

# AMP Agroecosystems Management Program

## THE NEWS SHED

### THE OARDC MID-WEEK FARMERS MARKET FOR THE CAMPUS AND COMMUNITY

The OARDC campus is now home to a mid-week farmer's market held every Wednesday afternoon from 3 to 6pm throughout the summer growing season. Staff, faculty, students and especially members of the Wooster community can buy from a wide assortment of fresh and locally grown fruits and vegetables, specialty baked goods, vibrant bouquets of garden flowers and even find a local source for delicious farm fresh eggs and meats.

Each week, 12 vendors set up their tents and create beautiful displays for their products. As word is getting around, the market is growing with a customer count of over 300 for each of the last several weeks.

The Agroecosystem Management Program initiated the farmer's market project with several goals. The most obvious goal was to make the purchase of fresh fruits and vegetables very convenient for all of us on campus but we also wanted to establish a greater connection between the OARDC staff



and the Wooster community. To host the marketing of the produce in which the OARDC invests its research and time demonstrates the completion of the circle of the agricultural industry. Consumers are able to see the connection between the research the OARDC does and how it impacts what they buy. The setting also brings the OARDC affiliates in contact with community members and their needs and concerns.

The farmer's market provides an opportunity for the community to learn from the farmers about how and where their food

is grown. This will help enhance people's understanding of the agricultural industry and get people excited about supporting local farms and farmers.

The AMP summer interns are managing the market throughout the season and are collecting valuable data as part of research to better understand the farmer's market function and its role in the local food system.

The OARDC Mid-Week Farmers Market is located next to the Fisher Auditorium parking lot behind the Gourley Greenhouses off of Payne Drive.

SUMMER 2009  
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### REMEMBER

Mark your calendar for the  
**3rd Annual  
Stinner Summit  
October 16, 2009**

A full day of friendship, planning and collaborating in keeping with Ben Stinner's vision of Healthy Agroecosystems and Sustainable Communities. This year's event will be held in The Main Barn at Malabar Farm State Park in Lucas, Ohio.

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## KSU GRAD STUDENT TO STUDY WATER QUALITY AT MELLINGER FARM

Alyssa Baxter, an ecology graduate student at Kent State University will be sampling stream water at the Mellinger Farm this year as part of a larger study looking at patterns in biotic, chemical and physical variables to the denitrifying community in agricultural and forested streams in Indiana and Ohio.

Land use is a key factor determining conditions in streams. In particular, the effects of surrounding agriculture on streams include increased nutrient loads from fertilizer runoff that can lead to eu-

trophication as well as increased temperature, turbidity and algal growth. It is not well understood how agricultural runoff and subsequent eutrophication, coupled with changes in dissolved organic matter, affect the denitrifying community's abundance and diversity.

This study seeks to determine how total bacterial abundance, algal growth, denitrifier abundance and diversity and the community of benthic invertebrates varies longitudinally in agricultural and mixed-use streams. Sampling under base flow conditions will be done three

times throughout the year. Three streams from intensive agricultural areas and three streams with mixed land uses (forested, residential, low intensity agricultural) will be included in the study.

The results of this study will be of particular importance for determining how the application of nitrogen fertilizers affects stream communities. The study will also impact our understanding of how denitrification can affect nitrogen loading and downstream transport in the Mississippi River watershed.

## NEW PROJECT IN NE OHIO SUPPORTED BY THE FUND FOR OUR ECONOMIC FUTURE

Northeast Ohio has a significant opportunity to increase high-paying jobs, slow no-growth sprawl, bolster both rural and urban economies, and improve environmental stewardship by developing a new industry cluster based on agriculture, including food, energy and materials.

Currently, the region is home to a large and growing, but disparate, array of regional agricultural assets. Yet the region is in an ideal position to capitalize on recent trends in the production of specialty crops and bioproducts, application of social networking technology to economic development, and strong demand for locally sourced food.

The Agroecosystems Management Program, with significant leverage from an existing \$2.26 million grant from the USDA Specialty Crops Research Initiative (SCRI) to Casey Hoy and colleagues, has been awarded \$250,000 by the Fund for Our Economic Future to accelerate the development of this industry cluster by developing a comprehensive inventory of agricultural resources in the region, a portfolio of at least ten business projects that can serve as an example to others, an online infrastructure to enable networking across the region, a region-wide Leadership Council, and a plan to build the cluster in the coming years.

The project is the result of over a year of conversation between Fund staff, Fund members and partners committed to the Fund's Advance Northeast Ohio Plan to develop the project with AMP/OARDC and the

Wayne Economic Development Council.

