



## Welcome to the MSU Student Organic Farm!

*Our mission is to cultivate knowledge and human capacity in organic and sustainable agriculture for students, farmers and educators.*

### Four basic management principles:

#### **Organic: The Living Soil - One of our risk reduction strategies is to build soil organic matter.**

The SOF has been certified organic since 2004. What does “organic” mean to you? At the SOF it means much more than just not using synthetic chemicals or fertilizers to manage pests and fertility in our fields. To us, “organic” means that our focus is on the soil and building soil organic matter. Did you know that there are as many as seven billion organisms in a cup of healthy soil? We feed this living soil which in turn feeds the crops we grow. Healthy soil cultivates healthy plants. Healthy plants contribute to healthy animals and humans. To feed the soil we use a combination of crop rotation, cover cropping, and compost. We rotate our crops so we only grow the same crop in the same space once every seven years. Cover cropping is the practice of growing a crop not for food, but to incorporate plant matter back into the soil to provide crucial food for soil organisms and nutrients for plants. Compost is plant derived organic matter that has been stabilized to a humus-like product through the process of composting.

#### **Crop Diversity – A second risk reduction strategy is to maximize crop diversity.**

Here at the Student Organic Farm we grow over 70 different vegetable crops. We grow all the staples like tomatoes and potatoes, watermelons and beans, but also a lot of crops you may not have heard of before like celeriac, rutabaga and Jerusalem artichoke. Not only does this give us and our members all sorts of wonderful, delicious meals, but it also helps provide security for us as well. With a diversified group of crops, if one of our crops yields poorly because of bad weather or some other reason, the effect is not as troublesome, as we have many other crops to fill the gap. Our seven field rotation includes 1) early spring crops, 2) potato, 3) summer fruiting, 4) winter squash, 5) sweet corn and beans, 6) fall crops and 7) green manure. We also have a field for perennial berries, asparagus and rhubarb, a field for cut flowers, mobile laying hens for eggs, bees for honey and pigs for soil management and meat.

#### **Diverse and Direct Marketing – A variety of markets and partners keeps the SOF healthy.**

Most of the food grown here at the SOF is marketed to our CSA. CSA stands for **Community Supported Agriculture**, and it is a system whereby families or groups of friends invest in our farm up front and become members for a season. They receive a share of the crop every week, which is usually designed to feed a family of four hearty vegetable eaters. This system helps spread out the risk of farming, as members take some of this risk when they invest at the beginning of the season. SOF members pay \$500 three times per year and receive a share weekly for 16 weeks for a total of 48 weeks (70 shares). We also have a summer CSA (70 shares) and a campus farm stand from April through October. Not only does CSA provide good food at reasonable prices to members of the community, and help reduce a farmer’s risk, it also helps recreate **local food economies** and regional food systems. In a nation where the food on our plates travels an average of over 1,500 miles before it is eaten, there is a tremendous amount of energy used in the distribution and transport of food, and a fundamental disconnect between eaters and what they eat. In a local food system, people are given the chance to become acquainted with those who grow their food and how their food is grown. For the last few years we have also been working with the Office of Residential and Hospitality Services to provide vegetables for students on campus. RHS has organized and hosted the Hoophouse Gala on farm dinner that has raised over \$100,000 for a scholarship endowment to support the education of future organic farmers.

#### **Hoophouses and Cold Storage provide year-round produce and balanced income.**

One of the great things about the SOF is that we are able to grow year-round—even in the middle of the winter! We use hoophouses, which we call Passive Solar Greenhouses because they are heated only by the sun. They are constructed of steel hoops with a double layer of plastic overhead which acts much like a cloud, allowing heat from the sun to enter the house and trapping the warmth around the plants where we need it, sometimes bringing it up to 80 degrees or so on a sunny winter day, even when it's 0 degrees outside! Even with these layers of protection, though, we can't grow just anything. The cold and low-light conditions of the deep winter allow us to grow all sorts of greens like spinach, lettuce, Asian greens, chard, kale, radishes, beets, turnips and much more. In the winter we supplement this food with the storage crops we harvested in the fall, such as potatoes, squash, carrots, cabbage and onions. We look forward to building a root cellar to reduce our energy use for cooling.

