilities Management.”

Martin said Freeman worked with CU-Boulder’s Ilene MacDonald, Geographic Information Systems Specialist, as that university works to create its own GIS program. “I look forward to seeing our campus maps utilizing Munsys like MSU in the near future,” said Martin.

University of Michigan and Western Michigan University saluted by Professional Grounds Management Society

The Professional Grounds Management Society (PGMS) has recognized the **University of Michigan in Ann Arbor** with an Honor Award in the Urban University Grounds category. **Western Michigan University** also received an Honor Award Awards in the University and College Grounds category of the Society’s 2009 Green Star Awards competition.

The universities were honored during the Society’s 2009 School of Grounds Management held in conjunction with the GIE+EXPO in Louisville, Ky., October 28-31.

The Green Star Awards program brings national recognition to grounds maintained with a high degree of excellence, complimenting other national landscape award programs that recognize outstanding landscape design and construction. This year’s program acknowledged the nation’s top manicured grounds in settings ranging from government buildings to universities. Overall, PGMS presented nine Grand Awards, its highest honor, as well as seven Honor Awards and three Merit Awards in eight categories of competition.

MSU Landscape Services tackles freon recycling

by John Frawley, Michigan State University



Landscape Services recently became a little more environmentally conscious and cost-effective with its purchase of the Robinair Cooltech 34288, a Freon recycling device. Freon, a refrigerant, is vital to functions such as air conditioning.

The Cooltech 34288 removes and recycles automotive refrigerant. According to Landscape Services Equipment Mechanic Douglas Aves, this is especially useful when machines are in need of repair. "The Cooltech cleans the refrigerant, holds it, and when you're done with the repair, it reinstalls it," he said.

In addition to recycling Freon, the Cooltech 34288 tests the system to ensure there are no refrigerant leaks, which can be harmful to the environment. This feature is especially helpful as the summer approaches and air conditioning is used more frequently. "Most of our equipment is air-conditioned," said Landscape Services Equipment Mechanic William Hickey.

The Cooltech's precision is an important feature. If a piece of equipment is not producing cold air, the mechanics need to be able to pull out refrigerant and put that exact amount back in, within plus or minus an ounce, for it to work.

In the past, Landscape Services mechanics sent out all of their air-conditioning work. Sending out the work, however, caused not only transportation difficulties but also added cost to the repairs.

Recognizing the cost savings and convenience, Aves, along with his fellow mechanics, pitched the idea for the purchase to their supervisor, Landscape Services Coordinator Roger Thelen.

Landscape Services Manager Gerry Dobbs commented, "I'm just proud of our guys for looking at technology like that."

Hybrids energize Transportation's fleet

by John Frawley, Michigan State University

Hybrid vehicles are in high demand at Transportation Services. The department now has several new hybrids available for lease and rent.

Transportation Services recently purchased 30 new Ford Fusion Hybrids, which are "the first true hybrid made by a domestic automaker in a sedan," according to Transportation Services Manager Brian Watts.

The department received 16 Ford Fusion hybrids on April 14, and will receive the remaining 14 cars once they're available from the dealership. The new Fords get 41 mpg in the city and 36 mpg on the highway. They bring the total number of hybrids in its fleet up to 53.

Yet MSU is not the only university trying to increase its fuel efficiency.

"Everybody's trying to green up their fleet," said Watts. "They're in such high demand, we're fortunate to get 30."

He feels that compared to other Big Ten schools, MSU's use of hybrids has been about average. However, he added that this latest installation should push Michigan State to the front of the pack.

Transportation leases and rents its vehicles to MSU departments and faculty members. In the past, hybrids have been very popular, a trend Watts expects to continue with the Ford Fusions. Classified as a mid-size sedan, they are more spacious than Transportation's other, more compact hybrid sedans.

Aside from beefing up MSU's fleet, Transportation's purchase may be one of many that could boost the American auto industry.

"I think this [new hybrid model] is going to be a tremendous shot in the arm for Ford," said Watts.



