Rochester decreases carbon footprint by increasing prairie space

Land purchased by the University of Minnesota Rochester has been revitalized. Asphalt and concrete were removed in this 2015 project. The plot was planted with native prairie grasses, Dogwood shrubs, and Aspen trees. This project decreases the city's carbon footprint, minimizes water run off and adds beauty to Rochester.

Continue reading on Page 2
The Association for the Advancement of Sustainability in Higher Education (AASHE) held its annual conference in Minneapolis October 25th to 28th, 2015. The conference was held during the 10th anniversary of the AASHE organization and the first to be held in the Upper Midwest, this conference provided an opportunity for the University of Minnesota to showcase the breadth and depth of sustainability work to an international audience. Sustainability Director at the University of Minnesota Twin Cities, Shane Stennes, along with Beth Mercer-Taylor, Sustainability Education Coordinator at the Institute on the Environment, attended and introduced at this year’s AASHE conference, shown to the left.

Relationships built within the context of the AASHE Host Committee helped build connections between the University of Minnesota Twin Cities and other higher education institutions, particularly those involved in a Hennepin County Green Partners grant. Planning for the four day conference was done with support from a Host Committee made up of representatives from higher education institutions in the Upper Midwest. University of Minnesota staff, students, and faculty provided critical leadership to the committee and helped to highlight unique, local sustainability successes through the conference proceedings. The Host Committee was also a catalyst for building relationships between the University of Minnesota Twin Cities and other higher education institutions that have had positive impacts beyond the conference.

The location of the AASHE conference in Minneapolis offered participants a unique opportunity to select from over 400 sessions offered across the three days without expensive travel costs often associated with a national conference. Participants selected from engagement, operations, curriculum, planning & administration, research and art tracks in a wide variety of sustainability-related topics, such as energy, finance, climate mitigation & adaption, and public engagement. Eighty-six University of Minnesota staff, students, faculty members and partners presented in various session formats throughout the conference. AASHE was described by one of the University of Minnesota staff members as “a chance to brainstorm, network and problem solve with leaders.” A total of 173 individuals associated with the U of M attended this year’s conference.

2,300 ATTENDED, 173 FROM UNIVERSITY OF MINNESOTA
In the spring and summer of 2015, University of Minnesota Rochester completed a project that not only added aesthetic beauty to Rochester, but made a positive impact on the environment. The University had purchased land at 701 and 617 S. Broadway in 2009, located right in the heart of downtown Rochester. Before purchasing, the land was used as a surface parking lot for restaurants, but the University has larger vision for the site. Eventually, the site will host development to support the campus and in the meantime, it was planted as a prairie.

The project began with removal of deteriorating asphalt and concrete. These impervious surfaces had previously allowed rainwater to run off of them, resulting in more water and pollutants entering the local watershed. After the removal of these surfaces, Rochester seeded it with natural plantings. Some of these plantings include: native prairie grasses, Dogwood shrubs, and Aspen trees.

Facilities and Operations Coordinator at Rochester, Barry Standorf, is proud of this project, stating that it “decreased the carbon footprint in the downtown area and decreased the amount of surface water runoff.”
Duluth Students Show Their Green Thumb

During 2015, the Sustainable Agriculture Project supplied over 30,000 pounds of produce and pumpkins to UMD, all grown by students, using organic methods. The Sustainable Agriculture Project (SAP) was founded in 2009 to promote research, teaching and public engagement around sustainability in food, water, energy and biodiversity within a landscape scale ‘land lab’. The SAP collaborates with researchers from the humanities, social sciences, the natural sciences and engineering on solutions-oriented action research projects.

