

THE OHIO STATE UNIVERSITY

## South Centers

Fall 2012

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The Ohio State University  
South Centers include:

- Piketon Research and Extension Center
- Endeavor Center for Business Incubation
- Enterprise Center
- OSU Learning Center South
- Small Business Development Center
- Manufacturing & Technology SBDC
- Ohio Cooperative Development Center
- Ohio Center for Aquaculture Research & Development

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# Connection

FARMS, FORESTS & STREAMS

## OSU Extension Celebrates Farm to School Month Momentum building for 2013

*By: Julie Fox, Julie Moose and Mary Griffith*

Ohio's school lunchrooms and classrooms provide a great opportunity for Ohio farmers and other food producers to connect local foods with local schools. There's plenty of momentum with the Farm to School program.

For example:

- Ohio Gov. John Kasich signed a Resolution declaring October Farm to School Month in Ohio, aligning with the national celebration.
- The Ohio Department of Education announced \$100,000 available in mini-grants to help schools implement Farm to School projects.
- The Ohio Department of Health is releasing a new Seed to Salad Tool Kit to expand the benefits of salad bars.
- The Ohio Farm to School team, led by OSU Extension will host a statewide Farm to School conference March 13, 2013.



The Ohio Farm to School program has a triple-positive bottom line.

- Young people access fresh local foods and learn more about food, nutrition, and agriculture.
- Farmers benefit from the program through access to a committed market with constant, steady demand, getting reliable prices for their products, increased community awareness and support.
- Communities benefit from circulating money and strengthening relationships throughout the community.

More information on the program can be found at <http://farmtoschool.osu.edu>.

**FARMS, FORESTS & STREAMS****Locally Grown Hops a Possibility for Ohio's Booming Microbreweries**

*By: Brad Bergefurd*

Ohio beer manufacturers send an estimated \$4 million out of Ohio annually by purchasing the flowers of the hop plant, called hop cones, or "hops," from growers outside the state.

To help keep some of that economic activity within the state, thanks to a recently awarded USDA/ODA Specialty Crop Block Grant, Ohio State University is developing a hop research program focused on production and marketing, said Brad Bergefurd, OSU Extension agriculture educator at the OSU South Centers in Piketon and at the Scioto County office of OSU Extension.

"This project allows us to develop sustainable production practices directly related to Ohio growing conditions," he said. "Data collected from these applied research trials will allow us to educate growers about production, pest management practices, and phenology data."

From preliminary research, Bergefurd said hops can be grown on the sandy soils of the Lake Erie shore to the heavy clay soils of southern Ohio, so they should be adaptable to most Ohio soil types. Research plantings will be seeded at the Ohio Agricultural Research and Development Center in Wooster and at the OSU South Centers at Piketon on two different soil types. The first-of-its-kind hop production research project will begin in fall 2013, Bergefurd said.

Bergefurd and Mary Gardiner, OARDC assistant professor in the Department of Entomology, The OSU South Centers and Ohio State's Department of Entomology will conduct applied field research and a marketing survey to determine the dollars and jobs that are currently being sent out of Ohio by Ohio's expanding brewing industry. The research will evaluate new hop cultivars, innovative hop production techniques, insect and disease control methods, harvesting, processing, and marketing techniques that can be adopted by Ohio farmers, he said.

"This will allow Ohio's beer manufacturers to spend their money in Ohio by purchasing Ohio-grown hops and ultimately help create Ohio jobs," Bergefurd said. "This crop may allow Ohio growers to diversify into a high-value specialty crop."

Ohio State researchers estimate that within the first year growers can expect a hops yield of 200 to 1,800 pounds per acre, depending on the cultivar, with an estimated value of \$2,000 to \$25,200. In the second and subsequent production years, yield increases to 500 to 2,200 pounds per acre valued at \$7,000 to \$30,800.

There is an ever-increasing Ohio market for hops with the expanding brewing industry. The Ohio Department of Liquor Control handed out more alcohol-manufacturing permits in the first six months of 2011 than it did in all of 2010, a trend continuing in 2012.

"Hops are a main ingredient in beer manufacturing, providing a bitterness that balances the sweetness of the malt sugars, and a refreshing finish," Bergefurd said.

