The Sustainable Agriculture Project
@ University of Minnesota Duluth
Randel Hanson, Geography
David Syring, Anthropology

An Experiential-Based Experiment in Evolutionary Systems Change around Food, Farming and Gardening
Throughout history, food has done more than simply provide sustenance. It has acted as a catalyst of social transformation, societal organization, geopolitical competition, industrial development, military conflict, and economic expansion. From prehistory to the present, the stories of these transformations form a narrative that encompasses the whole of human history.

—Tom Standage

*An Edible History of Humanity*
Conventional/Industrial Food System
REFOCUSING THE FOOD SYSTEM - CONCEPTUAL MODEL

CURRENT MODEL

INTEGRATED REGIONAL FOODSHEDS MODEL

Increase Healthy Food Production
Localize Processing Capacity
Decrease Transportation Costs
Increase Healthy Food Retail
Maximize Local Resources

= Increase Access
Increase Affordability
Increase Quality

# of regions is arbitrary for illustrative purposes - actual distribution and definition of U.S. foodsheds to be determined
SAP@UMD - Overview

• Mission is to engage in teaching, research, demonstration & community engagement around food, agriculture and gardening at UMD

• This is a piece of institutional change in the food system of UMD

• Developing field site for experiential learning at Research and Field Studies Center (aka UMD Farm) – including a ten acre field and a five acre heritage apple orchard
SAP@UMD - People & Networks

• Faculty Collaborative:
  ▫ Pat Farrell, Geography/Soils Science
  ▫ Randel Hanson, Geography
  ▫ Cindy Hale, NRRI, Ecology
  ▫ Stacey Stark, Geography/Geographic Information Systems
  ▫ David Syring, Anthropology/Ethnobotany

• Institutional Networks
  ▫ UMD: Facilities and Management, UMD Dining Services, Office of Sustainability, Civic Engagement, University for Seniors, Sustainability Agriculture Gardening Education Coop (SAGE), the student group on campus
  ▫ University of Minnesota, Twin Cities: Institute for Advanced Studies; Healthy Foods, Healthy Lives Institute; Minnesota Sustainable Agriculture Research and Education

• Institutional Home
  • Center for Sustainable Community Development, UMD

• Community Engagement
  ▫ Regional food, farming & gardening people and organizations
Assets for SAP@UMD

Land (UMD Farm)
Heritage Knowledge
Faculty & Staff
Students
College Farms
UMD Community

SAP@UMD
Field Site

UMD Enterprise Gardens Site

UMD Heritage Orchard

Video Overview of SAP: by UMD student Nathan Levendoski

- [http://www.youtube.com/watch?v=8T8DcbJQ1EQ](http://www.youtube.com/watch?v=8T8DcbJQ1EQ)
SAP@UMD: 4 Examples of Activities

• New Food Regionalism Seminar, Spring & public engagements in 2011
• Community Orchard
• 2011 Dining Services Garden
• Teaching & Student Opportunities
January 2011 Archives

Food miles and greenhouse gas emissions.
By mgranley on January 31, 2011 11:45 AM | 1 Comment | No Trackbacks

I recently read an article titled Food Miles and the Relative Climate Impacts of Food Choices in the United States in Environmental Science and Technology that concluded that the food miles from transportation/distribution are a small portion of the total greenhouse gas emissions related to food, and that it is the food production that accounts for the majority of emissions.

I've often heard the debate Local vs. Organic - which is more climate-friendly. The answer, according to this article, is organic and non-red-meat, as the article concludes "Shifting less than one day per week's worth of calories from red meat and dairy products to chicken, fish, eggs, or a vegetable-based diet achieves more GHG reduction than buying all locally sourced food."

I know that climate issues are not the main or sole advantage to local foods, but greenhouse gas emissions seem to be the issue many people relate to them.