Crookston: Local Foods Are Golden

Crookston harvested over 11,000 pounds of food this year from their local garden. This food was harvested and then prepared and served by Dining Services. This focus on local food is driving a sustainable approach to dining on the Crookton Campus. The Crookston Students for Sustainable Development (CSSD) created a new cooking class available to Crookston students that focused on preparation techniques for local foods. As many Crookston students are unaware of how to prepare and cook local foods, this class provided an opportunity to learn about the local foods available as well as prepare them. The class featured basic preparation techniques for potatoes and squash and taught students how to prepare Venison and round steak using simple ingredients like garlic and olive oil.

How much food did we grow?

Across the state, campuses harvested over 53,000 pounds of local food this year. This is equal to the weight of about 10 elephants!

Morris harvests over 2,400 pounds of food, uses in dining services

Morris is changing the way food enters and leaves their dining services, from source to disposal. The Student Organic Gardening Club has many student led gardens around campus, which include fruits, vegetables and herbs. This year, they harvested over 2,400 pounds of food. This food was used by the campus food service, and also shared with the Community Meals Program. This program focuses on creating a welcoming and warm environment for the community to eat, collaborate and build relationships.

<table>
<thead>
<tr>
<th>Campus</th>
<th>Harvested food (lbs/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twin Cities</td>
<td>10,500</td>
</tr>
<tr>
<td>Crookston</td>
<td>11,000</td>
</tr>
<tr>
<td>Duluth</td>
<td>30,000</td>
</tr>
<tr>
<td>Morris</td>
<td>2,400</td>
</tr>
</tbody>
</table>
Food Waste All-Star Team, Twin Cities University Dining Services (UDS) and the Food Recovery Network, Expand Efforts

In 2014, Twin Cities University Dining Services (UDS) partnered with the Food Recovery Network recovering food from the Coffman Memorial Union Minnesota Marketplace. In 2015, the team expanded their reach to even more UDS restaurants including the Carlson Food Court, the Residential Restaurants and TCF Bank Stadium. To date, this partnership successfully recovered over 9,500 pounds of food which was distributed to the community through other program partners such as Urban Ventures and Loaves and Fishes. Food that was unable to be donated was composted through the University’s organics collection program.

Crookston reduces waste while recycling

Crookston has found a way to promote sustainable water consumption while reducing waste. All first year students at the Crookston campus receive water bottles made of recycled materials. The Crookston Students for Sustainable Development provides these water bottles, which are funded through a Green Fee paid by on campus students.

IT’S A WHALE OF A TALE

Morris has composted over 250,000 pounds of food scraps from 2012-2015.

That is equal to the weight of a Blue Whale.
The land of 5,000,000 refills...

*that's 5 million 1 liter water bottles*

The University has been able to reduce its waste by installing hydration stations, used to encourage reusable water bottles. These stations are located around campuses and allow students and staff the opportunity to refill their reusable bottles. With 187 of these stations found across all campuses, students, faculty and staff are given the opportunity to use reusable bottles conveniently. This year, 5,849,111 1 liter disposable bottles were saved across all University campuses.

The water here is SUPERIOR!

The Duluth campus is taking time to appreciate their water and reduce use. In March, the campus celebrated World Water Day, and took the time to appreciate tap water while also working together to find ways to decrease pollution in Lake Superior. They also work to use natural plantings that both enhance the campus and require less water. The plants added are both native and adopted, and add a “wild” flare to the Duluth campus.

747,000 gallons of water reused at 17th Ave. Residence Hall

The rainwater collection system found on the top of 17th Avenue residence hall has been working hard this year. The Twin Cities newest residence hall has collected and reused 747,000 gallons of water in 2015. The water is collected on the roof and filtered. The green and white roof of the building not only captures water for reuse and to reduce stormwater runoff, but they also reduce the urban heat island effect in the Twin Cities. After filtration, the water is used as the primary water source for the toilet flushing system. The hall also uses high efficiency plumbing systems to reduce water use further.
Energy

70% of Morris Electricity from Renewable Sources
Morris is leading the way in renewable energy use. This year alone, 70% of the electricity the campus used came from renewable sources. It received 62% of its electricity from two 1.65MW wind turbines, located directly on campus. In addition, about 16% of the electricity from the local utility is wind power, which brings the Morris total to 70% renewable. For an even greater impact on energy use, the campus has 23kW of installed solar PV systems, which deliver over 30,000 kWh per year. That amount of energy could supply three homes with all their electricity needs for a full year.

