It sure is good to be back.

After more than a year of holding all events virtually, The Ohio State University South Centers returned to hosting in-person programming in May 2021 with the High Tunnel Soilless Strawberry Field Night.

More recently, visitors returned to Piketon August 5 for a field night focused on hydroponics and aquaponics, and for a hops field night on August 17.

“We are transitioning back toward those close working relationships that we enjoyed with our colleagues prior to the pandemic, which is a very valued aspect of being a part of the South Centers team,” said South Centers Director Dr. Tom Worley.
“Our intention is to gradually transition back to holding more scheduled trainings, field nights, and more opportunities for in-person interaction with clientele.”

In tandem with the Department of Horticulture, South Centers hosted its first in-person event since February 2020 in the form of a high tunnel strawberry field night and tour on May 5. The event was limited to just over 20 attendees due to more restrictions still being in place. This program provided attendees with a chance to see firsthand the latest strawberry growing technology utilizing a soilless method in a high tunnel environment.

Since that time, as restrictions have eased, two more in-person events were held in August, including Hydroponics/Aquaponics: Impacts and Opportunities.

This was a special field night that looked at the benefits and sustainability of aquaponics and hydroponics systems, all while conserving resources. This free event was made possible by a USDA capacity-building grant between The Ohio State University and Central State University.

The featured speaker was Jeni Blackburn, co-owner of the family-owned Fresh Harvest Farm in Richwood, Ohio, where they utilize Yellow Perch to grow produce through aquaponics. Ohio State University and Central State researchers and Extension specialists also spoke. Attendees had the opportunity to tour the Ohio State University South Centers aquaponics research system.

Topics covered were ones beneficial to both beginners and experienced aquaponics farmers, and included system selection and maintenance, plant and fish production, water quality, social media and marketing, business success/finances.

Recordings of both the soilless strawberry and hydroponics/aquaponics field nights are available for on-demand viewing by visiting go.osu.edu/soilless and go.osu.edu/aquaimpacts, respectively.

More in-person events are planned for the Fall, including a special celebration of the 30-year anniversary of the opening of South Centers. You can stay up to date with all upcoming events at South Centers by visiting southcenters.osu.edu.
Cover Story: Welcome Back

After more than a year of conducting events virtually, The Ohio State University South Centers is again holding in-person events in Piketon. Our cover story recaps two events held thus far, and looks ahead to the future.

Bradford Sherman
CFAES/South Centers

The Ohio State University South Centers in Piketon will be celebrating the 30th anniversary of its opening on Wednesday, September 29, 2021 beginning at 9:30 a.m.

South Centers will use this occasion to market its four main program areas (aquaculture; business development; soil, water, and bioenergy resources; specialty crops) to community stakeholders, other educational institutions, legislative officials, and internally within the College of Food, Agricultural, and Environmental Sciences (CFAES) and to OSU administration.

Among the honored guests scheduled to be in attendance is CFAES Dean Dr. Cathann Kress, as we celebrate three decades of enhancing southern Ohio by assisting people with informed decision-making through responsive research, education, entrepreneurial application and collaborative partnerships.

Registration to join us for the event is now open at go.osu.edu/sc30.
Subscriber numbers and video view counts continue to rise on The Ohio State University South Centers YouTube channel, which recently passed the 1,000-subscriber mark.

The multimedia team of Patrick Dengel, Duane Rigsby, and Sarah Swanson produces educational videos geared toward the clients of the OSU South Centers, as well as individuals in the state of Ohio, tri-state area, United States, and globally. Videos are publicly accessible at go.osu.edu/osusc.

The educational videos can take the form of one of three distinct formats: 28-minute telecasts shown on public educational access television stations; 5-15-minute formalized training videos; and 1-5-minute spotlights on our social media platforms highlighting specific programs, educational overviews, and informative content.