## Some SOF Programs and Projects

**Organic Farming Training Program:** The SOF offers a nine-month long intensive training program in organic farming for 16 participants. The program consists of practical training and management of our 10 acre organic farm and year round crop production and marketing. The non-credit outreach program provides both hands-on learning opportunities at the MSU Student Organic Farm together with classroom learning to prepare participants for careers in organic farming, urban agriculture / community gardening, and other sustainable agriculture related careers. For more information and application materials visit our website ([www.msuorganicfarm.org](http://www.msuorganicfarm.org)).

**Hoophouse Outreach:** Year-round or four season farming with hoophouses has the potential to provide meaningful work and food that contributes to our health. A variety of funding sources have supported farmer training at the SOF at sites throughout Michigan including urban agriculture in Lansing, Flint and Detroit. The hoophouse is the goal and important topics like crop scheduling and planning, compost production and transplant growing are also covered. ([www.hoophouse.msu.edu](http://www.hoophouse.msu.edu))

**The Edible Forest Garden – Permaculture:** The EFG was initiated in 2006 as part of a graduate student project. There is a huge variety of food-producing plants here, each exploiting its own ecological niche. Fruit and nut trees take the canopy with berry and nut bushes beneath and perennial vegetables and herbs growing closer to ground. There are also dozens of different plants that either attract beneficial insects to the plot to compete with species that otherwise might be harmful, or provide crucial nutrients for their neighbors. Our EFG is still young, but just imagine what it will be like when the trees and bushes are mature. It is a great teaching tool for the future of ecological farming.

**Pastured Poultry for Eggs and Pastured Organic Pork:** Students at the farm value and have requested opportunities for alternative animal management such as free range chickens. Laurie Thorp has initiated several projects and developed partnerships with faculty in Animal Science. The projects are providing valuable learning opportunities about the benefits and challenges of animal agriculture for our community.

**Vermicomposting of Campus Food Residue:** In partnership with the Office of Campus Sustainability, Residential and Hospitality Services, and the Recycling Center, the SOF is bringing kitchen preparation residue from Yakeley Hall and the Brody Marketplace for vermicomposting in a passive solar greenhouse. The goal is to return nutrients to the farm and to demonstrate the importance of connecting the food community to the farm.

**Bailey GREENhouse and Urban Farm:** In July 2012 a passive solar greenhouse was built adjacent to the newly renovated Liberty Hyde Bailey Residence Hall, home of the RISE Program (<http://rise.natsci.msu.edu/>). Students grow culinary herbs and leafy greens for nearby Brody Square and the Kellogg Center State Room in a growing medium of compost made from campus food waste and farm materials.

**The People:** Farm Manager and OFTP Director: Jeremy Moghtader\*\*; Production Manager: Dan Fillius\*\*;  
RISE Director and Undergraduate Education Program Coordinator: Laurie Thorp\*\*; Hoophouse Outreach Coordinator: Adam Montri\*\*; Hoophouse Outreach Assistant: Laura Haselhuhn; Vermicomposting Research: Brooke Comer, PhD Candidate; Bailey GREENhouse: Charles Defever; OFTP Manager/ instructor: Katherine Kelley, OFTP Recruitment Coordinator: Denae Friedheim; Faculty Coordinator, Composting and Infrastructure: John Biernbaum\*\*; \*\* Designates SOF Steering Team Members

**The Place:** The SOF is a 15 acre block at the Horticulture Teaching and Research Center. The plot was used for fruit tree research from 1966 to 1996. As trees were pulled the plots were worked to improve the soil. The organic salad greens research started on one acre in 2001 and the SOF grew with 1.5 acre planted in 2003, followed by 2.5, 3.5 and 4 acres planted in following years. We continue to invest in the site and now have eight hoophouses totaling 0.5 acre under cover. Heated greenhouse space is also used for transplant production.

**Get Involved at the SOF!** If you're interested in becoming involved in what we do here at the SOF, we want you to come and work with us. We have a dedicated group of volunteers that work alongside our crew, and there is room for you! For more information, visit our website ([www.msuorganicfarm.org](http://www.msuorganicfarm.org)), or to schedule a time to volunteer, call the farm phone (517-230-7987) or send an email to [msufarm@msu.edu](mailto:msufarm@msu.edu). For more information see [www.hrt.msu.edu/john-biernbaum](http://www.hrt.msu.edu/john-biernbaum).

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