University of Iowa Energy Hawks take flight

In August, The University of Iowa kicked off a new program aimed at identifying additional energy efficiency improvements and reducing energy costs in general education-funded buildings across campus. The UI Energy Hawks is a cross-functional team of specialists from UI Facilities Management's building & landscape services, commissioning, controls, and energy management units. The team will inspect and analyze building equipment components and systems, and monitor energy use throughout campus. Don Guckert, Associate Vice President, says the experts will work on both immediate and long-term improvements to shave off approximately \$1 million in utilities each year.



Jan Waterhouse, Assistant Dean for Operations and Finance, University of Iowa College of Nursing stated, "The team was in the Nursing Building for about two weeks. [The Energy Hawks] provided a complete list of action items identified during the investigative phase, explained what

they found, and the steps that would be taken to address the issues. The repairs included replacing our outside air dampers and a large number of old, faulty thermostats in individual offices, which has really improved our temperature control and air flow throughout the building. "

The energy monitoring will be done through a central hub where heating and cooling systems across campus can be remotely controlled and adjusted. The building's overall energy performance will be evaluated utilizing the tools available in the new Energy Control Center, which is planned to be operational by the end of calendar year 2009.

APPA and MAPPA Offer Supervisor's Toolkit



MAPPA Toolkit Participants

APPA will be offering the **Supervisor's Toolkit** (co-Sponsored by RMA) in conjunction with the delivery of the Leadership Academy.

- April 18-22, 2010
 - Colorado Springs, CO
 - Tuition: \$825 per person
 - CEUs: 3.0 Units Available
 - PDHs: 30 Hours Available
- Seats are limited! **Register today!**

MAPPA 2010 will also include the return of Supervisor's Toolkit training as well as the Educational Facilities Professional Exam (EFP).

- October 2-6, 2010
- Moline, Illinois



MAPPA Toolkit Participants

LEED professionals and design multiply at Univ. of Iowa

Almost a year ago, UI Facilities Management set a goal of doubling the number of LEED-accredited professionals on staff to help ensure that every new building, and major renovation, on campus is designed to be as environmentally friendly as possible. Today, that number has tripled bringing the total number of LEED-accredited professionals in Facilities Management to 18 and the total number at the University of Iowa to 20. Rod Lehnertz, director of Planning, Design & Construction in UI Facilities Management and one of the UI's LEED AP's, said the expanding cadre of LEED-accredited staff means the UI will be better able to coordinate with outside design professionals who have LEED certification experience and critically assess their products and services.

"With a larger accredited staff, we may be able to have some individuals specialize in certain areas, such as reuse of gray water and site-specific waste treatment," Lehnertz said. "While we will rely on the consultants to lead the team, having a staff rich with LEED AP's will keep the entire team on their toes and help us ensure that consistent and creative LEED opportunities are exploited on every major project. We will also be able to better introduce LEED principles into the many small projects that would not otherwise be required to reach LEED certification."



So far, seven UI buildings and structures in the construction or design stages are registered for LEED Silver standards or higher: Beckwith Boathouse; Pappajohn Institute for Biomedical Discovery; State Hygienic Laboratory; Institute for Orthopaedics, Sports Medicine and Rehabilitation; Old Music Building renovation; and the College of Public Health building, which is planned to achieve a LEED Gold rating.

The UI's first planned LEED-certified building, the P. Sue Beckwith Boathouse (pictured), opened September 18, 2009. The UI's new 22,500 square foot \$7.2M boathouse will house year-round training facilities for the UI Women's Rowing Team as well as club, recreational and community rowing clubs. The Boathouse design includes pervious concrete which allows for water to seep through the concrete and disperse through an 18" layer of rock instead of contributing to storm water runoff. The building features an efficient geothermal heat pump system and daylight harvesting, and was built with significant use of local

and recycled materials. In addition, the facility design took into consideration the proximity of the building to the river and incorporated flood mitigation strategies such as locating the mechanical and electrical services on the upper floor and incorporating first floor wall and floor finishes that can be cleaned, rather than replaced, in the event the building floods.

The first LEED renovation project at the UI is the refurbishment of the Old Music Building, slated for completion in 2010. The modernization of this 1918 structure will restore the building for use by the Psychology department. Some of the green strategies being employed include recycling on site, reuse of materials, protecting the envelope of the building, and excavating a new level below the building in which the mechanical systems will be housed.