Hops are sold on the open market, with the northwest United States supplying the majority of U.S. hops. Currently in Ohio, hops are grown in gardens and by homeowners on a small scale, and there are some growers already trying to grow them on their farms, he said.

"The reason hops production moved to the western United States about 100 years ago was because of disease and insect pests that reduced production in Ohio," Bergefurd said. "We believe we have advanced in our production technology so that we now can profitably grow hops in Ohio commercially."

"From our discussions with Ohio's microbrewing industry, which is partnering with us on this project, brewers have shown interest in directly purchasing Ohio-grown hops and may be willing to pay a premium."



One of our growers hops planting in the Marysville area. Photo courtesy of Brett Tossey



**FARMS, FORESTS & STREAMS****Blackberry Studies at OSU South Centers***By: Dr. Gary Gao*

Cold injuries are one of the main limiting factors in Ohio blackberry production. We have initiated several trials at OSU South Centers to help Ohio blackberry growers. One study is a comparison of three common production systems — high tunnel, open field (conventional), and rotatable cross-arm trellis. High tunnels can protect blackberry plants from cold injuries. However, some blackberry plants might grow too fast in high tunnels. Rotatable cross-arm trellis is a new production system that has been developed by a USDA scientist to grow blackberries in colder climates. There are pros and cons with each system. We will evaluate these systems side by side and show growers which one is suitable for them and how to manage each system.



A blackberry production systems study at OSU South Centers.



A Polish blackberry release #97521, an unnamed variety, is among four Polish blackberry varieties being tested at OSU South Centers. Photos by Gary Gao.

Four Polish blackberry varieties known for their cold hardiness are being tested against standard American varieties at the OSU South Centers. If these Polish blackberry varieties can produce high quality fruits at comparable yields as the leading American ones, we may have something going. The Polish blackberry variety trial was established this year, and plants have grown well so far. The first fruit harvest will be in 2013. At that time, we will share results of the varietal trials. We would like to thank the Ohio Vegetable and Small Fruit Research and Development Program for supporting this project.

## **Girl Scout Troop 2848 gives back... Buckeyes Boots for Kids**

*By: Charissa McGlothlin*

On November 28th, the girls of Troop 2848 each donated boots to the Buckeyes Boots for Kids. Buckeyes Boots for Kids is a Christmas charity project conducted by the staff at Ohio State University South Centers.

The donated boots go to families from the local area who are in need during the holiday season. The troop donated nine pairs of various sized boots.



Pictured: Back Row-Denelle Purdin(Assist Leader), Shelby Reynolds, Kylie Long, Carrington McGlothlin, Brilee Brown, & Charissa McGlothlin(Leader). Front Row-Tara Tolle, Annymae Cluxton, Tori Cheatham, & Autum Blair. Not pictured: Lacey Camp



**FARMS, FORESTS & STREAMS****Enhancing Sustainability of Freshwater Prawn Production in Ohio**

By: *Laura G. Tiu*

Freshwater prawn culture is becoming increasingly popular in many temperate regions in the United States. Freshwater prawn have great potential for the diversification of Ohio farms. Over the past ten years, interest in production of this product has increased due to rising demand for locally-raised products and the growing trend among consumers wanting to know where and how their food is produced, the uniqueness of the product, and increases in production rates for prawns based on new management and production practices.

Feed is the second highest contributor to variable production costs behind larval prawn procurement. Traditionally most prawn farmers feed a sinking catfish feed. With costs of these fishmeal-based diets continuing to rise, many animal nutritionists are looking for alternative protein sources to use in aquaculture feeds. One such alternative protein source is the black soldier fly larvae (BSF) and its frass, or castings. For the first time in the United States, BSF are being cultured on a commercial scale in Yellow Springs, Ohio by a company called EnviroFlight, where the first prawn diets using BSF frass and wheat middlings as ingredients were produced. Dr. Laura Tiu and the collaborating farmer were awarded a small grant from the Paul C. and Edna H. Warner Endowment Fund for Sustainable Agriculture to compare growth, production, and sales of freshwater prawn fed a traditional sinking catfish pellet with prawn fed the newly developed EnviroFlight shrimp feed.