Coming soon...
Combined Heat and Power Plant
The Twin Cities will unveil their new Combined Heat and Power Plant this year, which will cover the majority of steam needs for the Minneapolis campuses. This plant is a "major tactic in the goal of reducing the University's carbon emissions by 50 percent by 2020", said Shane Stennes, who serves as the Director of Sustainability at the University. He continues that "The carbon reduction is partly due to a change in fuel but mostly a result of increased efficiency," He also added that the ability to use the waste heat from the electricity generation is the real reason the University will see carbon emissions plummet. Another benefit of the combined heat and power plant is the improved air quality on the Twin Cities campus. The plant produces far less emissions than the previous system. The new system will provide large cost savings and increased efficiency as well. In a conventional system, there is about a 49% efficiency rate. With the combined heat and power plant, efficiency rises to 75%.

UMD launches Small Wind Research Project
Dedicated on Earth Day 2015, the UMD Small Wind Research project was installed in the middle of the UMD Land Lab. Led by Mechanical Engineering faculty, Alison Hoxie. A new, Zero-Contact Technology wind turbine is being tested and commissioned. Students from engineering, biology, environment and sustainability played important roles in planning and implementing the project. The wind resource in the heart of the Sustainable Agriculture Project site provided an ideal place to put the technology to the test, as it was designed for marginal wind sites. The project is studying how small wind can better perform in gusty wind conditions.

Duluth campus Energy Levels Up, Saving Energy in the Process
Another chilled water line was added to the Duluth campus to better serve the northern side. The chiller pods on the northern side of campus are the most efficient units. The new chilled water line allows the campus to fire-up the most energy-efficient air conditioning units first. The new line was "directionally-bored", reducing soil disturbance and erosion during construction. The steam line that runs underground from the heating plant to the Sports and Health building was removed this year. Crews removed the old steam line—which was having issues with water leaking into the line—and once the entire line was removed, was replaced with a brand new pipe that has double the insulation.

Crookston raises the roof! (For renewable energy)
Crookston received a grant from Otter Tail Power Company to install an 18 kW photovoltaic array on the roof of the Wellness Center that is currently under construction. This system will provide part of the power necessary to run the building. There is a learning component written into the grant; to comply with this one of the panels will be installed at ground level and will include a plaque with information about the system. Inside the building there will be a monitor so building occupants can see the production and consumption in real time.
TRANSPORTATION

U of M Twin Cities goes platinum!

The Twin Cities campus has received the platinum award from The League of American Bicyclists. This award program provides a clear roadmap to building a Bicycle Friendly University and the application has become a rigorous and educational tool. "The University of Minnesota is thrilled and honored to receive this award," said Steve Sanders, Parking and Transportation Services’ alternative transportation manager. "Moving up from our previous Gold designation to Platinum status is exciting for us. Our biking community grows annually and we do our best to respond in kind and to serve their needs. Our population really takes advantage of our amenities, including our on-campus bike center and ZAP! programs." The University of Minnesota Twin Cities campus is the third largest traffic generator in Minnesota. The U of M’s Parking and Transportation Services department is committed to establishing, maintaining and improving a comprehensive transportation system that reduces congestion, eases accessibility and enhances a friendly university community.

Transportation & U

Solar powered parking meters save waste and provide convenience in Duluth

The new parking meters installed across campus are solar-powered with a battery backup. Not only are they more convenient for campus visitors, as they accept credit/debit cards, but the Parking and Transportation Office will go through substantially fewer disposable batteries, all thanks to the power of the sun.