The studio began as an educational arm of the OSU South Centers in 2016 in conjunction with the RIO TV studio - a collaboration with OSU South Centers and University of Rio Grande in 2012. Although the collaboration with the University of Rio Grande ended in 2019, The OSU South Centers’ studio continues and has produced over 1,000 educational videos in the areas of business, manufacturing, community, education, agriculture, and economy.

All videos are uploaded to the OSU South Centers’ YouTube channel, which as of August 2021 has 1.01k subscribers with over 152,000 views.
Past statistics demonstrate that 30 to 36 new subscriptions occur each month. It should also be noted that at least 30 different countries have viewed these YouTube telecasts with the majority coming from the United States, India and Canada.

Educational access TV re-air many of the shows in the Youngstown, Cincinnati, Dayton, and Southern Ohio areas.

The studio produces a variety of monthly 28-minute telecasts on different topics with a variety of hosts from the Ohio State University South Centers, as well as OSU Extension, businesses, and organizations. Production of telecasts range from 12 to 16 each month.

Listed below are current monthly telecasts (Telecasts not current are not listed).

### Major Telecasts
- Manufacturing Enterprises .......................................................... Dawn Coleman (MEP)
- Earth is our Home ................................................................. Thomas Blaine - OSU Extension
- Consumer Protection and You ............................................ Ryan Lippe – State of Ohio Attorney General
- Forage Focus ........................................................................ Christine Gelley – OSU Extension
- Marketing Matters .................................................................. Christie Welch / Anna Adams – OSU Direct Marketing
- Healthy Aging Network ......................................................... Kathy Tutt – OSU Extension
- Culture Cast ............................................................................ Dustin Homan - University of Purdue Extension 4H
- South Centers Chat ................................................................. Thomas Worley – OSU South Centers
- Food Nutrition and Wellness ................................................ Dan Remley – OSU Family Consumer Sciences
- Healthy Living Resources ....................................................... Amy Meehan – OSU Family Consumer Sciences
- Southern Ohio Matters .......................................................... Gina Collinsworth – Ohio Valley Regional Develop
- Happening Now .......................................................................... Jennifer Dunn / Bradford Sherman – OSU South Centers

### Short Telecasts  Time ranges between 2 – 15-minutes
- Business Spotlight ............................................................... Patrick Dengel
- Success Stories ........................................................................ Patrick Dengel
- Portsmouth Chat ................................................................... Lisa Carver / Kim Bauer – Portsmouth COC
- Sustainability .......................................................................... Dan Remley / OSU Extension Staff
- Tree – ID ................................................................................ Dave Apsley – OSU Agriculture and Natural Resource
- Fruit Production ....................................................................... Gary Gao – OARDC Research
- Pike County Extension News Update ................................. Tammy Jones / Will Hamman - Pike County Extension

300-plus 2-6 minute short videos
2-minute South Centers’ Clips promos

Some of the equipment at the South Centers video production studio.
OCARD WINS NATIONAL COMPETITION FOR AQUACULTURE GRANT

Dr. Hanping Wang
Aquaculture Program Leader

The Ohio Center for Aquaculture Research and Development (OCARD) at The Ohio State University South Centers has won a national competition for aquaculture research grant dollars from the USDA.

USDA funds only four aquaculture projects each year in the areas of genetics, nutrition, disease, and aquaculture system. OCARD won the award of $300,000 in the genetics category for this year. This grant will be used for refining the technology for production of commercial-scale, fast-growing monosex yellow perch, and demonstration of their growth and production vs. mixed sex populations for the aquaculture industry.

“All-female monosex populations will significantly benefit the aquaculture industry,” said Dr. Hanping Wang, who leads OCARD at OSU South Centers.

Yellow perch females grow significantly faster and larger than males. In the past few years, OCARD has created a large number of neomale broodstock of yellow perch with a female genotype. The South Centers-based program will be using the large numbers of superior neomale broodstock to produce commercial-scale, all-female monosex yellow perch and transferring them to the aquaculture industry through demonstration. A few aquaculture farms have been identified for these demonstrations.