Food from Scratch for the Zenith of the Unsalted Sea: Creating a Local Food System in Early 20th Century Duluth, Minnesota
By rhanson2 on January 30, 2011 4:15 PM | 2 Comments | No Trackbacks

How do you create a locally harvested food system for a city of 100,000? This question is...
events:

feb.
3rd: The American Good Food Movement
17th: Assessing Western Lake Superior Region for Food Localization

mar.
1st: Community based Education around Food, Farming, and Gardening
31st: Institutionalizing Good Food

apr.
7th: Creating Student Centered College & University Gardens
22nd: Will Allen: Growing Power and Growing Food (event at Kirby Ballroom 7pm)
28th: Food Systems in Healthcare

may:
5th: Building Food Change in Eau Claire WI (location t.b.d.)

All events held at 3:45pm
In the UMD Library Rotunda, 4th floor
(with exception of Will Allen)

Public speaker series

spring 2011

community based education around food farming and gardening

TUESDAY
MARCH 1ST
3:45 PM
UMD library rotunda

with

SARAH NELSON:
Duluth Community Garden Program

CREE BRADLEY:
Farm Beginnings Program, Lake Superior Sustainable Farming Association

ANGIE MILLER & MICHAEL LATSCH:
Seeds of Success

Approved for Posting until

The University of Minnesota is an equal opportunity educator and employer.

funded by:
INSTITUTE FOR ADVANCED STUDY
UNIVERSITY OF MINNESOTA
Driven to Discover

UNIVERSITY OF MINNESOTA
Duluth
The University of Minnesota Duluth is an equal opportunity educator and employer.
New Food Regionalism Public Speaker Series—Full Schedule

- Thursday, February 3: “The American Good Food Movement: Communities, Health & Social Change” Maggie Adamek, Terra Soma Consulting
- Thursday, February 17: “Assessing the Western Lake Superior Region for Food Localization”, David Abazs, Senior Fellow, Endowed Chair in Sustainable Agriculture, Univ. of MN and Stacey Stark, UMD, Geography, Director of GIS Lab.
- Friday, February 18: “Incubating Farm(er)s, Creating the Duluth Community Farm: the Intervale Model”, Andrea Tursini, Director of Consulting and Land Stewardship at Intervale Center, Burlington, VT
- Tuesday, March 1: “Community Based Education around Food, Farming, and Gardening”, Angie Miller and Michael Latsch, Seeds of Success; Cree Bradley, Farm Beginnings Program, Lake Superior Sustainable Faming Association; and Sarah Nelson, Duluth Community Garden Program
- Thursday, March 31: “Institutionalizing Good Food: the Case of the Univ. of MN Morris” Sandra Olson Loy, Vice Chancellor of Student Affairs, UM Morris
- Thursday, April 7: “Creating Student-Centered College and University Gardens: The Case of the Corncopia Farm:” Courtney Tchida, Student Program Coordinator, MISA, U of MN St. Paul
- Friday, April 22: “Growing Power and Growing Food,” Will Allen, Growing Power, Milwaukee, WI
- Thursday, April 28: “Food Systems in Healthcare”, Diane Imre, MBA, RD Director of Nutrition Services, Fletcher Allen Healthcare, Burlington, VT
Other Community Engagements

- Community-engaged food-system assessment research
- 2009 Superior Food Summit
- Creating a learning community around cold hardy fruits within region
- Fruit Gleaning and Urban Gardening Planning with Community Action Duluth
- Food systems component ‘Green Jobs Action Planning’ for City of Duluth
- Edible Landscapes project with UMD Facilities Management
- Community Education/Workshops/Field Days on food related activities
- Other Public presentations (Harvest Fest, Sustainable Farming Association Conference, etc.)
- Related community project: Duluth Community Farm
- Newspaper articles/radio & television
A community engagement success

UMD Heritage Orchard wins a community orchard planting

Community cast more than 20,000 votes in May to make us one of about 20 communities nation-wide to receive a 50-tree planting and logistical support.

“Big splash” community event funded by Edy’s to be held in spring 2012.

All fruit from trees will be given to the community in ways appropriate to community food needs.

