

Northern builds green

Northern has registered with the U.S. Green Building Council and will seek “Leadership in Energy and Environmental Design” (LEED) certification for all future capital projects, beginning with Magers Hall, which is being converted back to a residence hall.

According to its Web site, the U.S. Green Building Council is a “coalition working to promote buildings that maximize economic and environmental performance.” Its 4,000 members include local, state, and federal governments; product manufacturers; contractors; builders; utilities; and educational institutions.

The LEED Green Building Rating System developed by the council’s membership is a voluntary, consensus-based national standard for developing high performance, sustainable buildings. Kathy Richards, director of engineering and planning at NMU, said the Michigan Department of Management and Budget now requires that all state-supported major capital outlay projects be designed and constructed in accordance with the LEED system and score enough points to meet minimum “LEED Certified” status.

“As a result of this requirement, NMU has decided to have all of its capital projects comply with this green building initiative,” Richards said. “The potential benefits we see are energy savings, resource conservation, waste reduction, environmental sensitivity, marketing promotion, and keeping consistent with our motto, ‘Northern. Naturally.’”

Research cited by the U.S. Green Building Council states that buildings account for 36 percent of total energy use and 65 percent of electricity consumption in the United States. They are also responsible for nearly one-third of all greenhouse gas emissions, raw materials use, and waste output.

The USGBC states that breakthroughs in science, technology, and operations have made it easier to “build green” and reap several environmental and economic benefits. These include improved air and water quality; enhanced and protected ecosystems and biodiversity; reduced operating costs; optimized life-cycle economic performance; enhanced comfort and health; and improved employee productivity and satisfaction.



Fast-track renovation

Construction on the estimated \$6.1 million renovation of Magers Hall began in March and is expected to be complete in just three months. The self-imposed schedule will serve as a trial for future residence hall renovation projects in the hope that on-campus housing will not be impacted during the academic year.

“In order to have better control of the scheduling, we’ve approached the bidding process differently,” Art Gischia, NMU director of business services said. “Instead of having an architect draw up one complete bid package, this time we had three individual bids—for general contractor, mechanical, and electrical—held by the university. It will take two or three shifts to accomplish this, but if it works, we may consider it again for future residence hall renovations.”

The renovation project also served as a real-life learning experience for construction management students, who worked on the schedule and followed the process through the initial construction phase. Carl Holm, director of housing and residence life, said architectural changes in the building will include a roofline that is pitched rather than flat, and three-story entryways on the corners featuring sunroom sitting areas on the second and third floors.

“We wanted to open up the long, dark corridors and bring in more natural light and allow students to take advantage of that light,” Holm said.

Northern board votes in support of WNMU-FM

The Northern Michigan University Board of Trustees voted unanimously at its December 2004 meeting to continue providing general fund support of \$50,000 to keep the public radio station on the air.

The trustees will not take action on the public television station until they receive additional information about the university’s liability in obtaining grants, financing alternatives for federally mandated digital upgrades, and marketing strategies aimed at students pursuing broadcast-related careers.

The board will hear a final report and recommendation on the fiscal and programming future of the public television station at its October meeting.

New business dean named

Rajib Sanyal is the new dean of the Walker L. Cisler College of Business. His appointment is effective July 1.

Sanyal has served as a professor of management in the School of Business at The College of New Jersey—formerly Trenton State—since 1987. He also spent four years as division head. In that capacity, he was responsible for administering academic majors in accounting, economics, finance, and international business with 19 full-time and six part-time faculty.

“I am excited at the opportunity to lead Northern’s business college,” Sanyal said. “It is well situated to serve as a key driver of economic development in the region. The college’s human and intellectual resources offer the promise of building on its record of positively chang-

ing the lives of students and the lives of the citizens in the community. It is this promise, I should say, that attracts me to Northern.”

