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## Introduction

Environmental responsibility and sustainability are part of the fabric of St. Olaf College. Long before sustainability became trendy across the nation's campuses, members of the St. Olaf community were attending to the college's natural surroundings and practicing thoughtful environmental stewardship while advocating greater social and political awareness.

In a beautiful essay called "Doing Good Work Together," William Kittredge suggests that

*We live in stories. What we are is stories. We do things because of what is called character, and our character is formed by the stories we learn to live in. Late in the night we listen to our own breathing in the dark and rework our stories. We do it again the next morning, and all day long, before the looking glass of ourselves, reinventing reasons for our lives. Other than such storytelling there is no reason to things.*

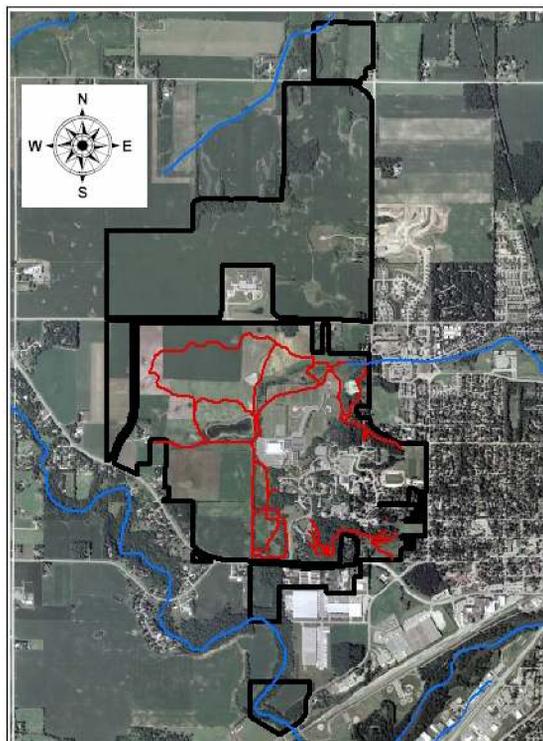
Our college mission and strategic plan tell a story of environmental responsibility. It is a story of change and creativity, of dynamic changes and flexibility, and a belief that living sustainability is a significant part of living a life of worth and service. We believe that a college education helps us form character by learning to live in stories. As a college, we try to provide a reason for things, a way of understanding the important changes and challenges of the 21st century, the era of ecological transition.

From stories of planning and action in the curriculum to the preservation of St. Olaf's natural lands, from advanced research to energy conservation and local purchasing of food products, the college has been actively engaged in seeking out solutions and advancing the well being of the planet. The road to sustainability is long and we continue to take positive steps forward while acknowledging our short-comings along the way.

## Place

When faculty, staff, student, alumni/ae and visitors come to St. Olaf College, they become embedded in the physical space or place the institution has been fortunate to call home for over 125 years. The sense of place helps to define who we are and the resources we have been temporarily given.

- Junction of tall-grass prairie and big woods biomes
- Located 35 miles south of Minneapolis and St. Paul in Northfield, MN
  - ✓ two-college town with 20,000+ residents
- Abundant wetlands and streams
  - ✓ Cannon River protected under the MN Wild & Scenic Rivers Program
- 1000+ acres of NW Northfield
  - ✓ 300 acre main campus
  - ✓ 700 acres of adjacent natural habitat and agricultural lands
- Liberal arts college of the church (ELCA)
  - ✓ 3,000 undergraduate students representing 45 states and 18 foreign countries
  - ✓ Residential campus: 96+%



Map of college owned lands. Property boundaries outlined in black, trails shown in red, and streams shown in blue.

## Major Components of Environmental Sustainability Portfolio

### Curbing Carbon Emissions & Enhancing Energy Conservation

St. Olaf has worked to achieve a significant reduction in both per capita and total annual carbon emissions.

- Very low annual carbon-per-student rate of seven metric tons
- Employs highly efficient (>94%) natural gas fired steam boiler at the central heating plant
  - ✓ 2008 peak steam flow was equal to the 1988 peak steam flow, even though the college had added 600,000 ft<sup>2</sup> of new space over that time
  - ✓ 2009 Xcel Energy Award Winner for efforts at improving energy efficiency. Avoided using an estimated 6.91 million kWh the previous year and was ranked No. 1 in natural gas efficiency, with 417,840 therms saved

- 2005-2006 constructed 1.65 MW utility grade wind turbine on-campus
  - ✓ Turbine directly supplies up to one-third of the electricity used by the college
  - ✓ Space exists for up to two additional units

Image at right: "Big Ole" the 1.65 MW wind turbine on the west side of campus



### Materials Diversion: Reuse, Recycling & Composting

St. Olaf has worked with state and local units of government in an effort to divert materials from landfills.