The replacement buildings for the flood damaged Arts Campus will also be LEED-certified, including the Hancher Auditorium/Voxman Music Building/Clapp Recital Hall replacement project. Design of this project is expected to commence in the spring, 2010.

Iowa Student Garden represents circle of life

This is the first year that University of Iowa students maintained a commercial-size student garden operation on a one-third acre plot located on the Hawkeye Campus. The garden opened last April in an effort to raise awareness about where food comes from and to give students a chance to garden or work towards the University's new Certificate of Sustainability.

The garden was planted with a

variety of plants including salad greens, tomatoes, squashes, fresh herbs, potatoes, and more. Compost from pre-consumer food waste from the Iowa Memorial Union (IMU) Food Services was applied to the garden to prepare and fertilize the soil, creating a full circle of on-campus, locally grown produce using organic methods of gardening. Crops were harvested by UI student volunteers three times a week and

produce picked up by the IMU to use in its menus. The IMU paid market price for the vegetables and that money was reinvested in the garden. The garden produced 2500 pounds of produce and, of that, 1200 pounds was sold to IMU dining. The greenhouse was recently moved to its winter location. The new location will allow for late fall and winter crops to be planted and supplied to IMU Food Services.

Western Michigan achieves first certified LEED-EB Gold building in higher education

by Peter Strazdas, President, Michigan APPA

The Western Michigan University Facilities Management Department applied to the US Green Building Council (USGBC) for Leadership in Energy and Environmental Design (LEED) certification in the newest category: Existing Building (EB). WMU was the first higher education institution in the State of Michigan to apply for LEED - EB certification. After months of documenting changes to facility processes and building elements in the Health and Human Services Building, the USGBC awarded WMU the Gold Certification Level. During May 2009 when this project was awarded LEED-EB Gold, it was the highest level of certification awarded to a higher education building in the country!

Work on evaluation of current energy efficient systems in the four-year-old building and implementation of new sustainable building practices were partially funded with a \$15,000 grant from the U.S. Department of Energy awarded in the fall 2007. Achieving gold status involved documenting sustainable practices with storm water management, site erosion and light pollution control, water usage efficiency in restrooms and landscaping, ozone-free cooling systems, recycling and waste management storage and collection, sustainable cleaning products and policies, increased ventilation standards, daylight harvesting and lighting control, thermal comfort monitoring and increased air filtration.

The high-tech, 200,000-square-foot building was completed in the summer 2005 and was designed by the architectural firm SmithGroup of Detroit. The facility was built with an emphasis on sustainable and renewable materials. Features of the structure include cork flooring and motion-activated lights, heating and cooling. Rice paper between sheets of glass provides translucent windows along hallways.

The building's completion brought all of the College of Health and Human Services' internationally known programs together in one location. Some of the most sophisticated labs and classroom facilities in the nation are part of the facility. The labs are devoted to such areas as biofeedback, blindness and low-vision studies, orthotics and motion research. This extraordinary task involved over 50 faculty and staff from several departments

focusing on documenting and improving the operations and maintenance of the College of Health and Human Services Building. The four-story building is perched atop a hill along Oakland Drive on land formerly used by the Kalamazoo Psychiatric Hospital. The building offers a panoramic view of the University's West Campus and establishes a modern presence designed to be in keeping with the traditional architecture of the psychiatric hospital and WMU's East Campus. During construction, every effort was made to preserve the area's park-like setting.

The process of documenting everything that goes

on inside and outside of the building led to not only gaining LEED-EB certification but also set precedent for the operations other building operations across campus involving 151 buildings and 8.1 million square feet. The sustainable practices, materials and methods have made a difference in facility operations.

LEED standards use technology and methods that can generate significant energy savings in the life cycle of a building while minimizing its carbon

footprint. The technologies in our newly constructed buildings that have shown a significant impact have been spawned into energy savings retrofit projects in our older buildings. These projects have come to be known as Energy Initiative Projects. These projects serve not only to generate cost savings for the university but also to educate students about environmental friendliness.

LEED standards have also defined the ways in which we conserve water. At the WMU department of Landscape Services, new irrigation technology limits the amount of irrigation based on the amount of rainfall, temperature and the needs of the plants, trees and grasses. Regional plant materials are also chosen to minimize water needs, maintenance and provide resistance to insect damage. Western Michigan sees itself as a steward to the environment. As such, the terrain surrounding both Main Campus and the Parkview Campus has been modified to contain storm water runoff, provide residence for the local wildlife and provide a natural, pleasing environment for the people who use it.