Orchard to serve as education and community engagement venue.
Varieties our orchard specialist, Dr. Cindy Hale, has selected for us to plant:

Anton Polt
Ashmedes Kernel
Blue Permain
Black Oxford
Fameuse
Snow Frostbite
Northern Spy
Prairie Spy
St. Edmunds
Russet
Wealthy
Wolf River
2011 UMD Dining Services Garden
Teaching & Student opportunities

• Courses in Anthropology, Geography, Cultural Studies, soil testing, ethnobotany, historical research, urban ecology, environmental studies
• Use the extensive archives on history of UMD farm and regional agriculture for student research projects
• Sustainable Development Research Opportunities Program (SDROP)
• Internships (paid and unpaid) at farm site
• Spurred creation of student group, SAGE (Sustainable Agriculture and Gardening Education)
Course Engagements: Anth Senior Seminar

- Structure of course = capstone, team-based applied research into a topic of significance for the community.
- Focus for past three years = regional food systems and sustainability.
Toward Sustainable Menus:  
A Chef’s Manual to Local Ingredients

Why Go Local?

Fresher Food
The average meal in the United States travels 1,500 miles before being consumed (CUESA). Local food is fresher because it does not need to be shipped as far.

Healthier Food
Local foods are healthier because they are fresher. Since the vitamins in almost any food are gradually lost from the time of harvest, foods transported globally are usually less nutritious than local foods because they may have been harvested days or even weeks before reaching the kitchen table (Gorelick et al., 2002, p. 51). Also, chemicals are often used to keep produce adequate for transport.

Keeps Money in the Local Economy
Buying local keeps money in the local economy and supports local jobs. Currently, nearly all of the $1.26 billion spent on food here leaves our region. The potential for job growth in the local food industry is substantial (Abaz, 2009).

It’s Easier and Less Expensive than You Think
Some locally produced foods are cheaper than commercially produced equivalents. When gas prices reached $4.00 in 2008, transporting food long distances became extremely expensive. As oil continues to grow scarce, gas prices are expected to rise dramatically in coming years. Since local foods are not shipped over long distances, the increasing gas prices will have much less impact on the price of locally produced foods.

More Variety
Local producers often have specialties and unique products that can add variety to your menu. Many local producers are willing to accommodate buyer specifications.

Better for the Environment
Reduced shipping distances of local foods help conserve finite resources and decrease CO₂ emissions and pollution.

Builds Community
Local food systems establish networks between producers and buyers that build community ties.

Food Security and Food Safety
Decentralizing the production and distribution of food reduces the chance of food poisoning and decreases reliance on unpredictable foreign markets.

This publication can be found online at www.localtransition.blogspot.com
2011 teams

- Crop Mob Crew
- Campus Gardens Gurus
- UMD Food System Folks
- Terroir Team
- Cider House Gang
Crop Mob Crew

- The intent of this project is for anthropology students to collaborate with community food producers to connect with volunteers who want to provide labor to assist in farming and other food production related activities.

- Anthropology students will research the concept of crop mobbing and other forms of volunteering labor for food production. They will also identify and collaborate with growers who could productively use volunteer effort to aid in the production of food in our region.
The intent of this project is for anthropology students to learn from and collaborate with Dining Services, Operations and facilities folks to create a clear map of the UMD food system in terms of system requirements, food sources, processing, consumption, etc.

Anthropology students will research the current food system, including what constraints the food services must operate under given regulatory and economic realities. Students will, as well, research examples of steps that other universities and colleges have been able to take towards the goal of relying on more local food growers for food consumption on campus.
Cider House Gang touring green building/home of community consultant Dave Stark, March 2011
Visioning the Future

- "Edible Forest" plantings
- Community Apple Orchard—intercropped plantings of plant "guilds"
- Permaculture Wetlands
- Ethnobotanical demonstration plantings
- "Western" Medicines
- Indigenous Medicines
- Dye plants
"The task of every generation is to shape tradition in ways that are important for solving the problems of today."

Walter Benjamin
(paraphrased from the German)