Growing Ohio’s Hop Industry Through IPM Education

Brad Bergefurd, Thom Harker, and Anna Adams
Department of Extension

Market demand for Ohio-grown hops continues to exceed supply and brewers in the Buckeye State want more Ohio supply and continued high quality hops. Growers are learning pest management techniques through hop integrated pest management (IPM) education that can increase their hop crop yields and quality. In-person field days and winter conferences have been held previously to teach hop IPM techniques and to make farmers aware of new and emerging diseases and insect pests that can impact hop profitability.

In 2020 and early 2021, in-person education was replaced with online virtual field days and conferences. What traditionally was a three-day, in-person conference became a six-month virtual webinar conference, which highlighted different hop IPM and production topics each month with invited IPM specialists and farmers to share their hop IPM knowledge and experiences.

Overall, growers reported the new online training format allowed for more participation from hop farmers, and with the sessions being recorded, added the flexibility to view the seminars at a later date or revisit a specific IPM session later in the growing season. Hop harvest is scheduled to begin in August of 2021 and initial yield and quality ratings indicate this could be one of the best-quality and highest yielding Ohio hop crops since the crop was reestablished in Ohio in 2012. In-person hop IPM field days and tours have resumed in 2021. Ten in-person hop farm tours and field days throughout Ohio were held on July 24 with more than 200 experienced, new, or beginning hop farmers participating. At these field days, growers shared their IPM techniques and participants were able to view first-hand symptoms of pest and disease issues that impact Ohio hops. Harvest field days are scheduled for the second and third weeks of August at Bowling Green and Piketon, Ohio, where participants will learn IPM techniques from hop specialists and will have an opportunity to view pest and disease pressures in Ohio State University hop research yards.

See HOPS Page 7
Ohio IPM Coordinator Jim Jasinski was one of the instructors invited to share IPM knowledge and experiences during one of the hop webinars held in 2000 and early 2001.

It can be exciting or depressing when we watch local and national news. The exciting side is that many of us are vaccinated, and things are finally getting back to normal. The depressing side is that the Delta variant is still going strong in many areas of the country.

We are not out of woods yet. I remember that someone said that “There is light at the end of tunnel, but someone just turned it off.” I certainly hope things are not that bad. Like every else, we have been learning new ways to do things and are more committed than ever to helping fruit growers and gardeners in the great State of Ohio!

Our fruit Extension and research team has gotten very good at delivering educational programs online through Zoom. We have purchased distance-learning equipment with the funds we received from Ohio Grape Industries Committee (Program) and the Ohio Department of Agriculture’s Specialty Crop Block Grant program.

“Without the hop IPM educational programming support of the OSU Extension IPM program, many more farmers would not have remained in the hop business the past 10 years, nor would they be increasing yields, acreage, and quality like they are today,” said Dave Volkman, Chair of the Ohio Hop Growers Guild and owner of Ohio Valley Hops near Cincinnati, Ohio.
Our team members, Ryan Slaughter, Bradford Sherman, Duane Rigsby, Sarah Swanson, and I have gotten very proficient in developing and delivering educational programs via Zoom, a wonderful online platform secured and paid for by The Ohio State University. We are so happy for the excellent turnout of our Fruit Production Series.

**Fruit Production Series (March-April, 2021)**

Our first-ever online Fruit Production Series, featuring two-hour-long individual sessions on blueberries, blackberries, and raspberries over the course of three weeks, was a rousing success with a total of 181 individuals registering to either watch the events live or on-demand later.

These events were held entirely online via Zoom, in keeping with the university’s policies and procedures during the COVID-19 pandemic. All registrations were collected online via Qualtrics.

The blueberry session held March 23 was the most popular event in terms of live viewership, but all three events averaged around 40-50 viewers for the live event. All the events also did a nice job of retaining viewers throughout the two-hour duration. For example, blueberries peaked at 50 viewers at one time and still had 43 people watching by the time the stream closed. Blackberries had a high of 40 viewers at one time, of which 21 remained at the end. Raspberries had peak live viewership also in the mid-40’s and retained that number throughout.