Two half-acre ponds were stocked with freshwater prawn juveniles in early June, 2012. One pond was fed a traditional sinking catfish pellet (\$0.36/lb) and the other the Enviroflight diet (\$0.30/lb). Both ponds were harvested in September 2012. Nearly identical total pounds of prawn and individual prawn weights were produced in each pond. All shrimp sold for \$12.00 per pound. The only notable difference was that the prawn fed the Enviroflight diet were slightly more pale in appearance than those fed the traditional diet. One customer commented that he preferred the paler appearance; it reminded him of marine shrimp. Experienced prawn taste testers detected no flavor difference between the two products.

Using a locally-produced aquaculture feed has many benefits for Ohio freshwater prawn producers, as well as potential benefits for aquaculture producers growing other fish species. First, the cost of the feed is cheaper than what is currently commercially available. This will contribute to the economic efficiency of the operations, especially considering that the cost of fish meal is predicted to continue to rise exponentially. Given that the feed is produced in Ohio, fewer “food transportation miles” can be attributed to its production and distribution. Additionally, feeding prawn a diet devoid of fishmeal may open additional marketing opportunities for farmers as some customers are opposed to the use of fishmeal in aquaculture feeds. Finally, given that the BSF larvae eat dried distiller’s grains, the production of this product actually serves to aid in the efficient re-use of waste/co-products derived from another Ohio industry. This recycling of nutrients adds to the overall sustainability of this project.



Prawn juveniles arrive for stocking in June, 2012



Beautiful freshwater prawn sold directly to customers.



Customers line up to purchase locally raised freshwater prawn.



## FARMS, FORESTS & STREAMS

### 2012 Soy-Aqua Fish Farm Tour

By: Julie Moose



Doug Blackburn of Rain Fresh Harvest explains his planting techniques for this aquaponics facility.

The Ohio State University South Center's Aquaculture Program and the Ohio Soybean Council partnered to host the 2012 Soy-Aqua Fish Farm Tour on Saturday, October 20, 2012. Thirty people interested in aquaculture and aquaponics boarded the tour bus in Marysville, Ohio.

The first stop was Millcreek Perch Farm just outside of Marysville. This farm is a cooperator with two area fish farms. Owner/operator Bill Lynch discussed how this arrangement works to reduce costs and manage labor. The group learned about the construction of his five one-acre ponds, the business side of running an aquaculture cooperative, as well as valuable tips and techniques for farming perch.

Stop number two was RainFresh Harvests in Plain City, an aquaponics and greenhouse facility operating on alternative and sustainable energy. Owner Barry Adler demonstrated the solar and wind energy system that allows him to operate his greenhouse off the grid. He grows high-value specialty crops and sells wholesale to restaurants.

Then it was on to Fresh Harvest Farm, a new aquaponics facility near Richwood that is growing perch and specialty vegetables. Following lunch and a long bus drive, the tour stopped at Fredericktown Fish Farm, a large commercial trout operation.



Operating off the grid, Rain Fresh Harvest grows specialty crops in an aquaponics facility through solar and wind energy.

The final stop before returning to Marysville was Catch of the Day fish farm outside of Galena. This farm has over 100 ponds of all sizes stocked with a variety of fish for pond stocking.

All of the participants responding to the follow-up survey agreed or strongly agreed that the bus tour helped them gain knowledge that will help them start or manage their aquaculture operation more effectively, gained ideas about new or different production methods, systems, and species that they should consider for their operation and found the Soy-Aqua bus tour of farms worth their investment of finances and time.



2012 Soy-Aqua Fish Farm Tour Participants



Tour participants were given a seining demonstration by Bob Grimm during their stop at Catch of the Day Fish Farm near Galena

## BUSINESS & ECONOMIC DEVELOPMENT NETWORK

### Local Food Businesses Connecting on Ohio MarketMaker

By: Julie Fox

The Ohio MarketMaker program is empowering local food producers, food buyers and other industry professionals to grow Ohio's local food system, facilitating positive economic and community impacts. Upon registering their business on the website, the user is prompted to create a profile which includes an overview of the business, their customer base, what they sell and where they sell it, and/or what they seek to purchase. Their profile also displays their industry affiliations with state partners such as Ohio Proud, links to their social networks like Facebook and Twitter, and any posts they have made on the Marketplace Buy/Sell Forum. An exciting new feature this year encourages profile makers to list their connections to other local businesses on MarketMaker.