Steam Turbines and Algae: It's All Happening at IU's Central Heating Plant



Microsteam Turbine to Generate Electricity

by Veronica Rog, Utilities Intern

Indiana University-Bloomington's Central Heating Plant is installing a "microsteam turbine" to reduce wasted energy and carbon emissions. The microsteam turbine converts the energy produced when the plant lowers the pressure of steam it produces from "production level" to "distribution level" into electric power. The installation of the new turbine will save the university nearly \$150,000 a year in electricity costs and lower carbon emissions by 2,016 tons per year.

Before the installation of the microsteam turbine, this energy was wasted. The new turbine will operate at an 80% efficiency rate. This new technology will allow for unattended operation and only requires the push of a single button to start up. The unit will be tied in parallel with the Central Heating Plant's pressure reducing valves (PRVs) and will feed the resulting electricity directly into the operation of the plant. Before the steam turbine, this electricity was purchased from the electric company. The installation of the microsteam turbine is one of many initiatives that Indiana University is taking to create a sustainable future.

What is Algae Doing in Our Heating Plant?

by Abby Schwimmer, Utilities Intern

When it comes to cutting its carbon footprint, the Indiana University Central Heating Plant is not afraid to step outside the bounds of traditional methods. While the plant uses mechanical means to limit emissions of particulate matter, sulfur dioxide and mercury, research at the Central Heating Plant is now exploring ways to use algae to absorb excess carbon dioxide emitted in flue gases.

For the past year, Richard Wagner, director and CEO of Phylein, a natural oil and biofuels production firm with operations in Indiana and Florida, has been conducting research at the Central Heating Plant to determine the viability of recycling carbon dioxide with algae. Burning fossil fuels such as coal releases large amounts of CO₂, but algae may be able to reduce the emissions.

"Algae are photosynthetic organisms that naturally absorb carbon dioxide (CO₂)," Wagner said. "In simple terms, through photosynthesis light energy from the sun is converted to chemical energy in the algae. This chemical energy is used to convert the CO₂ absorbed from the air into simple sugars that the algae use as food for energy or as building blocks for other complex molecules or structures. Our goal is to recycle this gas through the algae to produce useful products."

When carbon dioxide is inhaled in high concentrations, it has known negative human-health effects. In addition, the gas traps energy radiated off of the earth's surface, contributing to global warming. The Central Heating Plant has been searching for ways to minimize the adverse effects

to the environment resulting from carrying out its essential function -- providing round-the-clock heating for the IU campus.

Over the coming months, Wagner will be growing vats of algae, pumping different concentrations of CO₂ through them, and then measuring their response.

Primarily, his research will focus on how well the algae

stand up to such a heavy influx of carbon dioxide and other contaminants in flue gas.

"We must learn how to produce energy in this country in a sustainable manner," said Mark Menefee, IU Assistant Director for Utilities.

"Hopefully this research will provide a valuable contribution to future energy generation processes here at IU and industry-wide."



Richard Wagner

Fry Power at University of Illinois

by Dana L. Gillon, Environmental Health & Safety Specialist, University of Illinois

Once the student group Engineers Without Borders (EWB) hit the road in search of renewable fuel resources, it led them directly through the doors of the University dining hall kitchens. The EWB Illinois Biodiesel Initiative team completed the first leg of their journey on Thursday, October 29 when they delivered the first 400-gallon batch of 100% biodiesel fuel to the campus Facilities & Services (F&S) Garage & Car Pool (G&CP) underground diesel tank at 1701 S. Oak Street, Champaign, IL.

The biodiesel was transported from the processing location in four 100 gallon deliveries that coordinated with the arrival of an 8,000 gallon tanker truck carrying 2% biodiesel fuel; biodiesels from both the students and the tanker combine in the underground tank to a five percent mix. According to Pete Varney, associate director, GC&P, using this mix, which is higher than the usual two percent mix the University is currently required by law to use, "the campus fleet produces fewer emissions and uses less foreign oil." As the tank is drained and refilled over the winter, the remaining mix will slowly go back down to 2%.