In order to keep viewer retention high, we used a combination of PowerPoint slides, live Q&A, poll questions, and periodic prize drawings. Feedback for the series has been very positive.

**A New Ohio Specialty Crop Block Grant for Raspberry Production**

Ryan Slaughter (Research Assistant) and I are very happy to tell everyone that we have received a new Ohio Specialty Crop Block Grant to work on a project titled “Long Cane Raspberry Production System for Acreage Expansion, Farm Diversification, Risk Mitigation and Season Extension” from late 2021 to 2023. As you might imagine, we are very excited to hear the news and look forward to conducting research projects and delivering Extension programs to help boost raspberry production through this innovative method.

Long cane raspberry production is a relatively new production in the United States. In Ohio, we have not been able to adopt this system since the long cane raspberry plants are not available through commercial nurseries, until now. Nourse Farms (Whately, MA) has invested a lot of money into growing long cane raspberry plants and will have plants for sale in the no-so-distant future. Currently, all the plants are purchased by a single grower. We will purchase some plants from Nourse for our research and demonstration project in Ohio. Hopefully, Nourse Farms will greatly expand their production capacity so that more growers can adopt this production method. I am also hoping that one or more nursery growers can also produce long cane raspberry plants for sale.

Raspberry production in Ohio has been severely limited by soil conditions and fluctuating spring temperatures, labor shortage, and pest problems. Long cane raspberry production method has the potential to greatly expand raspberry production capacity since the plants will be grown in containers and all of the flower buds are always on the plants when you get them.

We will be doing quite a lot of research at our center and on several fruit farms in Ohio. This project will be challenging, but potentially rewarding to work on for us and, most importantly, for growers throughout Ohio.

See GAO Page 9
Dr. Gary Gao took a lot of pictures from the demonstration vineyards at South Centers in Piketon and posted some of them on Facebook from late March to the end of June. His pictures showed timely phenology developments of grapevines and gave growers a heads up on vineyard management tasks. His posts also generated a lot of good discussion among growers and educators.

Ryan Slaughter has also provided periodic updates on the South Centers’ horticulture web page from April to June in 2021.

**Vineyard Tours and Equipment Demonstration**

The demonstration vineyards at CFAES South Centers have continued to serve as the field learning lab for new grape growers. Ryan Slaughter has given several tours of the vineyards to new growers. He has also devoted quite a bit of time to showing growers our spray equipment, trellis, and netting.

Dr. Gary Gao has used the information from the demonstration vineyard in his presentations, updates, grower consultations, and VEAP cultivar recommendations.

Ryan Slaughter and the research crew at CFAES South Centers have put in a lot of hours in keeping up with vineyard tasks, which include pruning, fertilization, suckering, shoot and cluster thinning, spraying, trellis repairs, and weed control. As most growers found out, weeds have become one of the biggest problems this year due to all the rain events in spring. Our vines look quite good so far. We should have a decent harvest this year from most of our grape cultivars.

**Vineyard Expansion Assistance Program (VEAP)**

Dr. Gary Gao conducted quite a few vineyard visits for VEAP. He and Ryan Slaughter have provided ongoing support to many grape growers through phone calls, emails, text message, and some in-person and virtual visits. It is exciting to see that quite a few grape growers in the southern Ohio received this much-needed funding to expand the grape acreage.

When you look at the grape acreage in Ohio, you may or may not be impressed. However, it is important to point out that the Ohio Grape Industries Committee released its 2016 Economic Impact report, which finds that Ohio’s grape and wine industry has a significant impact of $1.3 billion on the state’s economy and provides 8,067 full-time jobs, with more than 2,700 additional jobs created since 2012.
Mapping Cooperatives across the Buckeye State

Ryan Kline
CFAES Center for Cooperatives
Cooperatives Program Specialist

Cooperative businesses play an important role in many economic sectors, including in some that are vital to the foundation of rural communities. However, until the College of Food, Agricultural, and Environmental Sciences (CFAES) Center for Cooperatives set out on a recent effort to count Ohio’s cooperatives, it would have been difficult to say with certainty how many cooperative businesses there are in the state, the sectors they operate in, and how those businesses are distributed across the Buckeye state.