- Single-stream recycling system implemented across campus
- 100% of food waste - preparation, production, line, and plate - collected and composted
  - ✓ In-vessel system, located on-campus and operated by grounds crew
  - ✓ Compost generated is used in landscaping and maintenance of the campus grounds
  - ✓ Compost supplied to the student-run organic farm
- Use of high recycled content paper
  - ✓ 95% of all paper used on campus made from recycled content
  - ✓ Copier and printer paper Forest Stewardship Council certified
  - ✓ 90% of paper used by Bon Appétit made from recycled content
- Reusable materials
  - ✓ Reusable lunch bag provided by Bon Appétit
  - ✓ Reusable coffee mugs provided by Bon Appétit
  - ✓ Water refill station located in "The Cage" cafe

Image at right: Food waste being loaded into composter



### Restoring the Lands

For several decades, St. Olaf has been involved in restoring natural habitats on neighboring lands owned by the college.

- Students & faculty from Biology and the Environmental Studies conducted extensive natural habitat restoration projects over the past 20 years
  - ✓ 40,000+ tree seedlings and nursery stock planted on ~90 acres to re-establish the dominant Big Woods forest type
  - ✓ 150+ acres of native tall grass prairie reconstructed, mowing and fire maintenance
  - ✓ 15 wetlands restored
  - ✓ 64 bluebird houses
  - ✓ On-going rotational and no-till agriculture practices for over 15 years; carbon offset program for music ensemble tours.



### Education and Research

In addition to a popular environmental studies major, where students may pursue tracks in natural science, social science, and the arts and humanities, faculty and students are involved in important research activities around the world...

- The Center for Geophysical Studies of Ice and Climate examines glacial movement associated with climate change in Antarctica, Alaska and Sweden
- Issues of water quality, agricultural runoff, and urban expansion are examined in the Cannon River Watershed, draining 1,460 mi<sup>2</sup> of land in SE Minnesota
- Developed and implemented green chemistry in the science curriculum and constructed Regents Hall of Natural and Mathematical Sciences around its principles and practices
- Offers *Campus Ecology*, a course focused on the ideal of ecological sustainability for the St. Olaf College campus
- Offers opportunities for international and off-campus study or internships linked to environmental issues: Biology in South India, Environmental Science in Australia, Winter Ecology, Desert Ecology, Equatorial Biology, Green Chemistry Internship with US EPA
- Field studies involving stream nutrient cycling in Northern California and Northern Siberia ([www.thepolarisproject.org](http://www.thepolarisproject.org))
- Explored the moral ecology of consumption and the cultural phenomenon of "Malls in America"



### Buildings – New & Old

About 10 years ago the college revised its facility planning guidelines, codifying many of the practices that had been on-going since the founding of the institution

- Successfully employed energy modeling in the design and construction of new and renovated facilities, starting the 1990s and used on every project since
- Established that major new construction and renovations will be registered with the U.S. Green Building Council and have Gold certification as their goal
- Implemented a campus-wide green cleaning program in 2007
- Supported green renovation process of an honor house

### Acknowledgments

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### Local and Sustainable Food Sources

On an annual basis twenty percent of the food served by Bon Appétit, the St. Olaf food service provider, is locally grown or raised, with higher rates during the growing season.

- Purchases year-round from 15 local producers whose products range from produce to beef, lamb, pork, and dairy.
- All of STOGROW, the student-run organic farm, products purchased by Bon Appétit
  - ✓ Founded in 2004 through a entrepreneurial grant provided by the college
  - ✓ A self-sustaining operation located on the James Farm site, 0.75 acres
  - ✓ Goals are to practice sustainable farming methods; provide fresh, local vegetables, fruits, herbs, and flowers to the St. Olaf community; foster agricultural awareness; and educate about sustainable food production
- Additional practices include:
  - ✓ All shell eggs from cage-free farmers
  - ✓ Fair trade organic coffee; fair trade bananas
  - ✓ Seafood from the "Seafood Watch" good list
  - ✓ 90% of fruit and veg within North America



STOGROW images courtesy of Joey Fleming