To fulfill their mission to lower University emissions and promote education about renewable fuel resources, the team takes used vegetable oil and grease from the University's dining halls fryers to make the fuel. These kitchen leftovers are converted or refined into biodiesel

using a simple process that splits fat molecules into smaller ester molecules (biodiesel) and glycerin. The EWB Illinois Biodiesel Initiative team performs this process along with engineers at the Illinois Sustainable Technology Center on campus. The biodiesel can then be used in virtually any diesel engine without modification. If the university fully utilizes the estimated production of 12,800 gallons of biodiesel per academic year, there would be a net reduction of 278,528 lbs of CO2 emissions per year.

An added bonus of the initiative is glycerin, a by-product of the process reaction that the students modify into high quality liquid hand soap. Eventually, the soap will be available for use in university shops and rest rooms.

A great benefit of the program is the students who participate in this exercise gain a different perspective on fuel production and utilization. The new insights and knowledge gained through participation could lead some of these students to develop future ideas for improving biofuel production and materials use efficiency. Which moves the campus and the world further ahead on the road to a sustainable environment.

For more information visit their website: <http://linc.illinois.edu/engineers-without-borders%E2%80%94illinois-biodiesel-initiative>

Iowa State Recognized in Innovation and Performance Excellence Program

The Iowa Quality Center recognized Iowa State University in the 2009 Iowa Recognition for Performance Excellence (IRPE) program—Iowa's premier program for innovation and performance excellence. Iowa State was awarded the Gold Level of recognition.

The prestigious Iowa Recognition for Performance Excellence program was established in 2000 to help businesses and organizations in the state become more sustainable. Each applicant organization receives over 1000 hours of analysis by a team of trained examiners and the

IRPE program presents awards to the organizations that demonstrate successful process-based results. The process is aligned with the Baldrige National Quality Program.

There is no monetary award, but those who complete the process indicate it helps them identify strengths and opportunities for improvement within their companies, provides training for continuous improvement and leadership development, and assures customer focus, efficiency, and workforce engagement within their organizations. This process is a proven method for organizations

to achieve their highest potential and become more competitive in the world marketplace. For this reason the process is used by 36 states to support their economic development efforts.

The IRPE process, awards and examiner training are coordinated by the Iowa Quality Center, an independent nonprofit organization, based in Marion, Iowa. For more information about the IRPE process contact Gary Nesteby at the Iowa Quality Center, (319) 398-7101 or visit the IQC website at www.iowaqc.org.

Purdue recognized as best new green cleaning program in the country for 2009

What started in July 2008 as a pilot program to test green cleaning methods in Discovery Park has now become a campus-wide endeavor.

Through the efforts of Purdue's Building Services, the West Lafayette campus has adopted a comprehensive green cleaning program that replaces cleaning chemicals with bio-based, biodegradable products derived from renewable resources.

"Previously we used products and technology that had been in use within our industry for more than 30 years," says Bob Morman, day general manager at Building Services. "These traditional cleaning products were blunt-force instruments. Today, we use finesse tools and products designed from an entirely different chemistry. Our green products are all third-party certified, and they meet tough environmental standards that meet or exceed federal guidelines."

The green cleaning program aims to improve air quality, eliminate volatile organic compounds, reduce water pollution created by cleaning processes, and reduce the amount of solid waste generated.



Purdue's program was recently recognized by American School & University magazine, the Green Cleaning Network and the Healthy Schools Campaign as the Best New Green Cleaning Program in the country for 2009.

The idea to introduce environmentally friendly cleaning processes grew out of a Big Ten and Friends Building Service Administrators Conference hosted at Purdue in September 2007. That led to a well-received six-month pilot program at Discovery Park in 2008. Building Services took the program campus-wide in February 2009.

During the pilot and now as part of the campus-wide program, Building Services has used biobased products formulated from naturally renewable, sustainable resources such as soy, corn and sugars.

"Biorenewable products eliminate the need for petroleum-based raw materials and support American agriculture and forestry industries," Morman says.

The program also involves the use of dispensing systems that systematically dilute chemicals with cold water as well as special training for custodial staff on how to use the new products.