Morris gets ZAPed

Employees and Students of University of Minnesota Morris have biked over 56,000 miles, as recorded by the ZAP readers around campus. ZAP is a service that tracks and rewards bikers by recording through digital devices around the campus. As bikes pass by, their ID is logged by the ZAP reader, and the biker soon receives benefits such as gift cards and discounted health plan rates. The program also allows users to track their miles, CO2 saved and calories burned.
Twin Cities. This state of the art fitness facility located in the there! You'll be climbing to new heights with natural light and ventilation. Be sure to brag about the rock wall. Be sure to brag about the rock wall. This place boasts all sorts of green amenities: preferred parking for fuel efficient vehicles, ultra low-flow fixtures and solar thermal panels! Be the envy of all your sustainable friends with this progressive property in Morris.

Entertain 52,000 of your closest family and friends in this LEED Silver & commercially zoned fully equipped stadium. Enjoy 7 chef’s kitchens in a zero waste facility, located in Minneapolis. You'll be scoring a huge victory with this deal.

Sleep in a different room every single night, and explore the vegetated roof. Amenities also include high efficiency plumbing and heat recovery mechanical systems. After seeing this place, it definitely won't be 17 on your Twin Cities list.

Ditch the classroom for the great Duluth outdoors! Built with 100% recycled materials, you'll have a great time teaching your friends and family about the Earth at a low environmental cost.

This property is simply illuminating: 90% of the lighting is natural! Learn all about economics and business within a Duluth building that truly lights up savings!

Beautiful rain gardens surround this hall in an effort to reduce storm water runoff. Purchase this Crookston listing today and you can help grow the seeds of sustainability!

Ditch the classroom for the great Duluth outdoors! Built with 100% recycled materials, you'll have a great time teaching your friends and family about the Earth at a low environmental cost.

The Sustainability Times

HOT PROPERTIES

We can find you the most sustainable property faster!

University of Minnesota Real Estate

Bruininks Hall

Bruininks Hall is the perfect place in the Twin Cities for you and your friends to talk about string theory and astrophysics. Bruininks hall boasts the Energy and Environmental Lighting Award of Excellence, so what other reasons do you need to buy this property?

TCF Bank Stadium

Entertain 52,000 of your closest family and friends in this LEED Silver & commercially zoned fully equipped stadium. Enjoy 7 chef’s kitchens in a zero waste facility, located in Minneapolis. You'll be scoring a huge victory with this deal.

17th Ave. Residence Hall

Sleep in a different room every single night, and explore the vegetated roof. Amenities also include high efficiency plumbing and heat recovery mechanical systems. After seeing this place, it definitely won't be 17 on your Twin Cities list.

Recreation Center

There’s never been a more perfect place to show off your skills on the rock wall. Be sure to brag about the natural light and ventilation to decrease energy consumption while you’re up there! You’ll be climbing to new heights with this state of the art fitness facility located in the Twin Cities.

Northrop

Northrop Auditorium, found at UMTC, includes low flow fixtures and vegetation that requires less water and chemical use, so go ahead and sign (and sing!) on this property today!

Welcome Center

The name says it all: welcome your family and friends to any party or event in this huge property that has also received the Preservation Award in Sustainability. Located in Morris, MN.

West Central Research & Outreach Center

This place boasts all sorts of green amenities: preferred parking for fuel efficient vehicles, ultra low-flow fixtures and solar thermal panels! Be the envy of all your sustainable friends with this progressive property in Morris.

Swenson Civil Engineering Building

Low flow fixtures, storm water runoff management and a heat recovery system all combine to make this Duluth listing one of a kind. Help engineer our way to a better, sustainable future. Hurry and beat the other scientists to it!

Bagley Outdoor Classroom

Ditch the classroom for the great Duluth outdoors! Built with 100% recycled materials, you’ll have a great time teaching your friends and family about the Earth at a low environmental cost.