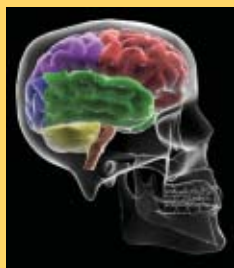
Sanyal was selected for an American Council on Education Fellowship for the 2004-05 academic year, which he completed at George Mason University in Fairfax, Va. In addition to teaching at The College of New Jersey, he has been a visiting professor at the University of Waikato in Hamilton, New Zealand, and a consultant on distance education for Thomas Edison State College in Trenton, N.J. He also was a lecturer in commerce at the University of Delhi in India and served as an adjunct faculty member at the following eastern U.S. institutions: Rider University in New Jersey, Thomas Jefferson University in Pennsylvania, and Brenau College in Georgia.



Rajib Sanyal

Sanyal holds a doctorate in business administration from Georgia State University. He also holds a master’s degree in industrial relations from the University of Wisconsin-Madison, a master of commerce degree in general business from the University of Delhi-India, and a bachelor of commerce degree in accountancy from the University of Calcutta-India.

Northern and Marquette General Hospital collaborate on brain tumor program



NMU will play a role in a new comprehensive brain tumor program being established by The Upper Michigan Cancer Center and the Upper Michigan Neuroscience Center at Marquette General Hospital.

Northern’s biology department will collaborate with MGH on a research program that will examine the genetics of primary brain tumors in an effort to identify the mechanisms that cause a cell to become cancerous. Improved understanding of altered genetic pathways may lead to new treatment approaches.

NMU biology professor Robert Winn will lead the research effort. He said his students are honored to work closely with MGH on the new initiative.

“We’re excited to partner with MGH in this way,” Winn said. “Using our research strengths, with resources available

at MGH, will benefit both institutions. I strongly believe it will result in a better understanding of brain tumors and ultimately better care for patients.”

The NMU biology department, Winn said, will undertake the actual detection and characterization of specific genes or gene products that may play a role in the development and growth of tumor cells.

“We’ll be looking for the presence of gene products in tumor cells that may be the underlying causes of the tumor,” he said.

The collaborative research effort is one of three key components of the Upper Michigan Brain Tumor Program, which may be fully operational by the fall. The remaining two components are a uniform clinical treatment program and patient advocacy programs.

MGH is using the Brain Tumor Center at Duke University as a model and consulting resource. The hospital provides medical, surgical, and radiation therapy care for a number of patients with a variety of benign and malignant brain tumors.

Promoting an energy efficient U.P.

Jennifer Silverston, an NMU graduate student from Grosse Pointe Shores, is the driving force behind an effort that resulted in a \$24,000 grant from the Michigan Department of Labor and Economic Growth to establish an energy demonstration center in Marquette, called Northern Options. The center joins six others around the state and will teach the public about wise energy use, green building practices, and renewable energy solutions. Silverston serves as the center's director.

Silverston received a bachelor's degree in marine biology from Boston University. She came to Northern after recovering from a boating accident that left her unable to walk.

While Silverston slowly regained the ability to walk, the pain persisted, and she was prohibited from having a full-time job. She said she became psychologically bored. "I kept asking the doctor if I could take a class."

She decided that Northern's campus was best suited for her inability to drive long distances and other limitations.

Her interest in wind and alternative energy exploration was sparked while taking a geography class, and in 2003, Silverston formed a group called Marquette Citizens for Wind Energy. The group persuaded the Marquette Board of Light and Power to conduct a \$20,000 study to see if wind energy would be feasible in the area.

She then organized a wind energy town meeting in January 2004 that drew more than 200 people. When the Michigan Energy Office heard about the interest in wind energy in the U.P., they encouraged Silverston to apply for the grant.

"I'm taking it one step at a time," she said. "The energy project has been a huge part of my recovery. It's way too easy to get overwhelmed by the pain, but the energy project has always given me goals."

Prodigal plants

Sowing the seeds of interest in plant restoration

As spring arrives and the birds return to their northern roosts, several other, more firmly rooted species are making a return to the area although many of them have been absent for much longer than a single winter.