"Our floor mops are made entirely from remanufactured 2-liter soda bottles, and our mop handles are made from rapid-growing bamboo," he says. "Everything we order comes in recycled packaging and in concentrated form whenever possible."

Consumable products such as paper towels and plastic can liners are also an important part of the overall program. They now meet EPA



requirements for high postconsumer recycled content.

"Our staff feels empowered by their stewardship role," Morman says. "Our customers feel engaged with a process that delivers the clean, safe, healthy environment they expect and reduces Purdue's ecological footprint."

"Our Big Ten peers are expressing tremendous interest in what we're doing. Many of them plan to emulate key parts of our sustainability programs on their campuses. Going forward we plan to continue supporting our friends and peers with their efforts to go green, and in the process, multiply the impact of our efforts across the country."



President's Corner

Continued from page 2

normally three years in duration. Currently standing MAPPA Committees are Professional Development, Membership, Information & Research, Professional Affairs, and Awards & Recognition. These committees mirror APPA committees of the same name as an attempt for MAPPA to be aligned with the initiatives of APPA.

The Professional Development Committee enhances communication and information about existing training and educational programs and opportunities available to MAPPA institutions. In addition, the Committee assists in the planning and execution of the MAPPA annual meeting. The Committee is comprised of Chairperson Doug Greenwood from the University of Minnesota-Duluth dgreenwo@d.umn.edu who also serves as the MAPPA representative on the APPA Professional Development Committee, and eight members: four from institutions without dedicated training personnel (small schools-under 10,000 FTE) and four from the Big Ten Trainers' Team (large schools-over 10,000 FTE). The goal is to have all member states represented on the Committee.

The Membership Committee is also a subcommittee of APPA under the same name. The purpose of this committee is to recruit new

membership and assist with member-related concerns of existing members. This committee is comprised of Chairperson Kristie Kowall from Illinois State University klander@ilstu.edu and members from each of the seven MAPPA states. There is currently a vacancy on this committee for a person representing Wisconsin.

Each of the next three committees have vacancies and opportunities for interested members. If interested in assisting, please contact me or any of the Committee Chairs.

APPA's Information & Research Committee is currently focusing on the Body of Knowledge (the on-line version of the Facilities Manual), the Facilities Performance Indicator (FPI)s, the four core areas on the APPA website, as well as some new communication and marketing initiatives. If you are interested in helping to improve these offerings, please contact MAPPA's Information & Research committee chair Jeri King from the University of Iowa jeri-king@uiowa.edu and let her know whether you would like to help on publications, the website, the FPI or whatever may be needed at the time. As a MAPPA I&R committee member, you can control your time commitment, but please try to attend a committee meeting at MAPPA 2010 in Moline, IL.

The Awards & Recognition

Committee charge is to solicit and select recipients for the Meritorious Service Award, the Pacesetter Award, and the APPA Fellow Award. The Chairperson, Jerry Carlson from Butler University gcarlson@butler.edu also provides the Membership with information pertaining to other APPA recognition opportunities and maintains an inventory of MAPPA recognition recipients.

Professional Affairs is charged with the development and administration of programs and activities designed to enhance the professional status of MAPPA members. The Chairperson, Greg Fichter from the Indiana University-Bloomington gfichter@indiana.edu provides input to the larger APPA Committee in regard to the development of APPA's Public Policy initiatives. They also provide input into the Facilities Management Evaluation Program, the Award for Excellence, Code Advocacy, Credentialing, and Scholarship programs.

As you can see, there are ample opportunities for involvement. All it takes is a little time, a little willingness to help others, and a little devotion to MAPPA, the very best professional facilities-related organization in the Midwest.

Open MAPPA Officer Positions

This year, MAPPA will have openings for two offices. **President-Elect and Treasurer**. Please keep in mind that the President-Elect position is a five year commitment. MAPPA by-laws spell out the nomination process:

"Nominations of all officers except the President, Past President, Junior APPA Board Representative and Senior APPA Board Representative shall be made by a nominating committee. This committee shall consist of the Past President, Junior Representative, and Senior Representative."

If you have suggestions for possible candidates for these positions, please contact John Ott at ott.52@osu.edu.

APPA 2010 Conference

July 14-16, 2010
Boston, MA

To register, go to:

<http://www.appa.org/Training/EventRegistration.cfm>