#### Why:

This is a great tool for farmers' markets, institutions and restaurants wanting to highlight their relationships with local food producers. For instance, anyone viewing a MarketMaker profile for a farmers' market can see a list of all the vendors to be found at that market and can easily follow the links to those vendor profiles for more information. Restaurants sourcing locally can now showcase the relationships they've built with Ohio producers. Ohio farmers can highlight their connections to local groceries, restaurants, schools, and more.

#### How:

Food businesses are able to showcase their MarketMaker business-to-business connections by registering or logging into their MarketMaker site and clicking on "My Connections" from the Members' Area. The easy-to-use search feature allows the user to enter the name of a business they want to link up with and connect their profiles. Any food business can register to request a free business profile.

**OHIO MARKETMAKER™**

From Business Directory  
**Paige's Produce**  
10130 Winchester Southern Rd.  
Stouffville, Ohio 43154

Email: [Contact Us](#)  
Website: [www.paigeproduce.com](#)  
Phone: (740) 477-7291  
Contact: [Brian Holmes](#)  
Last Updated: Nov 1, 2012

**Farmer/Rancher**

**Fruits & Nuts**  
Fruit Product Type: Apples, Blackberries, Cantaloupe, Cherries (Sweet), Grapes (Table, Wine), Melons, Muskmelon, Peaches, Pears, Strawberries, Watermelon  
Product Attributes - Product Verified: No Preservatives, Sustainable Practices  
Product Forms: Fresh, Wine  
Methods of Sale: Community Supported Agriculture (CSA), Debt/Credit Card, Delivery, EBT/SNAP, Farmers Market, On Farm Sales, Roadside Stand, Wholesale

**Vegetables**  
Vegetable Product Type: Beans (Snap, Wax, Yellow), Beets, Bok Choy, Cabbage, Carrots, Corn (Sweet), Cucumbers (Pickle, Slicing), Eggplant, Gourds, Greens (Turnip), Kale, Kohlrabi, Okra, Onions (Green, Sweet), Peas (English), Peppers (Bell, Hot), Pumpkins, Radishes, Squash (Summer, Winter), Tomatoes, Turnips, Zucchini  
Product Attributes - Product Verified: Greenhouse, Hoop House/High Tunnel, No Preservatives, Sustainable Practices  
Methods of Sale: Community Supported Agriculture (CSA), Debt/Credit Card, Delivery, EBT/SNAP, Farmers Market, On Farm Sales, Roadside Stand, Wholesale

**Business Details**  
Markets Served: Local  
Business Details: Days/Hours of Operation: May-October Mon-Sat, 10-6

**Map** | **Satellite**

Stouffville

Google Maps Data - Terms of Use Report a map error

Enter your address or directions:

**About Us**  
In season wholesale green beans, sweet corn, apples, call for availability

**Business Connections**  
Connect with other businesses on MarketMaker

**Industry Affiliations**  
Ohio Proud, Ohio Farm Bureau, Ohio Farm-to-Fork Council, Ohio Proud, Ohio Farm-to-Fork Council

**On the Web**  
Find us on Facebook

**Buy & Sell Forum Listings**  
Listing Title: 2012 CSA shares available  
Start Date: Oct 28, 2012

**OHIO MARKETMAKER™**

My Home | My Business | My Buy & Sell Ads | **My Connections** | My Alerts | My Account | Logout

HOME | GETTING STARTED | SEARCH | RESOURCES | CONTACT US | LOG IN

### My Connections

Businesses that you connect with on MarketMaker appear on your business's detail page to let users know more about your operation. You may want to connect with a variety of businesses, including:

- Retailers or farmers' markets that carry your product
- Businesses where you source product
- Other local food businesses

**Add New Connection**

- Type the name of a MarketMaker business into the search box and click Submit.
- Review the business results and click Connect.

Name	Type	Date Connected	Remove
<a href="#">My Sample Winery</a>	Mine	2012-10-29 12:29:08.513	<a href="#">X</a>
<a href="#">My Sample Farmers' Market</a>	Mine	2011-02-28 13:04:12.743	<a href="#">X</a>
<a href="#">My Sample Grocery Store</a>	Mine	2012-10-29 12:25:41.990	<a href="#">X</a>
<a href="#">My Sample Restaurant</a>	Mine	2012-10-29 12:26:15.470	<a href="#">X</a>

With increased emphasis on making connections in all aspects of the food system, MarketMaker is positioned to help meet the challenge. Julie Fox and the Ohio Direct Marketing Team coordinate the efforts of the Ohio MarketMaker program. State partners providing resources and guidance for the program include the Ohio Department of Agriculture/Ohio Proud, Ohio Farm Bureau/Our Ohio, Ohio Grape Industries Committee, the Center for Innovative Food Technology, Ohio Farmers Markets, the OSU Center for Farmland Policy Innovation, and a growing list of additional industry organizations.