AMP is currently networking with partners throughout the region as part of the USDA SCRI grant, through their social networking site [localfoodsystems.org](http://localfoodsystems.org). Opportunities through the project are to: 1) enhance the region's agricultural resources and production capabilities; 2) transform the cluster from lower-valued commodity production into higher value specialty crop and bioproducts; and 3) accelerate the local food system movement in the region.

Now a project like this may sound more like economic development than managing agroecosystems, but it is both. The project activities, both the social networking and the agricultural resource inventory research, are focused on empowering the abundant leadership in the region to build an economy based on local ownership and our natural and human resources, people and the land.

Agroecosystems include both people and the land, and managing agroecosystems means finding ways for the social, and economic, and agricultural/natural ecosystems to function in harmony. That harmony between the social, economic and environmental dimensions of agriculture is the basis for the project, for sustainability, and for agroecosystems management.

The overall approach has two phases. Phase I starts with engagement and assessment, the main foci of the current project.

## FAMILY FARM FIELD DAY

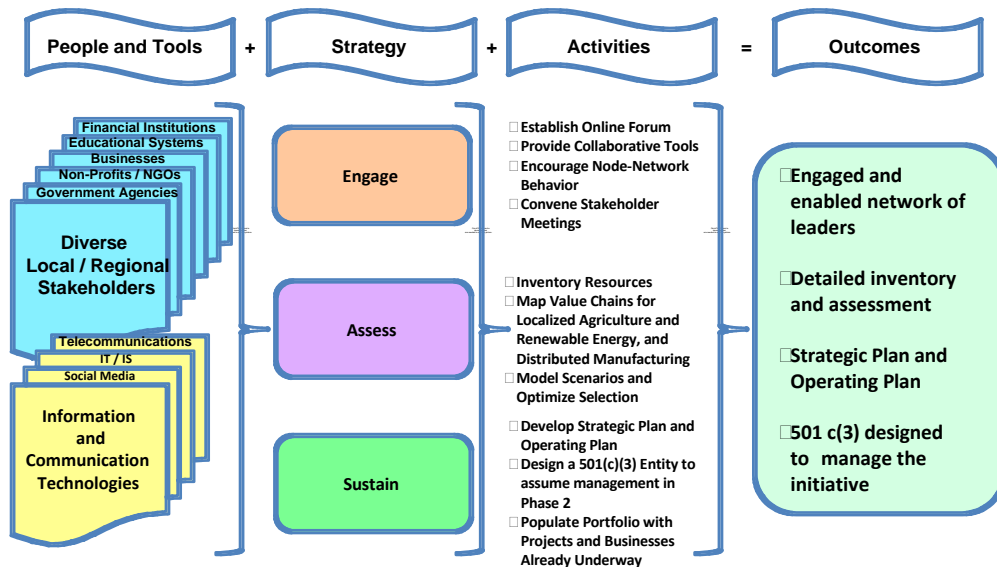
The Small Farm Institute will be hosting it's annual Family Farm Field Day, July 18, 2009 at the farm of David and Emily Hershberger 5119 TR 613 in Fredericksburg, Ohio.

The day long event features keynote speaker, Joel Salatin speaking on "The Positives of the Family Farm Among the Negatives in 2009". A variety of activity tracts enjoyable for the entire

family will continue throughout the day. The event opens at 8:30 and continues to 4pm. For more information, contact Leah Miller at the Small Farm Institute at 740-545-6349

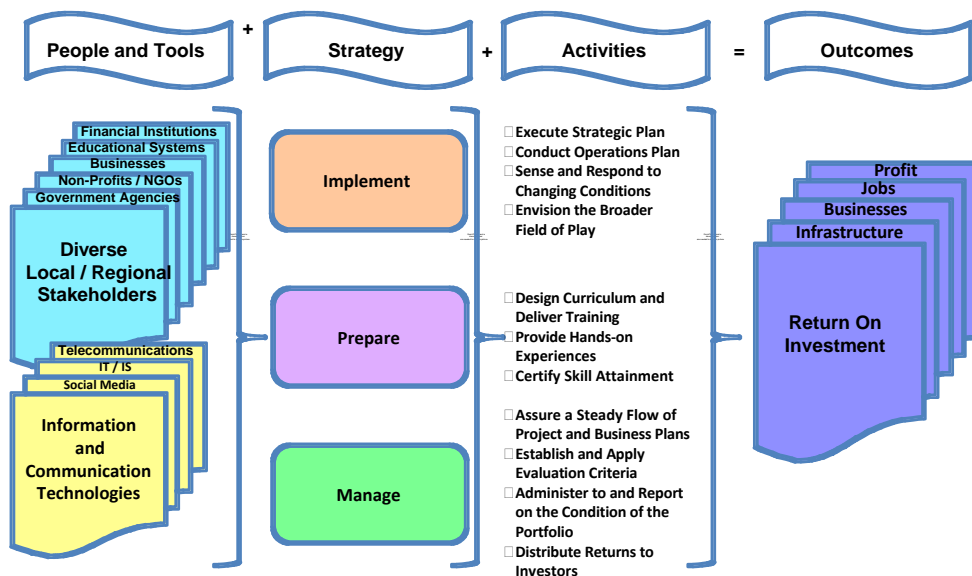
...to provide an educational format for grass-based agriculture that: supports low energy and a non-industrial way of farming; encourages family lifestyles that promote cohesive, economical and healthy rural living skills; and seeks to build morale and enthusiasm in the farming community