The team at the CFAES Center for Cooperatives collected, reviewed, and verified information from industry trade organizations, governmental sources, and other public sources to develop a comprehensive census of Ohio’s cooperatives.

The Center team collected data from various sources to ensure that they captured a picture of Ohio’s entire cooperative community, rather than just a single sector. The project was modeled after innovative work done by the University of Wisconsin Center for Cooperatives. Center staff also verified whether each cooperative was still active, using public sources like the public business records, websites, social media, and news articles.

“It was amazing to find cooperatives I didn’t know about in places I have visited for years,” said Charissa Gardner, Cooperative Program Coordinator, “it really brought to light how many unique cooperatives there are across the state.”

From breweries and laundries to financial services, agriculture, and housing, the state’s cooperative community is diverse. Team members documented 452 cooperatives headquartered in Ohio and almost 1,100 cooperative physical locations. In partnership with the CFAES Knowledge Exchange team, the data was built into an interactive map and table that are available to the public. The web resource is a self-guided exploration of the cooperative economy that highlights the reach and diversity of Ohio’s co-ops.

The goal is that cooperative leaders, community ownership advocates, policymakers, cooperative developers, and entrepreneurs will use the map and census resources in ways that will help their work. For example, by locating existing cooperatives, the team hopes that entrepreneurs exploring the cooperative business model will be able to locate and learn from similar enterprises in the region.

To explore the listing and map of Ohio’s Cooperatives online, visit go.osu.edu/ohiocooperatives.

For more information on the cooperative business model, Ohio’s cooperative community, or to explore the formation of a new cooperative, contact the CFAES Center for Cooperatives at osucooperatives@osu.edu.
Hannah Scott
CFAES Center for Cooperatives Program Manager

When the long-time executive director of the Mid America Cooperative Council (MACC), Rod Kelsay, was ready to retire, the Council began planning how it would continue supporting members into the future. MACC is a multi-state, non-profit trade association with members located in the heart of Middle America. The Council’s mission is to promote, foster, and enhance the values of cooperatives.

As organizations that provide cooperative education and training, MACC and the College of Food, Agricultural, and Environmental Sciences (CFAES) Center for Cooperatives were well acquainted. In 2019, leaders from both organizations began exploring potential strategies for the Center and MACC to partner more closely following Rod’s retirement. On September 1, 2020, the Center began providing management services to MACC. Under the arrangement, the Center’s team provides organizational support to the Council, works with the Council’s board of directors, and develops and implements MACC’s programming – all of which is geared toward improving the region’s cooperative businesses by developing their people.

Via MACC, the Center’s team now offers education and training for co-op employees and leaders in all stages of their co-op journey. Employees who are new to cooperatives learn about the unique aspects of the business model so they can be effective co-op ambassadors in the training, “Welcome to Co-ops.” Directors learn from cooperative leaders and academic experts about effective governance, communication, and other skills that will help them lead their co-op to success in “Building your Governance Toolbox” workshops. Cooperative professionals in communications, member support, human resources, board leadership, management, and other areas have opportunities to connect with and learn from peers in the quarterly “Cooperative Roundtables.”

Hannah Scott, Program Manager of the Center shared, “our team has enjoyed engaging more broadly and deeply with the cooperative community in Middle America and we’re looking forward to the many opportunities our relationship with MACC opens. Our goal is to help strengthen cooperative businesses, which are so important in rural communities throughout our region, by providing education that helps develop engaged employees and impactful leaders.”