Life Sciences Renovation

Study where we came from, and where we should go in this newly renovated Duluth space updated to double pane, argon filled low e windows and includes a white roof to decrease cooling load.

Ianni Hall

Less really is more with this great Duluth property: this hall reduced water usage by 38%, energy use by 22% and uses low VOC materials. Keep up the trend by making an offer today!

Evergreen Hall

Are you ready to get down with recycling? This Crookston hall has carpet with 60% recycled content and ceramic tile with 54% recycled content. You can really party on top of sustainability by making this property yours!

Janni Hall

Less really is more with this great Duluth property: this hall reduced water usage by 38%, energy use by 22% and uses low VOC materials. Keep up the trend by making an offer today!

Heritage Hall

Beautiful rain gardens surround this hall in an effort to reduce storm water runoff. Purchase this Crookston listing today and you can help grow the seeds of sustainability!

Green Prairie Community Residence Hall

You won't ever have to leave home with apple orchards and edible landscapes right in front of you! Become the ultimate zero waste property owner today, and impress everyone with your home grown meals in Morris!

Bagley Outdoor Classroom

Ditch the classroom for the great Duluth outdoors! Built with 100% recycled materials, you’ll have a great time teaching your friends and family about the Earth at a low environmental cost.

Labovitz School of Business & Economics

This property is simply illuminating: 90% of the lighting is natural! Learn all about economics and business within a Duluth building that truly lights up savings!

Meet our Realtors...

Shane Stennes
Shane is the Director of Sustainability at the University of Minnesota Twin Cities. Helping the Twin Cities be sustainable since 2010

Daniel Svedarsky
Daniel resides in Crookston, where he is the Director for Sustainability. Helping you find a sustainable home

Mindy Granley
Mindy directs the Office of Sustainability in Duluth. Move sustainably with Mindy

Troy Goodnough
The Morris Office of Sustainability is directed by Troy Goodnough. Turning sustainable dreams into reality

Barry Standorf
Barry is the Facilities and Operations Coordinator at Rochester. Exceeds your sustainability expectations!
The University of Minnesota signs the White House Act On Climate Agreement

In November 2015, Eric Kaler, President of the University of Minnesota, signed the White House's Act on Climate Agreement. Joining hundreds of other higher education leaders, President Kaler affirmed the University's commitment to address climate change by:

1. Reducing carbon emissions 50% by the end of 2020 through the implementation of combined heat and power and extensive energy efficiency initiatives.
2. Achieving carbon neutrality across all of our campuses by 2050.
3. Preparing students, through our Grand Challenges Curriculum and other educational experiences, to understand the causes and impacts of climate change, to assess interventions to achieve climate neutrality and resilience, and to take action.
4. Marshalling the University's research and creative capacity to develop sustainable cities and resilient communities, and to provide secure food, water and energy in a carbon constrained world and changing climate.

University of Minnesota Morris receives the very first Green Ribbon Schools Post-Secondary award

The University of Minnesota Morris has become the first post secondary institution to receive the Green Ribbons Schools honor. This award exists to inspire schools to strive for 21st century excellence, by highlighting promising practices and resources that all can employ. The award is given to institutions that show the following:

- Reduce environmental impact and costs;
- Improve the health and wellness of schools, students, and staff; and
- Provide environmental education, which teaches many disciplines, and is especially good at effectively incorporating STEM, civic skills, and green career pathways.

Morris was nominated and received this award for its sustainable practices, including the 32-unit solar thermal array that heats the Fitness Center pool, reducing carbon dioxide emissions by 30,000 pounds each year. Morris also houses two solar photovoltaic systems on campus to convert sunlight into electricity, and generate more than 30,000 kWh annually. A biomass gasifier plant on campus uses local natural resources to heat and cool the campus. The campus builds and renovates in sustainable ways, all which led to receiving this award.
WANTED SUSTAINABILITY ADVOCATES

Are you passionate about sustainability and wanting to expand green programming at the UMTC? Join one of the newest student committees, the MSA Sustainability Committee!