### Building Local and Regional Economies: Phase 1



Phase I will continue with sustaining the industry cluster towards Phase 2, in which the portfolio of businesses in the local economy is grown and managed

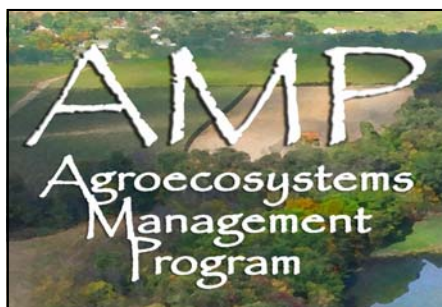
### Building Local and Regional Economies: Phase 2



### The Fund for Our Economic Future

Casey Hoy and colleagues, have been awarded \$250,000 by the Fund for Our Economic Future to accelerate the development of an industry cluster in Northeast Ohio based on agriculture, including food, energy and materials by developing:

- a comprehensive inventory of agricultural resources in the region,
- a portfolio of at least ten business projects that can serve as an example to others,
- an online infrastructure to enable networking across the region,
- a region-wide Leadership Council, and
- a plan to build the cluster in the coming years.



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## AMP—Discovering Balance on Ohio Farms

Agroecosystems management applies ecological principles to discover a balance between clean water and fertile soil, strong supportive communities and prosperous farms. We conduct research and develop solutions with this understanding in mind: that agriculture depends on many disciplines.

The Agroecosystems Management Program helps farmers and their communities find balance – balance marked by wise use of energy and resources and by profitable production

and marketing of wholesome food for all Ohioans.

This balance creates sustainable agriculture.

Based at the OARDC campus of The Ohio State University, AMP is a unique interdisciplinary program. Research is conducted and outreach and education programs are presented through a strong network of faculty, staff and stakeholders representing a wide range of scientific expertise, practical knowledge and experience.

## SUMMER INTERNS AT WORK WITH THE AGROECOSYSTEMS MANAGEMENT PROGRAM

AMP has some additional help this summer. The Ohio Research Internship Program, (ORIP), in its second year at OARDC, places student interns into many departments on campus. Matheus De Nardo, Callie Hopkins, William Cary, and Rachel Myers are working on four main AMP projects during the ten weeks of the summer program under the guidance of Casey Hoy.

De Nardo is managing the OARDC Mid-Week Farmer's Market project with the help of co-mentor and AMP Program Coordinator, Megan Shoenfelt. De Nardo's project involves assessing market participation and economic impact, and informing people about the importance of local food systems and the advantages of having locally based, self-reliant food economies in our state and community. Shoenfelt runs the market with the interns as they learn the ropes.

Cary's main project deals with ecosystem acoustics, using sound to assess the living world, by analyzing both anthropogenic and natural activity within an agroecosystem. In this project Cary will work with co-mentor and graduate student Claire Paisley-Jones to install ten automated microphone platforms to record the soundscape without the disruption of a human presence. The recorded soundscape will be used to assess biodiversity and ecosystem functions within various agroecosystems.

Myers research is focused on the use of Geographic Information Systems. The GIS software is a database that uses spatial referencing to integrate different kinds of data. Using the software, the interns work with co-mentor and Research Scientist, Krishna Vadrevu to create maps of local farms and farmer's markets to

analyze their environments and demographic surroundings.

Hopkins is heading a writing project where the interns travel to a variety of cities in the surrounding area to meet with people involved in urban agriculture and committed to strengthening local food systems. With help from co-mentor and Research Scientist, Ross MacDonald, these interviews will be used to generate stories that will be posted online at [localfoodsystems.org](http://localfoodsystems.org). The goal is to influence people's perceptions about agriculture as an effective use of vacant urban space and measure the impact of the stories on the social network.

Each intern will share one of the projects with an oral and written presentation at the end of the ten-week program. The internship program ends after the final presentation day on August 15.

The AMP Website is Loaded with Information! [www.oardc.osu.edu/amp](http://www.oardc.osu.edu/amp)