Since the CFAES Center for Cooperatives team began leading the Council’s programming in 2020, over 240 attendees from over 90 unique cooperatives and allied organizations have benefited from programs. Cooperators learned from a vast network of experts across the country, including cooperative researchers from Texas A&M University, Kansas State University, and University of Minnesota, retired cooperative leaders from Nationwide Insurance and United Producers, Inc., cooperative professionals from CliftonLarsonAllen and Barrett, Easterday, Cunningham, and Eselgroth LLP, and many others.
With the Ohio growing season in full swing and the stay-at-home orders now lifted, many Ohioans have had the opportunity to visit their favorite farmers market.

“It has been a great means of reconnecting, not only with the local foods we love, but with the farmers that produce it,” said Direct Marketing Team leader Christie Welch.

Welch explained that while last year brought many challenges to how we purchased our locally produced foods, going through the last challenging season has helped our markets learn to adapt quickly. It also brought to light some of the shortcomings of our food system.

To help Ohio farmers markets learn from challenges and successes, the Direct Marketing Team is providing aid in evaluating strengths and weaknesses in data collection. While the pandemic and all that it brought to our markets is hopefully a once-in-a-lifetime event, the ability to use collected data for sound decision making will remain. To help farmers markets collect and use the data effectively, we are partnering with the Farmers Market Coalition and Ohio Farmers Market Network to provide information, training, and resources to help not only Ohio farmers market managers, but also OSU Extension County Educators to help them understand what type of data can help markets in decision making as well as what tools are currently available to assist in the process. Farmers market managers of all types and levels of capacity across Ohio will gain a thorough understanding of current grassroots data collection systems across the United States and how to begin to embed their own data collection systems suitable for their needs. Vendors’ direct experience with data collection and analysis at the business level will be included in these trainings and will result in a deeper understanding of business needs by their market partners.

Examples of questions markets might be asking include:

- What practices implemented during the pandemic should be kept?
- What practices best serve our customers?
- How can we develop meaningful partnerships to grow our community?
Thinking Inside the Box: Growing CSA’s Across the Tri-State Region

The Ohio State University Direct Food and Agricultural Marketing Team is excited to be partnering with OSU Fulton County Extension, Purdue University, Michigan State University, and North Central SARE to bring the first Community Supported Agriculture (CSA) conference to northwest Ohio.

This two-day conference will bring together educators and producers from the tri-state area to help share best practices for starting or growing a CSA for direct marketing farmers.

The conference will include CSA operators and Extension educators from each of the three states. In addition, the conference will be held at Sauder Village, a living history museum in Archbold, Ohio.

The conference will be held Oct. 24-25 and registration is currently open. To learn more and to register visit go.osu.edu/2021csaconference.

Thinking Inside the Box
Growing CSA's across the Tri-State Region

Save the Date!

Community Supported Agriculture programs, or CSAs, have become an increasingly popular way to receive fresh, local products on a regular basis throughout the growing season. And they are helping farmers succeed.

Are you interested in starting a CSA in your community? Are you looking to grow your existing CSA program? Join Michigan State University, Ohio State University, and Purdue University for a Tri-State CSA conference October 24th and October 25th 2021 in Archbold, Ohio! Hear directly from industry leaders and learn ways to make your CSA more successful.

This conference is sponsored by the North Central SARE project. More details will be released at a later date. Please visit go.osu.edu/2021csaconference for conference details, agenda, speakers, and registration information.

MARKETING from Page 12

- Is our food assistance program serving the food insecure individuals in our community?
- Is our market poised for sustainability?

These types of questions and more can help markets ensure they are doing the best they can to meet their customers’ needs, as well as providing a valuable resource to the communities in which they are located.

This can also help the farmers and local food producers who sell at farmers markets understand how they can play a role in growing the market and serving their communities.

If you would like to learn more about this project or would like to assist the farmers market in your community, please contact Christie Welch welch.183@osu.edu.

The project is supported by funding from the USDA SARE Professional Development Program.