Contact Mike Greco
612-625-7501

WANT YOUR OFFICE TO BE A “GREEN OFFICE”?

The Duluth campus is here to help! If you know your office is energy efficient and reduces waste, contact UMD Sustainability. They can tour your office and provide you with a Green Office label!

Contact UMD Sustainability
sustain@d.umn.edu

SEEKING SOLUTIONS TO EARTH’S ENVIRONMENTAL PROBLEMS

The Institute on the Environment is seeking ideas for agriculture that feeds the world, renewable energy that powers the planet, provides food for every person, cleans water and oceans, creates vibrant economies in cities, neighborhoods and cultures and creates thriving ecosystems that support thriving economies and societies.

DO YOU HAVE AN IDEA?

CONTACT THE INSTITUTE ON THE ENVIRONMENT
612-624-6973

SEEKING GREEN AMBASSADORS

U of MN Morris needs you to lead Green tours to visitors and prospective students. Share your interest in sustainability and help others understand sustainable practices at the Morris campus.

Contact Office of Sustainability-Morris
320-589-6303

ACCEPTING REUSABLE MATERIALS

Bring your surplus office supplies, furniture, equipment and parts to the ReUse Center!

883 29th Ave. SE
Minneapolis, MN 55414
612-625-6874

KNOW A CITY THAT WOULD LIKE TO PARTNER WITH THE U?

Get involved with the Resilient Communities Project, where a selected community and the university partner for a one year. This connects the University to communities interested in sustainability, and provides communities with access to hundreds of students and faculty across a range of disciplines.

Contact Mike Greco
612-625-7501

NEED HELP DESIGNING A SUSTAINABLE PROJECT?

The Center for Sustainable Building Research can help! We offer Design for Community Resilience, where students from the College of Design offer solutions and designs that are sustainable and user focused.

Interested? Contact Richard Strong 612-625-3447

LOOKING FOR A GREEN ENERGY SOLUTION?

The Clean Energy Resource Team (CERT) can help! They are a statewide partnership with a shared mission to connect individuals and their communities to the resources they need to identify and implement community-based clean energy projects.

Visit our website: www.CleanEnergyResourceTeams.org
ADVICE

Dear University of Minnesota...

Q: I want to bike to school, but I don't have a bike on campus. What can I do?
- Mindful in Minneapolis

A: Great question! At the Twin Cities campus, there is a great system called "Nice Ride" that allows you to rent bicycles. There are more than 15 stations you can rent from around the campus, and it costs only $65 a year!
- Goldy Gopher

Q: I want to make a difference on campus, who can I connect with??
- Curious in Crookston

A: There is a great student group called "Crookston Students for Sustainable Development", you should look into that! They research, explore and create concepts for sustainable initiatives for the campus.
- Regal the Eagle

Q: I want to eat locally grown foods, but I can't grow a garden in university housing! What do I do?!
- Munching in Morris

A: Don't worry, Munching. Morris has a Farmers Market every Monday and Thursday through September from 3-6pm! If you stop by the Morris Healthy Eating Booth there, you will get a FREE reusable market tote bag too!
- Pounce the Cougar

Q: I have a great idea on how to increase sustainability on campus. Who do I talk to?
- Discovering in Duluth

A: You should look into the UMD Green Revolving Fund! It strives to reduce the carbon footprint, save money, educate the community about sustainability and increase interdisciplinary connections throughout campus!
- Champ the Bulldog

Q: I want to work out on campus, but there isn't a Rec center! What should I do if I don't want to drive to a gym?
- Restless in Rochester

A: We are so glad you want to decrease your driving! UMR has partnered with the Rochester Area Family YMCA to provide students access to recreational space. Stop into the Student Resource Center to learn more!
- Rockie the Raptor

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