See who's connecting on our Ohio MarketMaker website at <http://www.ohiomarketmaker.com>.

For additional information, please contact Stacy Haight, [haught.20@osu.edu](mailto:haught.20@osu.edu).





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**BUSINESS & ECONOMIC DEVELOPMENT NETWORK****Marketing Webinars = Convenient Affordable Learning**

*By: Julie Fox, Julie Moose and Stacy Haught*

Thanks to collaborative partnerships and the OSU College of Food, Agricultural, and Environmental Sciences' addition of Adobe Connect, the Ohio Direct Marketing team began presenting webinars to hundreds of participants throughout the state in 2012, making learning convenient and affordable.

The term webinar is short for Web-based Seminar. This technology allows us to bring in subject matter experts from all over the country to help producers gain new knowledge and skills. Participants can take part in the webinar from the convenience of their home or business, without travelling to a central location.

In 2013, producers can benefit from webinars on various topics, including a social media marketing series, delivered in collaboration with Penn State, eXtension and our state partners, <http://agsci.psu.edu/social-media-mobile-tech>

Webinars can be viewed live, allowing participants the opportunity to interact and engage in questions and answers with the presenters. The presentations are also recorded and made available on the Ohio Direct Marketing Website, so that people can view them at a more convenient time and place.

Visit the Direct Marketing website for a complete schedule of marketing webinars, conference presentations, and workshops, <http://directmarketing.osu.edu>.

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**Mike Rowe Selected for OSU South Centers Manufacturing Extension Partnership Position**

*By: Joy Bauman*

The Ohio State University South Centers Business Development Network is pleased to announce a new Manufacturing Extension Partnership (MEP) Program. The MEP program provides manufacturers access to education, applied research and technical assistance to enhance growth, improve productivity, and expand capacity. Mike Rowe of Beaver has been hired for the position of Manufacturing Field Engineer for the MEP program. Rowe will work primarily with manufacturers in Adams, Brown, Clermont, Gallia, Highland, Jackson, Lawrence, Pike, Ross, Scioto, and Vinton counties, with occasional duties across the rest of the twenty-five counties in the Appalachian Ohio region.

The Field Engineer will work in close collaboration with the MEP Incubator partners, MEP Field Engineers in other parts of Appalachian Ohio, and Project Managers from the Appalachian Partnership for Economic Growth (APEG). Rowe will work to develop business relationships with decision makers to gain an understanding of issues facing the manufacturer, and then identify creative strategies to help transform the company to higher growth and performance. As opportunities for growth become apparent through interactions with manufacturers, the Field Engineer will connect companies with APEG Project Managers who link companies with financial capital and other resources and programs to help implement the growth opportunities.


Rowe brings many years of plant management and supervising experience, having worked five years as production supervisor and twelve years as the plant manager of Masco Retail Cabinet Group (Mill's Pride) in Waverly, OH. Other experience includes work as production supervisor at M&J Welding and Machine in Lucasville, OH, and supervisor at Beaver Valley Eggs, Inc., (Jackson). Rowe brings experience and training in Lean Manufacturing, Kaizen/5S, ISO 9001, ISO 14001, Six Sigma, OSHA, and Situational Leadership. Rowe resides in Pike County, near Beaver, with his wife Susan, and their daughters Courtney and Cassidy.



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The Ohio Agricultural Research Development Center (OARDC) and Ohio State University Extension embraces human diversity and are committed to ensuring that all research and related educational programs are available to clientele on a nondiscriminatory basis without regard to race, color, religion, sex, age, national origin, sexual orientation, gender identity or expression, disability, or veteran status. This statement is in accordance with United States Civil Rights Laws and the USDA.

*Keith L. Smith, Ph.D., Associate Vice President for Agricultural Administration and Director, Ohio State University Extension; Steve Slack, Ph.D., Associate Vice President for Agricultural Administration and Director, OARDC*

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