Ronald Sundell, director of NMU's environmental science program, has spearheaded the native plants project, an effort to restore native plants and vegetation to campus. The idea took root during in-class discussions when Sundell came to Northern about six years ago. His interest in native plant restoration inspired a plan to place native plants right on campus grounds. Wildflowers and grasses including black-eyed Susans, Canada wild rye, big blue stem, and little blue stem are all growing on the hill outside Olson Library. Spring 2005 marks the project's third planting season.

"We're taking an area disturbed by humans originally and covered with nonnative species, and now we're introducing native species that were here long before we got here, and we're watching how they spread," said junior biology major Jason Woodhull. Woodhull works with the student Environmental Science Organization and helps to coordinate the cultivation of native plants in the NMU greenhouse.

Most of the campus is dominated by landscaped trees and lawn, which offer very little in terms of a native habitat or its attributes.

"Lawn is kind of a dead end in terms of what it provides for us ecologically," said Jan Schultz, plant ecologist for the United States Forest Service Hiawatha National Forest, which is aiding the NMU project. She said that non-native species, which can be persistent and aggressive, threaten our local and regional



Ron Sundell (center) works with students in NMU's greenhouse to prepare plant starts for the next planting season.



Students from Sundell's biogeography class pitch in and help plant native grasses between the New Science Facility and Olson Library.

biodiversity, and that threat ripples through the entire environment.

"Using indigenous species goes hand in hand with controlling and eradicating non-native plants. One of the forest service's chief concerns stems from that, pardon the pun," she said.

Schultz has worked closely with Sundell on the project, donating some of the seeds and assisting in their integration with the native flora of the campus environment. Other seeds were gathered from nearby areas. The nativity of the seeds was determined by geographical similarity and proximity to the campus; this is called "local provenance." Successful growth and establishment may depend upon this practice.

"Native plants don't require nearly the amount of or any fertilizer or herbicides, and are not bothered by bugs," said Schultz. "They are useful to our pollinators, birds, and butterflies. They are less consumptive of all the poisons and fossil fuels that we use on lawn."

Sundell and his students are developing the large swath of land between Olson Library and the New

Science Facility and by the two down-campus residence hall quads. Divided into six areas, each will be dedicated to a particular species—wildflowers and grasses, trees and shrubs, mixed woodland, wetland, and a native seed research area. The retention pond near Quad II serves as the wetland area of the project. A weather station, which was constructed earlier in cooperation with the National Weather Service, is also incorporated into the undertaking.

The area currently being tended is the stretch of land directly south of Olson Library. Recently Sundell secured \$17,000 of a grant that is shared with the several other environmental organizations. As more funding and manpower become available, other areas of the project will be developed.

Woodhull, who is charged with tending the restored area over the summer, said he was surprised when the industrious plants began popping up in various places on campus where they were not planted. Others took root so fast that they only needed to be watered in extremely hot weather after their first year. He

said he looks forward to planting more and observing the progress. "It was kind of amazing how strong the plant species are and how well adapted they are to that habitat."

Besides the benefit of an outdoor study area located conveniently on campus for lab science classes, Sundell hopes that the area will help to educate the campus and Marquette communities about the area's environmental heritage. Sundell plans to incorporate signage in the area to help people identify the various species. Aesthetic value is also a consideration.

"It can look a little dirty and messy, but once the plants get better established, you have the mix of different types of flowers blooming every year—grasses coming in four feet high. Beauty is in the eye of the beholder, and I think this looks really nice once established," Sundell said.

"It's a long-term project," he added. "I tell students, 'You're there at the beginning. You'll come back and show your spouse and children, and you'll be able to see your accomplishments.'"

That's what putting down roots is all about.

—Matt Schneider '00 BA



Students are already beginning to collect some seeds from the on-campus site. Here, students are collecting seeds from a large patch of black-eyed Susans.